BRITISH DEER AND GROUND GAME















Only 950 copies of "British Deer and Ground Game" have been printed. The first 500 of these form Volume II of the 500 complete sets of "The Gun at Home and Abroad."

This is set No. 39

Subscriber's Name





British Deer & Ground Game, Dogs, Guns & Rifles

BY

J. G. MILLAIS

W. BAXENDALE CAPT. W. COAPE OATES J. E. HARTING MAURICE PORTAL

HON. T. F. FREMANTLE



LONDON
THE LONDON & COUNTIES PRESS ASSOCIATION L^{TD}
39 KING STREET · COVENT GARDEN · W.C.
MCMXIII



31 G96 1912 V.2 SCNHRB

PREFACE

HE success which has attended the appearance of the first Volume of this Work encourages the hope that the second Volume will be as favourably received.

In the first Volume attention was confined to feathered game and wildfowl; the present Volume relates to Deer and Ground Game, Dogs, Guns and Rifles.
The chapters dealing with the different species of animals mentioned embody an account
of their status in the British Islands, their geographical distribution, natural history,
haunts, habits, breeding, care of young, and natural enemies; followed by descriptions
from personal experience of the various ways in which they afford sport with gun or rifle.

It will be obvious that in this Volume the most important animals dealt with are the various kinds of Deer met with in the British Islands—Red, Fallow and Roe—and for the time being attention is confined to these three species; for in a subsequent volume on Big Game due attention will be paid to the deer of other countries. In the chapters here contributed by Mr J. G. Millais it will be found that hardly any point of importance in connexion with British Deer has been overlooked, while the picturesque descriptions of stalking and details of wood craft have been written by him from long and varied experience as a stalker and naturalist.

The chapters on Hares and Rabbits, which have been written by Mr J. E. Harting, contain a variety of details concerning these smaller wild animals, and relate not only to their natural history, but also to the sport they afford with the gun.

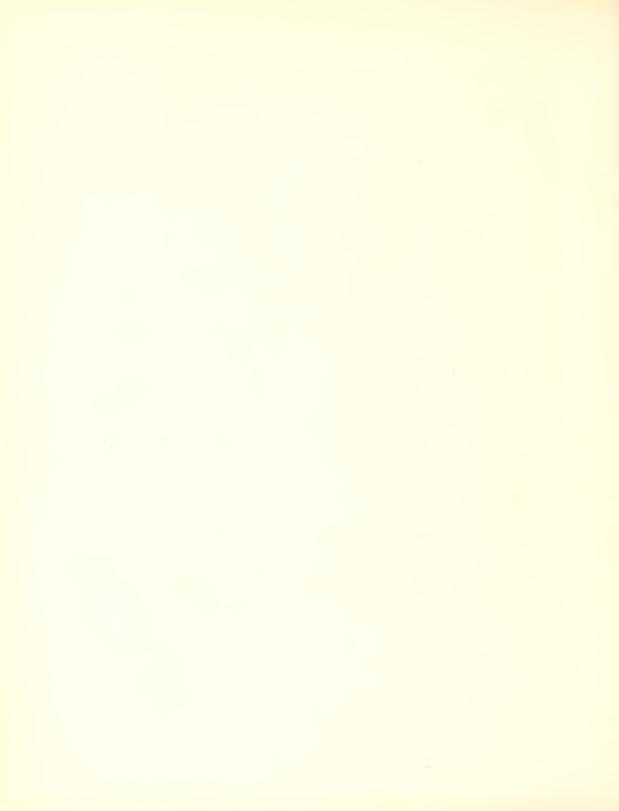
From game, both furred and feathered, to the dogs which are employed for finding and retrieving it, the transition is easy, and accordingly it will be found that Pointers, Setters, Spaniels and Retrievers are all duly dealt with in the chapters devoted to their respective breeds. In the treatment of this difficult subject the Publishers have secured the co-operation of Mr Walter Baxendale, Kennel Editor of "The Field," and the information which he has been able to impart is not only the outcome of personal experience, but has the approval of some of the best judges of sporting dogs in this country. Mr Baxendale has been assisted in his task by Captain W. Coape Oates and Mr Maurice Portal.

Then, as to sporting weapons, no one could desire a more instructive essay in the Evolution of Guns and Rifles than that which has been specially written for this work by the Hon. T. F. Fremantle. The reader who peruses it attentively will perceive that in a comparatively limited space it contains practically all that is worth knowing on the subject.

Finally, a chapter is devoted to the consideration of the Game Laws affecting Deer, Hares, and Rabbits—the law relating to feathered game having been discussed in the first Volume. In these days of extensive game-rearing and the management of shooting, some knowledge of law is more than ever desirable, and it is hoped that the elucidation of the statutes here set forth may be found of practical utility.

The Publishers are indebted to Mr B. J. Warwick for kindly allowing them to reproduce in colour, from the originals in his possession, the two examples of Miss Maud Earl's work.

This Volume has been prepared for the press by Mr J. E. Harting.



The following is a list of those who have kindly associated themselves with this work before publication, and to whom the thanks of the publishers are due.

Lord Decies, D.S.O.

Lord Deramore, D.L., J.P.

H.I.H. Grand Duke Alexander of Russia H.I.H. Grand Duke Michael H.H. The Maharajah of Patiala H.H. The Maharajah Gaekwar of Baroda, G.C.S.I. H.H. The Maharajah of Bhavnagar, K.C.S.I. H.H. The Maharajah Scindia of Gwalior, G.C.V.O., G.C.S.I. H. H. Rajah Sir Bhuri Singh, K.C.S.I. H.H. Maharajah Kuma of Tikari Nawabzadu Col. Obaidulla Khan of Bhopal Duke of Alba Duke of Manchester Duke of Penaranda Duke of Portland, K.G., P.C., G.C.V.O. Duke of Sutherland Marquis of Tweeddale Earl of Clancarty, J.P., D.L. Earl of Compton Earl of Durham Earl of Egmont Earl of Essex, J.P. Earl of Gosford, K.P. Earl Howe, G.C.V.O. Earl of Kintore, P.C., G.C.M.G. Earl of Limerick Earl of Morley, J.P. Earl of Plymouth, C.B., P.C., D.L., J.P. Earl of Portarlington Earl of Ranfurly, P.C., G.C.M.G., K.C.M.G. Earl of St Germans Earl of Seafield Earl of Strathmore, D.L., J.P. Earl Waldegrave Earl of Warwick, D.L., J.P. Earl of Westmorland, J.P. Viscount Anson Viscount Coke Viscount Dalrymple Viscount Lewisham, M.P. Viscount Massereene and Ferrard, D.S.O. Viscount Northland Lord Airedale Lord Ashburton Lord Camovs Capt. Lord John Cavendish, D.S.O. Lord Cheylesmore, K.C.V.O. Lord Clinton, D.L., J.P. Lord Crawshaw, J.P. Lord Ninian Crichton-Stuart, M.P.

Lord Grantley Lord Hastings Lord Herbert Lord Herschell, M.V.O. Lord Kenyon, K.C.V.O. Lord Victor Paget Lord Rendlesham Lord Sackville Lord St. Oswald, D.L., J.P. Lord Savile, K.C.V.O., J.P. Lord Stafford, D.S.O. Lord Strathcona, G.C.M.G., G.C.V.O. Lord Tweedmouth, D.S.O., M.V.O. Lord Waleran, P.C., D.L., J.P. Baron de Pallandt Eerde Baron Bruno Schroder Col. Hon. A. H. Lawrence Major Hon. A. Hanbury-Tracy, C.M.G. Capt. Hon. J. Coke Capt. Hon. J. Dawnay, D.S.O. Capt. Hon. Arthur O'Neill, M.P. Capt. Hon. F. R. D. Prittie Capt. Hon. H. C. O'C. Prittie Capt. Hon. Algernon Strutt Hon. K. P. Bouverie Hon. Arthur Brodrick Hon, Dudley Carleton, J.P. Hon, E. Coke Hon. R. Coke Hon, Maurice Egerton Hon, Gilbert Hastings Hon. R. W. Legh Hon. E. Lindley-Wood, M.P. Hon. G. Hope Morley Hon. A. E. S. Mulholland Hon. A. J. Mulholland Hon, C. B. Portman Hon. H. B. Portman Hon, J. H. Savile Hon. W. F. D. Smith, D.L., J.P. Hon. Henry J. Stonor, C.V.O. Hon. John H. Ward, C.V.O. Hon. Guy Wilson, D.S.O., M.P. General Sir Arthur Paget, C.V.O., C.B., K.C.V.O., K.C.B. Sir Frederic E. S. Adair, Bart., J.P. Sir Matthew Arthur, Bart. Sir Abe Bailey, K.C.M.G., D.L., J.P. Sir Randolf L. Baker, Bart., M.P. Sir Theodore Brinckman, Bart., C.B. Sir Hervey Bruce, Bart. Sir George Bullough Sir Francis Burdett, Bart.

Sir Archibald Campbell, Bart., of Succoth Sir Foster Cunliffe, Bart. Sir Bertrand Dawson Sir Everard H. Doyle, Bart. Sir John Swinnerton Dyer, Bart. Sir William Hart Dyke, Bart., P.C., J.P., D.L. Sir John Eardley-Wilmot, Bart. Sir Walter Egerton, K.C.M.G., C.M.G. Sir Ailwyn E. Fellowes, P.C., K.C.V.O. Sir William Garstin, G.C.M.G., K.C.M.G. Sir John Gladstone, Bart. Sir Thomas Glen-Coats, Bart., C.B. Sir Cecil Graham, Bart. Major Sir Hamilton Goold-Adams, G.C.M.G., K.C.M.G., C.B. Sir Richard Graham, Bart., J.P., D.L. Sir Edward H. W. Hulse, Bart. Sir William Jaffray, Bart. Sir Robert W. B. Jardine, Bart. Sir John Kelk, Bart., J.P. Admiral Sir William R. Kennedy, G.C.B., K.C.B. Sir Arthur Lawson, Bart. Sir Edmund Giles Loder, Bart., J.P. Sir Victor Mackenzie, Bart. Sir William Mackenzie Sir Charles T. Mander, Bart. Capt. Sir Mervyn Manningham-Buller, Bart. Sir Charles H. T. Metcalfe, Bart. Sir Powlett Milbank, Bart., J.P., D.L. Sir Richard Musgrave, Bart., D.L., J.P. Rev. Sir William Hyde Parker, Bart. Sir W. Eley Quilter, Bart., M.P. Sir Charles Bine Renshaw, Bart. Sir John Rolleston, M.P. Sir Thomas A. Salt, Bart. Sir Archibald H. M. Sinclair, Bart. Sir H. Lincoln Tangye, Bart. Sir Peter Walker, Bart. Sir Robert J. Walker, Bart. Sir Joseph Ward, Bart., K.C.M.G. Sir Charles Watson, Bart. Sir George Younger, Bart., M.P. Rt. Hon. Robert Farquharson Major-General V. Hatton, C.B. Major-General H. B. Peters, J.P. Lt.-Col. John G. Adamson Col. Stanley Bird ix

Lt.-Col. R. H. Carr-Ellison Col. M. Cradock, C.B. Col. F. H. Custance, C.B. Col. Archibald Douglas Dick, C.B. Col. Max C. Fleischman Col. John R. Grav Col. Reginald Hoare Col. George H. Holdsworth Col. Frank Johnson Col. H. R. Lloyd Col. H. C. Lowther Col. P. S. Marling, V.C., C.B. Col. Charles R. Prideaux-Brune, J.P. Col. A. S. Pratt, C.B. Col. J. M. Rogers Col. W. A. Scott, C.B. Col. Hy. Streatfield Col. Wm. Hall Walker Col. Victor W. Bates Van de Wever. J.P. Lt.-Col. J. A. C. Younger Major H. B. Dalgety Major F. J. Carruthers Major Ralph P. Cobbold Major H. G. Henderson, M.P. Major F. F. Hopwood Major R. F. Peel, M.P. Major M. Pitt Major James E. Platt Major R. A. Scott Major R. F. Ratcliffe, M.P. Major G. F. Trotter, D.S.O. Major G. Dalrymple White, M.P. Major H. H. Wigram Capt. Geoffrey V. S. Bowlby Capt. Robert B. Brassey Capt. H. R. Bruce Capt. J. Campbell Capt. H. A. Clowes Capt. E. Clive Coates Capt. Christian Combe Capt. C. R. C. de Crespigny Capt. Quintin Dick Capt. Alex. T. Gordon Capt. W. Higson Capt. H. R. M. Howard Capt. Michael Hughes Capt. A. Glen Kidston Capt. C. Martin Capt. J. A. Morrison, M.P. Capt. G. M. Mundy Capt. William Neilson Capt. W. Coape Oates Capt. J. H. J. Phillips Capt. F. Rose Capt. A. R. Steele Capt. J. M. Stewart Capt. J. R. Walker Capt. Warwick Capt. M. S. Williams Capt. Herbert H. Wilson

G. L. Courthope, Esq., M.P. Angus V. Hambro, Esq., M.P. S. Hill-Wood, Esq., M.P. Rowland Hunt, Esq., M.P. Percy H. Illingworth, Esq., M.P. O. Locker Lampson, Esq., M.P. G. C. H. Wheler, Esq., M.P. A. Stanley Wilson, Esq., M.P. J. Wood, Esq., M.P. George M. Fowler, Esq., C.M.G. C. P. Skerrett, Esq., K.C. Count George Festetics Frank H. Aarons, Esq. G. Aguet, Esq. Lionel Ames, Esq. Carrol H. Andsell, Esq. W. B. Anderson, Esq. Harold D. Arbuthnot, Esq. James Arthur, Esq. C. S. Ascherson, Esq. Philip H. Ashworth, Esq. Francis M. Baer, Esq. H. Barker-Hahlo, Esq. V. R. Balfour-Browne, Esq. George H. Bankes, Esq. S. R. Bastard, Esq. William Bean, Esq., J.P. W. Beardmore, Esq. Richard Berridge, Esq. Bryan B. Bellew, Esq. J. Bell-Irving, Esq. J. J. Bell-Irving, Esq. G. L. Bevan, Esq. J. B. Blessig, Esq. Edward Blount, Esq. F. N. Blundell, Esq. James Blyth, Esq. W. Norman Boase, Esq. Henry C. Bond, Esq. Leo Bonn, Esq. Walter T. Boodle, Esq. A. E. Bowen, Esq. John H. Bridges, Esq. J. Douglas Broad, Esq. A. M. Brodrick, Esq. Stanley Brotherhood, Esq. Alex. Browne, Esq. R. H. Bruce, Esq. F. Bryce, Esq. I. Bullough, Esq. Charles W. L. Bulpett, Esq. A. E. Butter, Esq. Charles A. J. Butter, Esq. C. A. Cain, Esq. Duncan Campbell, Esq. J.Cameron-Head, Esq., of Inversilort A. W. G. Campbell, Esq. John Traill Cargill, Esq. Henry M. Carlisle, Esq. Emilio N. Casares, Esq. L. E. Chalmers, Esq. Edward F. Chance, Esq.

Ernest Chaplin, Esq. Abel Chapman, Esq. Fred J. M. Christie, Esq. Kenneth M. Clark, Esq. George Clark, Esq. Herman Clarke, Esq. A. E. Clerk, Esq. W. Brodrick Cloete, Esq. Leonard Clow, Esq. John D. Cobbold, Esq. Leonard L. Cohen, Esq. Ralph T. Cole, Esq. Archd. Colville, Esq. H. C. S. Combe, Esq. Henry F. Compton, Esq. Bernard H. Conrad, Esq. A. Wynne Corrie, Esq. H. A. Cox, Esq. William Henry Cox, Esq. John Coxon, Esq. Philip Arthur Sambrooke Crawley, Esq. Gordon Crosdale, Esq. Horace Czarnikow, Esq. Robert Davidson, Esq. Fred. L. Davis, Esq. A. A. Delmege, Esq. J. Dewrance, Esq. George Dixon, Esq. F. D. Docker, Esq. Norman F. Druce, Esq. Arthur John Dorman, Esq. Alexander Doughty, Junr., Esq. George H. Drummond, Esq. M. Drummond, Esq. Alfred H. Duggan, Esq. Alex. L. Duncan, Esq. F. Dunsford, Esq. A. Percy Eccles, Esq. Jno. J. Emerson, Esq. A. P. Evans, Esq. F. Eustace Faithfull, Esq. W. de Falbe, Esq. Alfred Farquhar, Esq. Sydney Farrar, Esq. A. H. Fass, Esq. B. S. Faudel-Phillips, Esq. A. R. Fellowes, Esq. Mark Fenwick, Esq. Brinsley Fitzgerald, Esq. J. D. Fletcher, Esq. David Forbes, Esq. R. Oswald Fordham, Esq. Phipps Foster, Esq. Walter T. Fremlin, Esq. C. P. Fry, Esq. J. S. H. Fullerton, Esq. C. Gairdner, Esq. J. C. Gardner, Esq. Charles T. Garland, Esq. Frederick Garside, Esq. Francis T. Gervers, Esq.

Henry Wallis Gilbey, Esq. Alfred J. Gillott, Esq. Alastair S. Gilmour, Esq. Hugh S. Gladstone, Esq., F.Z.S., F.R.S.E.

Francis E. Goad, Esq. Spencer H. Gollan, Esq. C. W. Gordon, Esq. Joseph Gould, Esq. J. D. Gouldsmith, Esq. Percy N. Graham, Esq. Loudon Greenlees, Esq. R. N. Halfhead, Esq. R. Halsey, Esq. C. Eric Hambro, Esq. R. O. Hambro, Esq. N. Dalrymple Hamilton, Esq. A. Hanbury, Esq. Arthur Hawley, Esq. Holford Harrison, Esq. Walter Heape, Esq., M.A., F R.S. Frank P. Heath, Esq. W. A. R. Heaven, Esq. Hugh L. Heber-Percy, Esq. Brodie Henderson, Esq. F. Henderson, Esq. S. Heilbut, Esq. Richard Hennessy, Esq. E. Hett, Esq. John T. Hibbert, Esq. Cecil M. Higgins, Esq. A. P. Hill, Esq. J. A. Hill, Esq. P. K. Hodgson, Esq. E. S. Holman, Esq. Eardley Wilmot B. Holt, Esq. G. N. Horlick, Esq. J. Hamilton Houldsworth, Esq. T. M. Hunter, Esq. Holcombe Ingleby, Esq. G. C. L. Insole, Esq. C. Bower Ismay, Esq. James H. Ismay, Esq. Arthur James, Esq. R. Jardine, Esq. C. E. Jeffcock, Esq. Harry Wyndham Jefferson, Esq. Herbert Johnson, Esq. James J. Joicey, Esq. W. J. H. Jones, Esq. H. Kent, Esq. Stephenson Kent, Esq. Robert Molesworth Kindersley, Esq. Jersey de Knoop, Esq. William Laidlaw, Esq. Percy Laming, Esq. Arthur Lampard, Esq. W. H. Laverton, Esq. H. Lawrence, Esq. David Lawson, Esq. W. H. Leslie, Esq. M. Liddell, Esq.

Alex, Littlejohn, Esq. R. E. Longfield, Esq. A. W. Lyle-Kidd, Esq. A. C. McCorquodale, Esq. A. Mackenzie, Esq. W. Dalziel Mackenzie, Esq. Thos. Mackie, Esq. Angus Mackintosh, Esq. Colin MacIver, Esq. R. Craig McKerrow, Esq. William Mackinnon, Esq. C. C. McLeod, Esq. W. N. McMillan, Esq. J. I. McConnel, Esq. David McCowan, Esq. Duncan J. Macpherson, Esq. C. C. Macrae, Esq. Percival R. Mann, Esq. T. Hugh Mann, Esq. George E. T. Manners, Esq. J. Howorth Massey, Esq. R. D. Matthey, Esq. Ralph W. Maxwell, Esq. Clive Meares, Esq. E. L. Mellin, Esq. F. N. Kay Menzies, Esq. W. Steuart Menzies, Esq. C. A. Mills, Esq. J. D. Mills, Esq. J. E. Mitchell, Esq. F. J. O. Montagu, Esq. James F. Montagu, Esq. W. B. J. Montgomery, Esq. W. B. Morris, Esq. Hugh Morrison, Esq. H. E. Morritt, Esq. R. G. Mortimer, Esq. Charles A. Murray, Esq. George Rigby Murray, Esq. W. Murray, Esq. F. G. Naumann, Esq. G. C. Neilson, Esq. Hugh Hope Nelson, Esq. W. Newall, Esq. Charles R. I. Nicholl, Esq. A. J. North, Esq. E. de C. W. Oakeley, Esq. C. H. Oliverson, Esq. Harold M. Ommaney, Esq. Roland Orred, Esq. T. C. Owen, Esq. Cecil B. Pape, Esq. Marriott Parkinson, Esq. T. W. Parkinson, Esq., M.D. Edward Paul, Esq. E. Paul, Esq. Horace O. Peacock, Esq. Edward Charles Pearce, Esq. Arthur L. Pearce, Esq. Hugh Peel, Esq. Fred. R. Pelly, Esq.

Charles James Phillips, Esq.

F. D. Pirie, Esq. A. R. C. Pitman, Esq. Ernest Platt, Esq. John H. Platt, Esq. George J. Poston, Esq. C. B. Prescott, Esq. J. Henry Preston, Esq. A. V. Pryor, Esq. Herbert S. Pullar, Esq. Percy C. V. Quilter, Esq. A. D. Ramsay, Esq. Thomas Ramsden, Esq. Cecil Frank Raphael, Esq. C. S. Rattigan, Esq. Frank Reddaway, Esq. John Sherard Reeve, Esq. Marshall Reid, Esq. T. Ritchie, Esq. F. A. Roberts, Esq. G. P. Roch, Esq. Charles M. Rolker, Esq. D. Sanday, Esq. W. Samson, Esq. H. Samuelson, Esq. Dr H. Sauer Harold Schwind, Esq. H. B. Sedgwick, Esq. H. S. Seldon, Esq. Gerald Graig Sellar, Esq. Stephen Sellon, Esq. Agnew Ruskin Severn, Esq. D. A. Shennan, Esq. Nathaniel Sherwood, Esq. Fredk. Shoolbred, Esq. Beckwith Smith, Esq. E. W. Stanyforth, Esq. H. K. Stephenson, Esq. F. C. Stern, Esq. H. C. Stewart, Esq. W. Burton Stewart, Esq. J. Stewart-Clark, Esq. R. C. Swan, Esq. Fred W. Stobart, Esq. Hartley Straker, Esq. Herbert Straker, Esq. John C. Straker, Esq. Joseph Henry Straker, Esq. G. Stuart-Ogilvie, Esq. R. C. Swan, Esq. Edwin Tate, Esq. R. R. Tattersall, Esq. Frank Humbert Taylor, Esq. T. L. Taylor, Esq. Wilfred F. Tempest, Esq. J. R. Tennant, Esq. Hugh Lloyd Thomas, Esq. George A. Tibbitt, Esq. Ernest W. Thompson, Esq. Marmaduke A. Thorpe, Esq. Frank C. Tiarks, Esq. J. W. Todd, Esq. M. Tosetti, Esq.

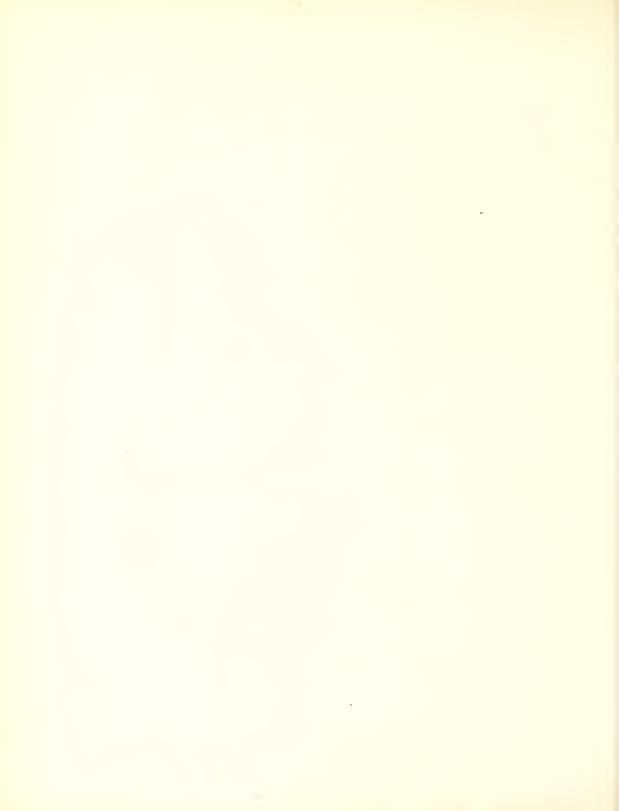
M. Alex. Tosetti, Esq.
J. J. Van Alen, Esq.
Wm. Van der Weyer, Esq.
D. Von Braun, Esq.
V. C. Vickers, Esq.
T. L. Villiers, Esq.
A. Barclay Walker, Esq.
J. Monro Walker, Esq.
Percy Wallace, Esq.
Arthur James Walmsley, Esq.
Bernard Walsh, Esq.

B. J. Warwick, Esq.
W. H. A. Wharton, Esq.
W. E. Whineray, Esq.
G. Cecil Whitaker, Esq.
C. W. Sofer Whitburn, Esq.
R. W. White Thomson, Esq.
A. Whitelaw, Esq.
Graeme A. Whitelaw, Esq.
J. H. A. Whitley, Esq.
George Wilder, Esq.
A. V. Willcox, Esq.

A. T. Williams, Esq.
C. R. Williams, Esq.
C. P. Wills, Esq.
W. Melville Wills, Esq.
Walter Winans, Esq.
Cecil de Winton, Esq.
Arthur H. Wood, Esq.
Robert Woodhouse, Esq.
W. S. Worthington, Esq.
F. J. Wright, Esq.
J. M. Younger, Esq.

CONTENTS

PREFACE	Page vii
THE RED DEER. J. G. Millais	1
THE FALLOW DEER. J. G. Millais	147
THE ROE DEER. J. G. Millais	157
THE COMMON HARE. J. E. Harting	174
THE MOUNTAIN HARE. J. E. Harting	186
HARE SHOOTING. J. E. Harting	194
THE RABBIT. J. E. Harting	201
RABBIT SHOOTING. J. E. Harting	212
THE POINTER. W. Baxendale	218
THE SETTER. W. Baxendale	223
SPORTING SPANIELS. W. Baxendale	248
THE FLAT-COATED RETRIEVER. Capt. W. Coape Oates	256
THE LABRADOR RETRIEVER. Maurice Portal	264
CURLY-COATED RETRIEVERS. W. Baxendale	273
THE BREAKING OF GUN-DOGS. W. Baxendale	277
THE EVOLUTION OF GUNS AND RIFLES. Hon. T. F. Fremantle	281
LAW RELATING TO DEER AND GROUND GAME. J. E. Harting	322



PHOTOGRAVURE FRONTISPIECE HIS MAJESTY KING GEORGE V

COLOURED ILLUSTRATIONS*

PLATE I	. A Wet Day on the Tops	facing page 16
II	. The Master Stag	32
III	. Coming Up the Pass	48
· IV	. Impregnable	64
\mathbf{v}	. The Snow Squall	80
VI	. Naboth's Vineyard	96
VII	. Jealousy	112
VIII	. Early Days in September	128
IX	. Beyond the March	144
X	. Overlooked	158
XI	. The Hare	174
XII	. The Mountain Hare†	186
XIII	. The Rabbit	202
XIV	. A Beautiful Back	224
XV	. Outside the Covert	254

PHOTOGRAVURES

PLATE XVI. Stag's Head	facing page 56
XVII. Peter of Faskally	264

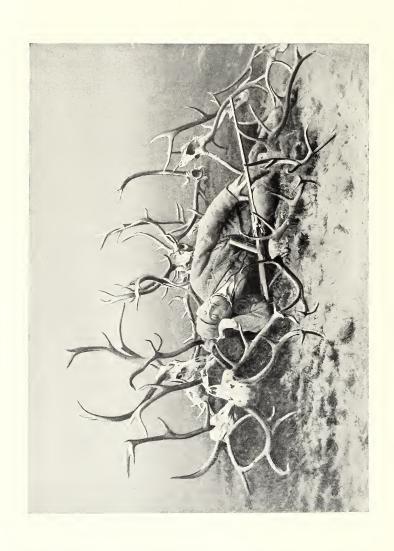
*The illustrations in colour have been reproduced by Messrs Ben Johnson & Son, Limited, of York, from original water-colour drawings specially executed for this Work by ARCHIBALD THORBURN, V. R. BALFOUR-BROWNE and GEORGE E. LODGE, and from two original drawings by Miss MAUD EARL, in the possession of Mr B. J. Warwick. No artists' proofs have been issued.

[†]Plate No. XII is reproduced by the Monochrome process.

HALF-TONE PLATES

PLATE XVIII.	A Dream of the Past	facing page 1
XIX.	Stag's Head. J. G. Millais	66
XX.	Stag's Head. Major Porteous	70
	Stag's Head. E. M. Crosfield	70
XXI.	Stag's Head. Sidney Loder	74
XXII.	Stag's Head. J. C. Williamson	78
XXIII.	Mr R. Ll. Purcell Llewellin's English Setter, "Dan"	228
XXIV.	A Night Poacher's Setter	230
XXV.	Mr R. Ll. Purcell Llewellin's English Setter, "Countess Be	ar" 238
XXVI.	Mr Otto Pohl's Irish Setters	242
XXVII.	Mr Maurice Portal's Labrador, "Flapper"	266
XXVIII.	Captain Radelyffe's Yellow Labrador, "Dinah"	270
XXIX.	Mr W. Gordon Canning's Retriever, "Major"	274
	The Earliest Illustration of a Firearm	282
XXXI.	A Soldier of 1607	284
XXXII.	1. German Wheel-lock Rifle, XVIth Century	286
	2. German Wheel-lock Rifle, XVIIth Century	286
	3. Scottish Snaphaunce Musket, 1685	286
XXXIII.	A Drive of Deer and Wild Boars, 1644.	292
XXXIV.	1. Shooting Flying	294
	2. Stalking Wildfowl	294
XXXV.	1. Double Wheel-lock Pistol, late XVIth Century	296
	2. Double Flint-lock Under and Over Gun	29 6
	3. Double Flint-lock Gun	296
	Positions in Loading and Firing	300
XXXVII.	1. Snaphaunce Revolving Pistol, XVIIth Century	302
	2. Col. Ferguson's Flint-lock Breech-loading Rifle, 1786	302
	3. Egg's Flint-lock Breech-loading Carbine, Early XIXth Co	entury 302
XXXVIII.	Series of Guns by Purdey:	204
	1. Flint Lock, 1815-20	304
	 Percussion Muzzle-loader, 1857 Pin-fire Breech-loader, 1861 	304 304
VVVIV	4. Central-fire Breech-loader, 1869	308
AAAIA.	5. Central-fire Breech-loader, 1875	308
	6. Central-fire Breech-loader, present day	308
XI.,	1. Baker Rifle, Flint Lock, 1803	314
712.	2. Mr F. C. Selous' '461 Single Sporting Rifle	314
	3. '256 High Velocity Magazine Rifle	314
XLI.	Punt-Gunning	320
	Col. Hawker's Punt for his Heavy Double Punt Gun	320





PARE DISTRICTOR

Captain Horatio Ross and some of his trophies.

Reproduced from a photograph kindly lent by Mr C. C. Macrae. PLATE XVIII. A DREAM OF THE PAST

THE RED DEER

CERVUS ELAPHUS

DISTRIBUTION AND EARLY HUNTING

O fully understand the red deer and its chase it is necessary to study the animal and its distribution in Europe from the earliest times until the present day. By nature, the red deer is a forest animal, inhabiting the greater part of Europe where there are large woods. It is found as far north as the Arctic Circle in Norway, and at no very distant date a few existed on the mainland opposite the Lofoden Islands. There are red deer in the dense forests to the south of St Petersburg, further south they occur near the Volga, but are now nearly extinct in the Crimea, from whence, about 100 years ago, many magnificent specimens were sent to Britain.

Red deer are found in varying numbers in the British Islands, France, Spain, Germany, Norway, Sweden, Russia, Austria, and all its dependent states, Turkey, Montenegro, Albania, Asia Minor, Daghestan and the Northern Caucasus, Circassia, Sardinia and Corsica, Algeria and Tunis. Formerly they occurred, but are now extinct, in Greece, Italy, and Switzerland.

The stags of Persia and those of the forests between that country and the Caucasus, are sometimes relegated to a separate species known as the Maral; but the differences between that animal and the European red deer are so trifling that we need not discuss them.

According to Owen, the oldest stratum in Great Britain that yields bones of red deer, is the Red Crag at Newbourne. From the early age represented by this stratum, through the late Pliocene and the succeeding epochs of the Pleistocene, the brick-earths, and the peat mosses until historic times, we have a continuous chain of evidence of the abundance of these noble animals in our islands. Remains of the very large type of red deer, called by Owen Strongyloceros, are comparatively rare. They were probably few in number, having wandered up through Western Europe from their birthplace, which may roughly be guessed as Persia or South-Eastern Europe.

After the arrival of man in Britain, which we may approximately place as late in the Pliocene Age, red deer were very abundant. Their bones and horns are constantly found in railway and canal cuttings, and in

excavations round London, in the caverns of the south coast, the sands of Lancashire and Cumberland and the old watercourses, also in the lacustrine deposits of England, Scotland and Ireland.

After the severities of the Ice Age, the climate of Central Europe seems to have undergone a great change, and red deer were very abundant. It became much warmer, and this was, in itself, destructive to the plants on which the reindeer lives, whilst it favoured the succulent grasses and the growth of trees which constitute the food of the red deer. In consequence the latter rapidly increased in all the forest areas as the reindeer retreated or became extinct on the open hills. There were probably many races of virile savages, whose shattered skulls are now occasionally found in the earlier Pleistocene deposits of England and Scotland, that hunted the red deer, the reindeer and the giant fallow deer long before the little Feens, Finns, Picts, Pechts or Lapps, or by whatever name the reader chooses to call them, came upon the scene. These little Picts are supposed to have gone annually from Scotland to hunt the giant fallow deer in Ireland, just as the Jarls of Orkney crossed the stormy waters of the Pentland Firth to chase the red and reindeer in the mosses of Caithness, returning to their stone-built fortresses with spoils of skins and meat.

The Picts, we know, were great hunters. Scottish legends relating to the chase by these little people are common in the pages of Ossian and other ancient writers. Modern authors, such as Campbell, Stuart, Mac-Ritchie and others, have carefully elucidated many of these legends and stories. These tales of flood and field have doubtless some foundation in fact. The hunting of the "Great Deer" by the Picts, who inhabited Scotland for many centuries, and were countenanced, and even feared, by the more recent Celts, is certainly not mythical.

It requires no stretch of imagination to reconstruct the methods by which primitive man slew these large ruminants, once they learnt the use of the bow and arrow. There are Esquimaux living to-day in the far north of America and Greenland, who, in killing polar bear, musk ox, and reindeer use precisely the same methods as Prehistoric Man, with only this slight difference—that the Esquimaux to-day employs the huskie dog, which is a near descendant of the wolf, and is in some cases directly crossed with the wolf, whilst Early Man used trained wolves to hunt the red deer and the megaceros to a standstill. In fact, the bones of man, wolf, and deer have been found lying close together, the two former having

THE RED DEER

probably been surprised and killed in some inter-tribal fight after having done the deer to death.

What splendid runs and exciting finishes the first hunters must have had, such as even the early Victorian sportsmen, with their deerhounds, might envy, save that they cared nothing for the horns of their noble quarry save to cut them up for skin-dressing implements and other uses; but everything for the meat which kept life in themselves and their families.

As yet the cultivation of cereals and vegetables was unknown, and perhaps unnecessary. Like the "Yellow Knives" of the far north of America, and Telhuelches of the far south, they were essentially meateaters, and lived entirely on the captures of bow and spear. So things went on until the coming of the Lapps, Feens or Finns, who, doubtless crossing from the northern parts of the Scandinavian continent, entered Scotland, and brought with them the traps and devices they employed for the destruction of the reindeer. The principal trap they used in the high fjelds of Norway consisted of building two long stone walls almost at right angles to one another, with an apex in the form of a circular fold-yard, in which was a small pit about ten feet deep. I have seen numbers of these traps in the high mountains of Laerdal and Hallingdal, and they are all in much the same condition, the flanking walls having fallen down and only the pit remaining with its surrounding stones.

These traps were usually placed in a narrow neck between two lakes, or on the shore of a lake from which the ground sloped rapidly upwards towards a precipice. The method of killing the deer was as follows: A number of men drove the high ground towards the neck, or lake-edge, whilst a few others concealed themselves behind the outer flanks of the projecting walls. As soon as the deer approached the apex of the triangle, having been scared there by their pursuers, the men on the flanks arose and kept them moving forward by rushing in from the sides. The drivers then joined in, and no deer could escape except by breaking back, in the course of which they were probably killed with arrows or spears. The remains of more than one of these stone fences and pits still exist on the top of Ben Grimm, in Sutherlandshire, proving that the Picts had introduced this method of killing deer-probably both red and reindeerinto Scotland. It is interesting to note, too, that the methods of all prehistoric savages and those few which are still living to-day in the condition of Early Man, are practically the same. My friend Mr Melvill, who has recently spent two years in the northern basin of the Mackenzie River

(Northern Canada), tells me that the Indians and Esquimaux of those parts to-day use a wall of brushwood, behind which they conceal themselves, whilst others drive the caribou towards the apex of the triangle. Cormack, too, in his interesting notes on the now extinct Beothics of Newfoundland describes the long fences of timber cut down, by which they used to force the deer to cross the lakes at certain points, where they were easily butchered with bow and spear from the canoes.

Representations of men hunting, contemporary with the Roman occupation of Scotland, show that the bow and arrow were the weapons almost exclusively used in the method of taking bear, boar and deer on foot, whilst it is probable that with the coming of the horse, introduced by the Romans, or even the early Phœnicians, who were practically the first of traders to set foot in Britain, the use of the long spear may have been practised. There seems to be no evidence that the Romans hunted game for sport to any extent, their time being employed in getting a foothold amongst the savage tribes; the country being too unsafe for individuals, or even small parties, to roam far afield. The Danes, Saxons and Celts doubtless hunted for meat, just as their predecessors did, and it was not until the conquest of England by the Normans that a new era was inaugurated, when men did chase the deer for sport, and not necessarily for the sake of food.

At the time of the landing of the Normans the greater part of England, Scotland and Ireland was covered with vast forests, in which the natives continually hunted or engaged in inter-tribal wars. During the rule of the Romans, and subsequently under the Saxons and Danes, certain clearings had been made in the South of England, parts of the eastern counties, and in a few parts of Yorkshire and Northumberland, and these were cultivated by the peasants, composed of mixed or pure British extraction, who supplied their masters with the grain to make bread. Nearly all the hunting, however, was done by the natives, who brought the spoils of the chase to market at central forts or villages, for it was somewhat dangerous at this time for even small armed parties to proceed beyond certain bounds. The Normans, however, not only brought effective rule, owing to their iron discipline and enforcement of their authority, but a certain artistic sense and the amusements of a refined people.

Their games and sports lacked the cruelty and barbarism of their predecessors. Bear-baiting, dog and bull fighting, etc., survived well into the eighteenth century and were merely a relic of ruder times, but these

THE RED DEER

were not the sports beloved of the gallant Frenchmen. They loved the horse and hawk and hound and, most of all, "the tall deer," whom William is said to have loved as a father. Fine horses were introduced in abundance, so that the Conqueror and his Norman nobles could easily indulge to their hearts' content the pleasures of the chase in all the southern English forests which now became one vast preserve.

FitzStephen, the monk, one of the first authoritative writers on English history (1174), tells us of the forest surrounding London, and the variety of game there, amongst which he includes the red deer. These great woods were, as we have said, at first only intersected by clearings made by the natives for agricultural purposes; the forest itself practically existed from Kent to Cornwall, and from Essex to Caithness, with only a few open wolds and moorlands intervening. As the Normans extended their rule more and more hunting grounds became available, but so, too, the open spaces increased in extent and, with them, the local population, still keen lovers of the chase. In course of time it was found that since every one who could use a bow and keep dogs became addicted to the chase, the game, especially the red deer, rapidly decreased in the neighbourhood of the great centres. It therefore became necessary for the barons, if they were to enjoy all their privileges, to enforce strict laws for the regulation of hunting, and to make the capture of deer, except by authorized persons, a capital offence. Wherefore the forest laws, as explained by Manwood, came into force, and in that interesting treatise is set forth all the laws, privileges and enactments of the chase, as well as punishments, which were enforced against all persons disobeying them. To make their sport more certain, too, the Norman barons, finding that game was becoming scarce, introduced the system of driving deer into parks and haiæ, or hays (small enclosures). The right to form these was looked upon as special favour, and only granted to those who had in some way deserved the royal esteem. From the days of Canute the privilege of hunting deer in the forests belonged to the king, but certain freeholders of land were granted the right of hunting in their own domains. In Domesday Book we read that thirtyone parks, and more than seventy hays, are mentioned as existing at the time, and of these only one remains to-day, namely Eridge Park (Reredfelle), in Sussex, the property of Lord Abergavenny. In certain books it has been stated that Woodstock, in Oxfordshire, is the oldest English park, but that is not the case, for it dates only from the time of Henry I. From the period of the Normans, until the middle of the seventeenth

century, these parks and hays increased in number, and as the forests fell before the woodman's axe, the wild deer were driven further and further afield, and from one stronghold to another. A licence to empark any piece of forest had to be obtained from the Crown, and many such licences are still in existence. In 1404 the Commons tried to abolish this law, but without success, and it was not until after the Restoration that these licences became unnecessary. Another privilege was the right to construct saltatorium or deep-leaps, a contrivance by which wild deer could jump into a park, but not leap back to freedom. In the Middle Ages deer-parks were often constructed at some distance from the owner's house, and their custody was entrusted to the care of a "lodge-keeper," who lived in "The Lodge" to which nobles retired from society and enjoyed the pleasure of their chase on horseback. Most of these parks were surrounded with high oak palings, but a few, such as Wootton, Ashton, Petworth and Woburn, had high stone walls.

At the time of the Reformation most of the bishops, abbots, and priors had their own deer parks. Early in the reign of Henry VIII, the See of Norwich had thirteen, whilst the Archbishop of Canterbury had the right of hunting in no fewer than twenty parks and chases. Thus parks continued to increase throughout England until the time of Cromwell. In 1575 Saxton's maps show that there were seven hundred parks in England. The Percy family alone owned twenty-one deer parks, containing 5,500 deer.

Harrison, writing in 1577, grumbles at the excessive creation and upkeep of deer parks, saying that a twentieth part of the realm was given up to "deer and coneys." If the good historian had lived to-day he would see how little things have since altered except that, as Kipling remarks, "the pheasant is master of many a shire." A little later Stow, in his "Annals" (1592), quotes Andrew Borde (1562), "There be more parks in England than in all Europe beside."

Henry VIII, Elizabeth, and James I were all devoted to the chase of red and fallow deer, but there seems to have been a decline in the number of deer parks between the reigns of Elizabeth and Charles I. During the great Civil War many parks were destroyed, the deer being driven out or killed, the king's parks suffering amongst the rest. At the Restoration, however, a few of the old parks were restocked, and a large number of new ones came into existence. Most of the large ones existing to-day were created at that time.

THE RED DEER

At the time of the Conquest the King of England possessed eight deer parks, and to-day His Majesty King George V is the owner of four, namely, Windsor (which includes Cranbourne, and used to include Stoke), Richmond, Bushey, and Greenwich. King Charles II used to hunt in St James's Park and Hyde Park, but the deer were removed to Bushey Park in the year of the Coronation of Queen Victoria.

The Duke of Devonshire is the only subject who has as many deer parks as the Sovereign. He owns Chatsworth, Hardwick, Bolton, and Holker, and about fifteen other persons own more than one. In 1867 Mr Evelyn Shirley described 334 parks as then containing deer. To this number Mr Whitaker added fifty more, which had either been omitted by Mr Shirley, or had recently come into existence. The largest park in England is Savernake, which is over four thousand acres in extent; quite as large as many of the German and Austrian deer forests, for whose trophies prizes are annually given. The deer in Savernake are practically unrestrained, yet they do not seem to wander over the surrounding country, having sufficient of browsing and grazing in their own beautiful domain. Next in size come Windsor, Eridge, Knowsley, Tatton, Dancombe, Blenheim, and Buckhurst, which are all over two thousand acres. There are now red deer in eighty-eight English parks. The finest red deer in the British islands are in Warnham Park, Sussex, whilst the fallow deer of Petworth, Sussex, carry the best antiers, although they are not so large as the semi-feral deer on the Duke of Buccleuch's estate in Dumfriesshire.

It is now necessary to say a few words with regard to the wild deer of England, and to show how these animals have been gradually forced back to two sanctuaries, namely, the Westmorland Fells and the Devon and Somerset woods and moorlands, where they alone remain in feral conditions.

In the days of Charles II the country north of Nottinghamshire was still covered with great forests, in which many red deer were to be found, and, even at that time there were, in the south of England, still great tracts of unreclaimed woods at Epping, St Leonards, Exmoor, Wolmer, the New Forest, and in Cornwall. For the most part these remained, to a large extent, untouched until the beginning of the nineteenth century. Royal hunts frequently took place in Epping and the New Forest, whilst we read that in Wolmer red deer to the number of 500 were driven along the vale of Wolmer Forest for the amusement of Queen Anne. St Leonard's

Forest is said to have been devoid of deer before the coming of the Georges, the inhabitants of that part of West Sussex having been granted permission to kill them, owing to the damage done to the crops. Red deer never became quite extinct in the New Forest, although more than one edict has gone forth for their destruction, because private owners of small tracts always maintained a few whilst the slaughter was going on in the Crown lands, and this small nucleus was at any rate sufficient to keep the breed from becoming extinct.

In the Royal Forest of Needwood, in Staffordshire, red deer existed until the nineteenth century, but in Worcestershire they are supposed to have become extinct during the Civil Wars. In Charles the Second's reign large numbers of red deer still existed in the great forests of Bowland and Blackburn in Lancashire, Wensley Dale in Yorkshire, and throughout Cumberland, Northumberland and Westmorland, where they still survive on the Martindale Fells. Until recently they existed at Whin Fell, in the same county. From the Restoration until the Georges, nearly the whole of this forest area, extending from Staffordshire to the Scottish border, was reclaimed for agriculture, and the red deer were killed or driven northward into the great Caledonian Forest. At the present day an occasional stag is found in the high woods of Derbyshire, but their existence is probably due to some neighbouring park.

It is necessary to give some account of the forest of Martindale and its adjacent deer ground, in the mountains of the English Lake District, for the red deer which inhabit it are more purely related to the original stock of British deer than those now found in most of the Scottish forests. Martindale is bounded on the north by the arms of Ullswater Lake, and on the east by Haweswater. The present herd is mostly to be found in the centre of Martindale, which includes the valleys of Boarsdale, Bannerdale, Rampsgill and Fusedale, whilst High Street, across which the Roman sappers made a military road, is one of their favourite haunts. In these wild corries the sea eagle built her nest so recently as the year 1800, and even to-day the marten ekes out a precarious existence amongst the broken crags. Pole-cats, too, lived here until quite recently. The badger is still there, but the wild cat has long since gone. Fortunately this forest is still unfenced, the deer roaming where they will. The sanctuary in Martindale is on a hill, locally known as The Nab, which lies between Rampsgill and Bannerdale. There is good feeding on the Nab, which has many fine grassy slopes, varied with bracken. Apparently the deer do

not frequent the fells near Bampton and Shap to any great extent, although in winter many cross from The Nab to Place Fell, where there is heather. The Rev. H. A. Macpherson tells us that in feudal times the Lakeland deer were hunted alike by clergy and laity, whilst law suits as to the privileges and etiquette of hunting were of frequent occurrence. In those days most of the deer were fenced in by "hunting hays," but in recent times the pleasure of hunting the Martindale deer was shared by the whole countryside, when Squire Hasell kept open house for the whole neighbourhood at Dale Head. In the house at Dale Head there was a large banqueting hall, hung round with the heads of stags killed in the neighbourhood. The poet, Wordsworth, tells us that the room was

"Fitted up in the sportsman's style, with a cupboard for bottles and glasses, with strong chairs and a dining-table; and ornamented with the horns of the stags caught at these hunts for a succession of years, the length of the last race each had run being recorded under his spreading antlers."

Of Martindale, Hutchinson wrote a century ago:

"Mr Hasell, of Delmain, is possessed of the Chace of Martendale, which borders on the lake (Ulleswater), and includes most of the heights which lie on the eastern side. The lands of his manse being of customary tenure, are attended with this badge of servility, the tenants are bound to attend their Lord's hunt within this Chase once a year, which is called in their court roll 'a boon hunt.' On this occasion they have each their district allotted on the boundaries of the Chase, where they are stationed to prevent the stag flying beyond the liberty."

Until the reign of Queen Elizabeth, Martindale was an independent manor, when the Queen granted it to the Earl of Sussex as a part of the Barony of Barton, reserving for herself and her successors accommodation for her pad when she came to hunt there. After a time it was bought by Sir Christopher Musgrave. Clarke, in his "Survey of the Lakes," thus describes the old state of tenure:

"The forest lands are held on the common forest tenure, the tenants having what grass they can take with the scythe. They likewise covenant not to drive the lord's deer out of it at any time of the year. In summer, however, the deer seldom come there, they being mostly red deer, which always frequent the tops of mountains in that season. Whenever the lord goes to hunt the stag, the bailiff summons all the tenants before sunset the preceding night to attend to their strones

or stations. These stations are at two places, viz., Bampkin (Rampsgill) and Bannerdale, where the deer chiefly lye, and where the tenants stand with their dogs, to prevent the deer escaping to the mountains. This service, which they are to render once a year, is called 'a boon day,' and for this every tenant has his dinner and a quart of ale. It is also a custom here that the person who first seizes the hunted deer shall have the head for his trouble. It is remarkable that the first buck taken here was seized by a woman; she, for the sake of his head, laid hold on him as he stood at bay on a dunghill, threw him down, and getting upon his head, held him fast. The late Mr Hassel (sic) frequently called upon the tenants for this service."

A succession of severe winters recently reduced the stock of deer to about one hundred head, but, by careful preservation, their numbers are now again on the increase. I am indebted to the Earl of Lonsdale for the following particulars of the state of Martindale Forest, of which he is the present tenant:

"There seems to be some mistake as to the size and importance of Martindale, which is in reality only a small piece of ground amongst many hundreds of acres of the neighbouring forests owned by myself. It is a sort of Naboth's Vineyard for the deer, which range over the whole of the surrounding hills in large numbers. In the whole ground 150 red deer were killed in 1911 and a similar number in 1912. Occasionally good heads are obtained late in the season, but not at Martindale, where the heads are poor, though the bodies are good.

"The heads are usually about the same as Scottish deer, but if a very good one is obtained, it is generally somewhat better than the best Highland deer. The deer weigh very heavy all through the forest, especially in the Naddle Forest, which is densely timbered.

"We consider that Martindale is not the only wild forest in these parts. There is the forest of Hartsop, for instance, and the deer range right from Windermere to Shap. Here there are thousands of acres of wild forest which belong to myself, so that Martindale can hardly be said to be the only forest in the north of England. There is also another forest near Ullswater called Gowbarrow, part of which now belongs to the National Trust. For hunting in these forests it is not possible to drive there, so ponies and pack ponies are used.

"Recently Canon Hasell, the owner of Martindale, from whom I

rent the ground, shot about three or four stags and no hinds, so that the deer from our forests went there and remained permanently."

In 1896 the Martindale herd numbered 250 head. Prior to 1893-1894 it rose to 300, but during that severe winter about fifty died. Mr Hasell used to shoot about six or seven stags every year, with weights running up to eighteen and even twenty-two stone. The antlers are not remarkable, being hardly finer than in an average Scottish forest. A few years ago six calves from a Highland forest were introduced into Martindale, and have mixed with the original herd with good results.

At one time there were several other deer preserves near the Scottish borders, the most famous of which was Inglewood. This forest belonged to the Crown, and stretched along the Eden Valley as far as the marshes of the Solway. Edward III found it difficult to protect his deer owing to the incursions of the Scottish noblemen, who liked nothing better than to raid their neighbours' deer and cattle. Inglewood was once the scene of a great hunt when Edward Baliol (1333) was staying in Westmorland as the guest of Lord Robert Clifford. A stag was roused in Whinfell Park, and was pursued by a single hound in a northerly direction. They crossed the Esk and a smaller tributary of the Sark, and reached Red Kirk, in Dumfriesshire. Here the stag turned back again and ran along the wooded banks of the Eden as far as Brougham Castle, where it jumped the park palings and died within the enclosure. The gallant hound, which had followed, also tried to leap the fence, but fell back and died. For many years the antlers of this stag were hung on the trunk of an oak tree close to the spot where the stag met its death. The oak was known as the "Hartshorn Tree," and the horns remained upon it until 1648.

Inglewood Forest remained in possession of the Crown until William II granted the manor to the Duke of Portland, who sold it to the Duke of Devonshire in 1737.

The Exmoor herd has never received any infusion of foreign blood, so that it can boast a purer descent than the deer in the majority of Scottish forests.

On the high moors and shaggy woodlands that cover the beautiful valleys of North Devon and West Somerset, the wild deer roam to-day as free as in the days of King Alfred. For hundreds of years they have been hunted, although it was not until the early part of the reign of Queen Victoria that the sport became a popular one. To-day the early meets at Cloutsham more resemble some fashionable picnic, in which champagne

and pâté de foie gras play a prominent part, than some simple outing for the sake of sport. Nowadays there is a tendency to overdo anything that is good in sport, and from this evil West of England deer-hunting is now not wholly free. Still, the local people, who know their ground and run "cunning," still see the best of the game, and rather favour the hunts late in the season, when the crowd has gone and the hinds run straight. In 1871 the Western herd was estimated to number 250 head, but of late years the deer have increased so rapidly that, besides the original pack, two others have been formed to keep them in check. In 1905 the late master, Mr R. A. Sanders, told me that the number would be about 500, but there must be an increase of quite 200 since that date, as I was informed on a visit to the district in 1912.

Mr Greswell has told us that the notices of early Saxon hunting round Somerton, Cheddar (Coeddir), Taunton, and North and South Petherton are more voluminous than they are elsewhere. King Alfred constantly hunted from Newton Court, and in the forest and park of North Petherton. At this time there were no fewer than five royal and ancient forests in Somersetshire—namely, Selwood or Frome Forest, Mendip Forest, the forest of Neroche to the south of the Quantocks, and about eight miles beyond Taunton, Exmoor, with an extent of twenty thousand acres of heather, coombe, and moorland, and the royal park and forest of North Petherton, situated south of the Quantocks along the alluvial valley of the Parret. The country has changed less during the succeeding ages than perhaps any other part of fertile England. The greater part is still uncultivated moorland, surrounded by shaggy woods with deep coombes, and it is as attractive to-day to deer as when King John hunted there and flew his gerfalcons at the cranes that lived on its marshy wastes.

In summer the red deer, especially the stags in velvet, are often seen on the open moors, but the bulk of the deer shelter in the woods and wood edges, working out at night to feed. They range from Bridgewater to Ilfracombe, and from Ilfracombe to Exeter. Taking Dulverton as a centre, their distribution roughly extends twenty-five miles to the east, west and north. Recently they have crossed the main valley of the Taunton Vale, and are now to be found in some numbers in the woods to the west of the Blagdon Hills. I saw tracks of deer in the woods below the Wellington Monument in August, 1912, and was informed that they range now as far south as Tiverton. Their favourite resorts are the Quantock Hills, the woods adjoining the rivers Exe, Haddon and Barle, and the woods of St Audries,

Slowley, Dunster, Horner, Cutbone, Badgworthy, Bray, Youlston, as also on Exmoor proper.

It is curious to note that these western English deer live more exclusively by browsing on trees than by grazing on the grass, and in this respect they differ from their northern relations, and are similar to the forest stags of Germany and the Carpathians.

Lord Tavistock informs me that it has been found nearly impossible to keep deer from the last-named areas in confinement at Woburn, whilst those from the Scottish Highlands and the Caucasus are amongst the easiest of ruminants to keep in paddocks on a grain and maize diet.

Let us now revert to the history of Red deer in Scotland and see how these animals have fared through the centuries, and how the deer forests of the present day came to be formed. In this case the advance of agriculture, as well as the consequent increase of population, have not been nearly so rapid as in the case of England, and this is principally due to the fact that the greater part of the northern hills and wastes are, and always have been, unfitted except to serve as a sanctuary for the wild animals that can flourish there. It is true that quite one-half of the deer forests of the present day could support sheep, but when, for various reasons, sheep were not found to pay the same rent to the proprietor as deer for sport, it is obvious that the animal which is most profitable for the time being should be in the ascendant. Truly a day may come when the wealthy may have to economize, and then luxuries, of which deer forests are one of the most unnecessary, will have to go, and sheep, as necessary food, will probably again come into favour.

War and the chase, followed by feasts and the strife of bards, composed the life of the ancient tribes of Caledonia. Hunting was the chief pastime, as well as the means of existence, of the early Celts, although they kept a few domestic animals and cultivated a little rough corn in clearings in the valleys. "The desert," cries Fingall, "is enough for me, with all its woods and deer!" The vicissitudes of the chase—that mimic of war itself—were gallant training for the future warriors, and served to make a nation of fighters. Fittis tells us that, "in his mythological creed, the Gael believed that the spirits of the dead found delight in pursuing aerial deer over the mountains of the silent land, and often those of earth." The poet, Ossian, too, is equally romantic. "The departed children of earth," he says, "pursue deer formed of clouds, and bend their airy bows. They still love the sport of their youth, and mount the wind with joy."

The pictured stones of ancient Scotland bear eloquent witness of the days of sport and storm in which the ancient Celts delighted. On nearly all we have representations, some (such as the Meigle stone) being remarkably graphic, of hunting as it was then conducted. These relics are coincidental with the Bronze Age and the early Roman occupation. The spear may have played some small part, but this was more used in battle and in sport after the coming of the horse. The chief weapon was the bow and arrow, assisted by large and powerful hounds, which not only bayed the game, but prevented it from becoming too dangerous after it was wounded. No doubt there were many other devices for taking game beside the drive and the pitfall already described, but we do not see in the sculptured stone any such aids as nets and nooses, such as used by the ancient Greeks, and were common in Central Europe and the British Isles in the Middle Ages.

Dr John MacPherson thus describes the banquets of the Hebridean chiefs:

"The whole tribe filled the Chieftain's Hall. The trunks of trees, covered with moss, were laid in the order of a table from one end of the hall to the other. Whole deer and beeves were roasted and laid before them on rough boards or hurdles of rods wove together. Their pipers played while they sat at table, and silence was observed by all."

In later times, with the introduction of the long-bow, and afterwards the more powerful cross-bow, came skilled organization in deer-driving on a much grander scale. This was known as the *Tainchel*, and was literally a cordon of men who slowly drove the deer—the operation sometimes occupying several days, and extending over a great area—to some spot where the hunters lay concealed. Great chiefs combined with all their vassals and drove immense districts, the results being in proportion to the skill of the men and quality of the weapons employed. Very interesting accounts of these great hunts are to be found in the MS. of Col. James Farquharson, of Invercauld, and the writings of John Taylor, the Water Poet, William Barclay, and Robert Lindsay, of Pitscottie.

The last-named has given us an excellent account of the great *Tainchel* organized by the Earl of Athole, in Perthshire, for the entertainment of King James V, who was accompanied by the Queen-mother and the Papal Ambassador in the year 1529. He writes:

. "Upon the next summer thereafter, the King, together with his

mother, and an Ambassador of the Pope's, who was in Scotland for the time, went all together to Athole to the hunts. The Earl of Athole hearing of his coming, made great and gorgeous provision for him in all things pertaining to a prince, that he was as well cared for in all things as if he had been in one of his own palaces. . . .

"It is said, by the space of the three days that his grace was there, the Earl of Athole was every day at one thousand pounds of expenses. This Pope's Ambassador, seeing so great a triumph in the wilderness, where there was no town near by twenty miles, he thought it a great marvel that such a thing should be in Scotland: that is, so court-like and delicious entertainment in the Highlands of Scotland, where he saw nothing but woods and wilderness. But most of all, this Ambassador, when the King was coming back from the hunts, marvelled to see the Highlanders set all this palace on fire, that the King and the Ambassador might see it. Then the Ambassador said to the King 'I marvel, Sir, you let burn your palace wherein you were so well eased.' The King answered, 'It is the use of our Highlandmen that, be they never so well lodged all the night, they will burn the same on the morn.' This being done the King returned to Dunkeld that night, and on the morn to St Johnstoun (Perth). It is said, at this time, in Athole and Strathardle bounds, there was slain thirty score of hart and hind, with other small beasts, such as roe and roe-buck, wolf, fox, and wild cats, etc."

The fame of this great hunt probably induced Queen Mary to witness a similar one in the wilds of Glentilt in 1564, and of this we have an excellent account from the pen of William Barclay, who accompanied the Court. The drive lasted for two months, and was conducted by two thousand Highlanders, embracing the woods of Atholl, Badenoch, Mar, Murray, and the adjacent country. They brought within view of the Queen two thousand red deer, and in one day were slain 360 deer, five wolves, and some roe.

"During the time of the Commonwealth," writes Fittis, one of our best authorities on Scottish mediæval times, "a grand stag-hunting took place in the forest of Monar, in Glen Strathfarrer, Invernesshire, conducted by the Earl of Seaforth and the master and tutor of Lovat. This was in 1655. 'The party,' says a manuscript of the period 'got sight of six or seven hundred deere and sport of hunting for four days, fitter for kings than country gentlemen': and two Englishmen who were

in company declared that in all their travels they never had such brave divertisement; and if they should relate it in England it would be concluded mere rant and incredible. Another great hunting was held at Braemar in August, 1715. It was attended by the leaders of the Jacobite party in Scotland with more than a thousand followers: and there the Earl of Mar arranged his insurrection in favour of the Chevalier de St George."

John Taylor gives us an interesting account of the manner in which the actual hunting was conducted. He says:

"The manner of the hunting is this: five or six hundred men doe rise early in the morning, and they doe disperse themselves divers ways, and seven, eight, or ten miles compasse, they doe bring or chase in the deer in many heards (two, three, or four hundred in a heard), to such or such a place as the noblemen shall appoint them; then when day is come the lords and gentlemen of their companies doe ride or goe to the said places, sometimes wading up to the middles through bournes and rivers; and then they being come to the place doe lie down on the ground till those foresaide scouts, which are called the Tainchel, doe bring down the deer; but as the proverb says of a bad cooke, so these Tainchel men doe lick their own fingers; for besides their bowes and arrows which they carry with them, wee can heare now and then a harquebuse or a musquet goe off, which doe seldom discharge in vaine; then after we had stayed about three hours or thereabouts, we might perceive the deer appeare on the hills round about us (their heads making a shew like a wood), which being followed close by the Tainchel, are chased down into the valley where we lay; then all the valley on each side being way-laid with a hundred couple of strong Irish grey-hounds, they are let loose as occasion serves upon the heard of deere, that with dogs, gunnes, arrows, durks, and daggers, in the space of two hours, fourscore fat deere were slaine, which after we disposed of some one way and some another, twenty or thirty miles, and more than enough left for us to make merry withall at our rendevouze. Being come to our lodgings, there was such a baking, boyling, rosting and stewing, as if Cook Ruffian had been there to have scalded the Devil in his feathers."

The early Scottish nobles, more especially the "Border Ruffians," dearly loved to poach another man's deer, an instinct which is not yet completely eradicated from our dispositions. In the days of Queen





Elizabeth this hunting over the Border was occasionally permitted, but we read that "towards the end of Sir John Foster's government, when he grew very old and weake, they (Scottish nobles) took boldenesse upon it and without leave-asking would come into England, and hunt at their pleasure, and stay their owne time." This abuse was soon checked by Sir Robert Carey who, after warning the trespassers, turned out the troops and caught the hunting gallants in midst of a foray. All the property of the poachers was destroyed, whilst a dozen were taken to Witherington Castle, where, after a short detention, they were released on promising not to repeat the offence—a promise they honourably kept. James I, who was himself a hunter, however, took umbrage at this treatment of his subjects, and complained to Queen Elizabeth, so there was "no more of this businesse."

Scottish deer forests are often sarcastically referred to as the offspring of a pernicious alliance between the nouveaux riches of England and
America and the impecunious Highland lairds. That there is some truth
In this cannot be denied, for at the present day there are many northern
wastes recently afforested, which are entirely unsuitable to the habits
of deer, and on which it is cruelty to keep them without artificial food.
The demand for northern play-grounds may possibly exceed the supply
in the piping times of peace, yet it is unfair to say that without such modern
agencies the deer would have become well-nigh extinct, for, since the time
there was any writing by educated Scotsmen, we have accounts of the
protection that was afforded to deer in certain districts. Atholl, Mar,
Monar, Glenartney, Jura, and many others are spoken of as established
forests as early as the beginning of the sixteenth century, and Monro,
High Dean of the Isles, who wrote in 1549, makes several references
of a similar character to Skye, Scalpay, Raasay and Harris.

Monro refers to Jura as a "fyne forrest for deire," whilst of Islay he says it is "fertil, fruitful, and full of natural grassing, with many great deire, maney woods, fair games and hunting." Mull, he says, possessed "certain woods, many deire," etc. Martin, too, writing in 1695, speaks of the Chase of Oservaul as "fifteen miles in compass," whilst in Harris there were, as to-day, abundance of deer. Besides the above-mentioned, great parts of Ross and Sutherland were ancient deer forests, now split into many small ones, whilst Gaick, Ardverikie, Glenfeshie, the Black Mount, Glen Strathfarrer, and Braemar are all old resorts and preserves of deer.

The practice of killing deer by driving them to concealed riflemen prevailed in Scotland until 1745, in which year Pennant describes it as the usual method of killing them. Deer-stalking, as understood to-day, is quite a recent innovation, for the guardian of the grandfather of the present Lord Lovat informed his charge that he hoped he would not so far derogate from his position as to think of going into the forest to shoot deer for himself, as such a practice was neither dignified or customary. The first record we have of the pursuit of deer by stalking is when Cluny Macpherson, chief of Clanchattan, engaged in deer-stalking with "Mr MacDonald of Tulloch, in 1745." Next we have notice that at the Black Mount one Angus MacDonald, in 1777, "after stalking for five hours, got within shot." After this references to the new sport are frequent, and the use of large deerhounds to follow and bay the stag if it was missed, became a necessary adjunct of the chase.

J. G. MILLAIS.

THE HABITS OF DEER

Those who love the forest and its creatures find a perennial interest in the habits of deer. It is, perhaps, the greatest feature of our enjoyment in Scottish hills that the red deer there are not necessarily woodland animals, and that they can exist and even thrive in open situations, where we are at all times able to watch them. Some there are who depute all their responsibilities to the professional stalker, but they miss the best of the fun in the same way that there are men who do not care to shoot unless the bag is likely to be five or six hundred pheasants, and could not in any circumstances find a snipe, or a duck, on their own estates if left to their own devices. To thoroughly enjoy deer-stalking one must oneself be fairly conversant with the habits of deer, and able to meet stratagem with stratagem. When an intelligent animal has been regularly pursued at certain seasons for centuries it will develop certain powers of observation and precaution that are delightful to us to study, because without the employment of intellect on our part we cannot outwit the beast. The higher, therefore, the cunning exercised by the quarry the more we esteem it, and to the true sportsman a victory through swiftness, or brains, on the part of our adversary is more enjoyable than our own triumph over a somewhat dull-witted animal.

It behoves us, therefore, to study deer and all their interesting ways.

It takes a lifetime to learn them properly, and even then a stalker should know the habits of individual stags on his own ground. To give an instance. Nowhere in the world is it more difficult to kill a warrantable stag than in the great forests of the Carpathians, and it is there quite common for certain stags, living on certain hills and roaming over only a small forest area, not only to remain unshot for many seasons, but even to be unseen by the forester watching the beat.

"I think we shall get a shot to-morrow evening at the big stag on Magura," said Nicolo Zaftchuk, the old stalker and ex-poacher, making his customary obeisance to Prince Henry Leichtenstein.

"Why?" replied the prince.

"Because," answered the stalker, a smile lighting his grizzled old face, "just for the last ten days he passes a little glade in the forest near to the river every evening at five minutes to five o'clock."

No one said anything or doubted the old fellow's word, for they knew that what he said was true. Prince Demidoff was the lucky stalker, and he went to Magura that evening. At twenty minutes to five he was in a position near the glade in question, and at five minutes to five, to the second, a stick cracked, and out walked the big stag to fall to the Prince's rifle-shot.

That the reader may appreciate this excellent piece of work with regard to this particular stag, I may say that I have roamed for a week with old Nicolo over the vast forests and raspberry thickets (10 feet high) that constitute Magura, and that I found few "little glades" there where a stag could be seen, so that the strict observation that led to a shot showed intelligence of no mean order. I have never seen a stalker who loved the work like this old man. "If you do not run to the stag when he roars Nicolo will despise you," said my host. He would sit for hours brooding over his smelly pipe or fingering his conch-shell in anticipation of the roar. Then he would go off to examine forests on far-off ridges and return excitedly with trophies in the shape of bits of hair, fresh dung, broken twigs, etc. But stories of Nicolo are for another time and place. To him old age was a cursed thing. I have seen him strike his legs in rage because they could not move fast enough.

From the point of view of beauty and interest the red stag is the finest animal we possess. Even in an English park, roaming through the bracken or resting amidst the gaily coloured chestnuts, he is an ornament we should be sorry to miss; but, on the hills of Scotland he is just the right thing in the right place. Away up amongst the rocks and waterfalls he is the very

spirit of the northern mountains. The giant moose, the white-necked caribou and the magnificent wapiti are all fascinating creatures in their own habitat, but for dignity of movement none of them can compare with our red stag as he moves along the hillside.

Wherever it is possible Red deer prefer to live in the shelter of the woods, from whence they come to the open glades and hillsides to feed at dawn and sunset. All day long they lie securely hidden, or browse fitfully on certain trees. In summer they rest nearly the whole day and only feed in the cool hours of evening, and night, and early morning.

Red deer are adaptable creatures, and where woods are wanting they soon learn which hillsides and corries give them shelter from the winds of winter. They may often be seen migrating in big herds from one valley to another on the approach of or during a storm. There is no doubt, however, that woods, although not essential for shelter, are of the greatest value to deer, because if the firs are interspersed with deciduous trees it gives them browsing in the severest months, when the open grounds are almost devoid of food. It is well to remember this when planting, as too many of the recently made coverts of the north are firs, and firs alone. Deer will only eat fir branches when there is no other tree-food available. They will eat Scots fir, Douglas and Austrian pine if thrown down for them in spring, but soon tire of it, whilst if it is found at all times they will hardly touch it at all. The trees they like best to strip are ash, chestnut, hazel, oak, and thorn, whilst the young leaves and shoots of birch and rowan are eaten at all seasons. Chestnuts, both horse and sweet, and acorns are a favourite food in the autumn and early winter, and it is a pretty sight to see a stag rearing up and thrashing the branches with his antlers to make the acorns or chestnuts fall. In the open they eat several kinds of moss as well as grass, young heather and blaeberry and bearberry plants.

Deer do not feed very close as sheep do, and sometimes roam over a considerable area in their feeding hours. In consequence they leave tufts which soon become old and wiry, and thus pasture frequented only by deer is apt to become sour unless grazed by other animals, such as cattle of the roughfeeding kind, namely, Welsh or West Highland.

Some years ago the experiment of feeding off the rough grass was tried in one of the valleys of the Black Mount and the result, as far as improving the grass was concerned, was more or less good. In other forests, too, in Ross-shire, the same thing has been tried, both with sheep and cattle, but foresters have always experienced some difficulty in

keeping their domestic charges from straying. It is doubtful, too, whether stalkers ever give much attention to farmyard animals, which they are inclined to treat with contempt.

Apples and turnips are a favourite food, and both sexes invade the fields and orchards in the autumn. Hinds eat turnips very close, and are not particularly wasteful; but stags are most destructive in a field. When a stag bites a turnip he jerks it out of the ground and does not touch it again after the first mouthful, yet, curiously enough, he will pick up every grain of Indian corn that is scattered amongst the grass. When they can get into plots or kitchen-gardens carrots and cabbages are eaten freely, whilst potatoes are dug up with the fore-feet. In the spring they are fond of eating growing cereals, and in the autumn like nothing better than a wheatfield near a wood to lie in. The damage done to crops near their haunts is considerable, and their presence can only be countenanced through the goodwill of the farmers. In Scotland the wealthy owner has to pay for damage in money, but in the west of England this compensation is not the real solatium to the men of the soil. It is the sport of stag-hunting, so dearly beloved, that induces these western farmers to endure so much.

Two years ago a number of continental sportsmen in Vienna were discussing the various food products which created the finest horn growths, when one of them, a German, remarked, with a twinkle in his eye, "I think we know very little about the subject, for the finest horned stag in Europe at the present moment is one kept by a butcher just outside Berlin, and he feeds it entirely on raw meat."

Two of the sportsmen present corroborated this astounding fact.

Even when living in the open, deer sometimes forget that they are no longer in the woods and go fast to sleep in the daytime. Mr Steel and I on one occasion almost touched a stag on an open hillside. We had stalked him in July for a little practice, and when within three yards found he was absolutely sound asleep. McCook, the stalker at Ben Alder, once caught a stag that was fast asleep in the middle of the day. I never saw a more remarkable instance of natural instinct in avoiding danger than one September day at Glencarron in Ross-shire. The stalker and I were working up and around a herd of deer in which there was a fine nine-pointer, which we were engaged in stalking on the south face of Glennig. On topping the crest we suddenly found ourselves confronted by a stag of perhaps four or five years old. He saw us exactly at the moment we saw him, and instead

of at once bolting he dropped to the ground and lay perfectly still with outstretched neck. It was evidently a ruse he had inherited from his forest ancestry. Sudden fear and instinct acting together caused him to do a thing he would not have done had he had warning of our approach. There he lay in the open whilst we walked without concealment right past him at one hundred yards, even giving him our direct wind. But he did not bolt, but kept moving his neck round in a line with us so that we might mistake him for some old stump of withered heath. As soon as we were out of sight I have no doubt he rushed away as hard as his legs could carry him. Altogether that was a strange day's stalking, full of unusual incidents. Just as we were coming in on the nine-point stag already mentioned we suddenly saw a ten-pointer coming over the march from Strathconan and driving about seventy hinds in front of him. At this irritating spectacle the Glennig nine-pointer—a very heavy stag suddenly sprang to his feet and rushed down the hill to give battle to the newcomer. The latter, deeming discretion the better part of valour, abandoned his hinds and made off at full speed. The larger stag gradually overhauled the ten-pointer and they both dashed into the river at the bottom of the glen, making the water fly on all sides. Once on the far bank the lighter stag had the best of it when they breasted the hill, for, having less weight to carry, he moved more easily; yet the rage and jealousy of the heavier beast was so great that he would not give in, but pursued his rival on to the crest of the range two miles away, and so out of sight into Strathconan. We waited for two hours, but neither of the stags returned to their respective harems, which remained in the same place the whole afternoon, apparently blissfully unconscious, or at any rate caring little for the struggle on their account.

In the evening we found a stag with three horns—a curious beast indeed—and I did not get a shot at him until the light had almost disappeared, but somehow the bullet went straight and I killed him.

Except in the rutting season the sexes generally keep apart in small or large companies, the largest herds of adult stags usually being found together in the beginning or middle of September just before they begin to break up, and again just after the new horns have commenced to grow in spring. In all forests, however, there are large stags which seem to live more or less isolated lives, and either never associate with others or pair with some young stag, whom they treat as a fag or watch dog. These cunning old fellows know from experience that the safest place is some

wood close to the home policies or the stalker's house, or away up in some hidden corrie amongst the clouds where man seldom comes. If the weather is fine in August and September the best stags are generally found very high up, in parties of ten to one hundred or more, and like to frequent steep hill faces under the wind, where they have commanding views below and in which they can receive all eddying winds from the tops or sides.

Hinds are generally found in big herds in winter, usually feeding much lower than the stags. These herds break up as fine weather and the spring come on, gradually forming into calving parties of from ten to twenty in May and June. Many individual hinds, however, go off by themselves and hide their calves in young wood, bracken or rocks.

It might be supposed that large numbers of stags and hinds would die in the winter in Scotland owing to the privations they have to undergo; but this is not the case. In the first place Red deer are very hardy animals and seldom die from exposure if they can obtain food. The time when great mortality takes place is chiefly in the spring—in the month of April, when the first flush of new grass comes up. This is greedily eaten by the deer in their impoverished condition, and the consequence is scouring and death to those in the worst state. Thus the race is pruned of weaklings, though even this does not prevent the deterioration due to overcrowding.

Hinds calve at three years old in a wild state, and in parks at two. They usually have one young one at a birth, though there are now many instances of twins amongst Red deer. In the Highlands calving usually takes place between June 10 and 20, and in the south of England on May 28 and the following week. The young are at first carefully hidden and suckled by the mother at night, in the early morning, and evening. If suddenly surprised the calves keep still till the last moment, and then dash off on tottering legs towards the mother, who is generally circling round close at hand. A calf can gallop a good distance at full speed with the mother, who will head it suddenly to some fresh piece of covert and force it to lie down again by pressing down its hindquarters with her chin. Even before the young are dropped hinds have an instinctive antagonism to dogs, and will boldly charge any small one that comes near them, striking out with their fore feet. A small spaniel of mine was nearly killed by an infuriated hind whose calf I was photographing. She knocked the dog over three times, and had there not been a fenced-in covert close by, the spaniel

would no doubt have been killed. Even when I picked the dog up and carried him away the angry hind followed me, closely grinding her teeth with such rage that I thought she meant to strike the dog as I held him in my arms.

It is somewhat curious that more male calves die than those of the opposite sex; they are, like boys, more delicate. Young stags will breed with hinds at eighteen months old, but grow somewhat slowly after the third year. They are usually considered fit to shoot at six or seven years of age, being then full grown, but they do not reach their prime in a wild state until eleven. From this age to fifteen or sixteen a wild stag is at his best, though in parks a decline usually sets in at about thirteen years of age. Known and marked hinds have been kept in confinement for twenty-seven years, and it is probable that the age of Red deer is very similar to that of the horse. In some fortunate cases it is possible that a stag may live to thirty-five years; but even supposing he is not shot there are many dangers to which he is exposed before such an age can be reached.

There is no doubt that the roaring of the stag and his desire for the other sex is entirely governed by the sexual condition of the females. Some hinds brought from New Zealand in 1910 were turned out in Warnham Park in the middle of June. These hinds arrived when they were in season, and all the adult stags whose horns were only half grown began roaring. However, this excitement soon died down. Sir S. Maryon-Wilson reports in "The Field" (October 8, 1904) the case of a stag which roared throughout the summer in Kinveachy Forest, Boat of Garten, and I could give other instances of a similar character. There is great variety in the roar of the stag. Some give vent to a loud, howling note not unlike that of a wolf, and I have noticed in watching those that emit such sounds that they hold the head much higher than others. Most stags when roaring hold the head and neck at any angle between fifty and seventy-five degrees. In doing so some few compress the upper lips inwards towards the palate, a fact neither noted nor drawn by any artists, though I have seen it many times at a very short range. Generally it may be said that the larger and stronger the stag, and in consequence the more sure he is of his hinds, the less he roars. Some big stags, especially wood dwellers, never roar at all, and if they do, do so only at night. Stalkers have told me of individual wood stags that never emitted one roar for several seasons, although they were known to frequent certain woods with

their hinds. Others only emit a few grunts when chasing too ardent youngsters or the two-year-olds, known to continental sportsmen as "Bei-hirsch," whose presence is tolerated up to a certain point by the master stag. The more roaring a stag does the more likely it is that he is not an adult one. Those of six or seven years of age, whose condition and strength are both good, are generally the noisiest singers. These seldom, if ever, fight, though they may procure hinds at the half-season when the sexual turmoil or death of the big stag gives them an opportunity. Such stags, if met by another somewhat more adult, generally run at the first show of fight. The angry, defiant challenger is generally that of a traveller who is looking for hinds, whilst the long-drawn, yawning roar is that of one who is already in the pride of possession. There are so many "ifs" to be overcome before they fight seriously that it is a very rare sight indeed to see two big stags engaged in real combat. I have watched stags for years and have only seen three genuine fights, once in Savernake forest, once in a park, and once at Guisachan. Many a time I thought now we shall see a proper battle, but at the last moment—after one clinch—one or other of the combatants has turned tail and bolted. I watched two master stags—an eleven-pointer and a royal—meet in the Snowy corrie, at Black Mount, one September day. Each moved slowly up towards the other, whilst the hinds formed a great circle of spectators. They walked to within ten yards and each looked the picture of rage and defiance. Then they began roaring at each other and continued in this position for over an hour, sometimes tearing up the peat with their forefeet and striking the ground with their horns. Neither gave way a yard, but nothing happened. Then the eleven-pointer, slightly the finer of the two, suddenly turned round, drove all his hinds into a bunch and herded them out of the corrie. I got a running shot at him as he went down hill and broke his back.

The best fight I ever saw was in the park at Warnham, after the master stag, a twenty-eight pointer, had been driven out by a young royal of great strength. It so happened that I moved the disinherited and forced him into the royal and his herd of nearly one hundred hinds. This the new master resented. He at once dashed at the twenty-eight pointer and the two became locked for a moment. Then ensued a battle of kings. Each stag fought with the utmost fury. Retreating to a distance of ten yards apart, they charged at full speed for a period of twenty minutes. To give an idea of the strength of these charges it is enough to say that several large pieces

25

of horn were knocked clean off the antlers of the larger stag. If one stag had made the slightest error in receiving the charge he must have been killed. So the fight, which I witnessed at thirty yards' distance, went on until at last both stags rolled to the ground and collapsed. I walked up to them, when the royal, who had recovered his wind, suddenly sprang to his feet and galloped away to his hinds, where he heralded the victory in a pæan of exultation. I walked to within a few yards of the fallen twentyeight pointer and then did not like to go nearer. He seemed to be dead, but his heaving flanks showed he was still very much alive. So I retreated, as I did not know what he might do if he suddenly found me so near, Presently he staggered slowly to his feet, and with head down tottered away to a big oak tree and lay down. Here, the keeper told me, he lay for two days without moving, in a fit of sulks or weakness. That his spirit was not crushed for ever was proved by his having another fierce battle with the royal, and losing another five points off his "tops." But that was his last fight, for next year he was a thirty-two pointer and was killed for his wonderful head, which I now possess.

It is a very rare thing for a stag to be killed when fighting in a wild state, for there he has ample room for manœuvring or retreating, whereas in parks it is of common occurrence. This is especially the case when a fight takes place at night, as most of the fights do, near to iron rails. A stag then forgets his surroundings, and in endeavouring to turn gets his horns caught in the railings and his whole flank is exposed. Three of the most promising young stags in Warnham have been killed in this way, just when they had reached the early adult period. One particular stag (for the Warnham stags are my especial friends) met his death on the first of October last year (1912) in a night fight when his bruised body was found lying against the railings of the park. He was a grand twenty-seven pointer and only seven years old. I had hoped that he would have been something remarkable.

During the rut stags eat next to nothing, and if their stomachs are examined they will be found to contain no food. All the large deer, however, suck up at this season a small quantity of peat and water. I have seen them doing this. Caribou especially drink in quantities of black mud. Why they do this I cannot understand, for it can have no sustaining effect.

During the rut stags love to roll and bathe in peat, and if this is not to be found will even cover themselves with mud and clay, so that they present

a disreputable appearance. This soon dries, however, and the dirt is shaken clean and another bath taken. In October the stags exercise little care for their own protection, trusting almost entirely to the noses and eyes of the hinds, but individual stags, especially wandering males looking for hinds in woods, will hunt for them diligently with their noses, tracking along the well-frequented path much in the same way as a hound upon scent. I have stood near a path all day in one of the Austrian woods waiting for the master stag to come by as he would not roar, and have seen no fewer than three young stags, of ages from three to seven, come along the trail with noses to the ground, intently following the line of vanished charmers. One of these passed me within ten yards without ever looking up. The travelling stag is supposed to go great distances in search of hinds, and there are instances of individuals that have appeared regularly at different seasons in a certain forest that were known to summer fifty and sixty miles away. Doubtless they have their tastes for particular places, for in the past they have found security and the necessary things in each, though these grounds may be widely separated.

In the spring, shortly before calving, hinds often engage in a game of romps. The whole herd will dart off at full gallop and chase one another for an hour or more, following small or large circles in the course of their games. Even adult Red deer stags will so far forget their age and dignity as to play at being children again. I have seen six stags chase each other in play for over an hour. They rushed after one another at full speed, then one would turn round as if to charge, when another would spring into the air, with lowered head, like boys dodging one another at "prisoner's base."

Red deer walk at a moderate pace, about three miles an hour, and are much slower in their paces than reindeer. The usual mode of progression when moving fast is a free and graceful trot. They only gallop when much frightened, and this pace seems to tire them, yet a hunted stag will gallop for hours provided he is not too hard pressed. When lying down they drop on their knees, and swing their hindquarters beneath them, and in rising they get first upon their knees and then raise their hindquarters before throwing out their forefeet. Both stags and hinds rear up and strike one another with their forefeet when angry. The ears are dropped parallel with the neck and they show the whites of the eyes. They also display anger by biting, kicking out behind or forward, and grinding their teeth. Though not remarkably keen sighted, deer have their sense of smell and hearing

highly developed. They can take the wind of a man at a mile, and quite a small stick carelessly broken will put deer on the alert half a mile away if there is no wind. When travelling, they advance to windward, and when resting choose the lee-side of a hill just below the crest; for preference, one that forms a point between two valleys. In such a position, and especially in bad weather, deer will remain for days in the same place. They know they are safe, for they can see everything that moves below and get the wind from both flanks and above. Once I spent five days in one of the best forests in Scotland with four other rifles. The wind was in the north and all the deer were collected in big herds at favourable points facing south, and not one of us obtained a shot.

A slightly wounded stag travels up-wind and uphill, and then lies down looking backward, but a badly wounded animal generally goes down-wind and downhill.

The habit of cunning old stags employing a youngster to keep watch for them is well known, and it is a common habit of a hunted stag on entering a fresh wood to range it up and down until he finds a young beast to drive into the open as a substitute, and then, to complete the deception, the old stag occupies the couch of the youngster.

Deer are very good swimmers and will easily travel four to six miles across lakes, or even over an arm of the sea. They swim at a moderate depth, only just showing the line of the back. Reindeer swim the highest out of the water and Japanese deer the lowest, the latter only showing the top of the head and the horns.

Red deer are also good jumpers, and I have seen a large stag clear a net seven feet high. On the flat they can easily jump twenty feet broad, and can doubtless cover even wider spaces when frightened. The "Hart's Leap," on the borders of Ettrick, is commemorated by two stones placed there by one of the Scottish kings; they are twenty-eight feet apart.

It is a mistake to make pets of stags, for after the second year they invariably become dangerous. Several men have been killed by stags which had been allowed to become too tame, whilst even a "gentle fallow deer" killed a man a few years ago in Greenwich Park. In 1889 M'Lennan, the head stalker, at Fannich, was killed by a tame stag after a desperate struggle. On his way home from church he met the stag, which he knew to be dangerous, yet he did not avoid it, and completely underestimated the strength of the beast. Doubtless the first blows were warded off with his umbrella, but in time the stag got the best of it, and his body, when

found, was a mass of wounds. I think it is entirely the fault of the keeper when a Red stag becomes dangerous in a park and an accident happens, because Red deer never become savage suddenly. It is always a gradual process. When a stag in a park refuses to move out of the way, shows the whites of his eyes and lowers his ears at the approach of a man, it should be killed at once; such a deer is becoming dangerous, and if allowed to live will do mischief, for a stag which has lost his fear of man is as dangerous as a lion.

All deer, however, vary greatly in disposition. Hinds and heviers are generally gentle, whilst only a few exhibit a savage disposition, especially if they have ever been teased by children. On the other hand, we have the singular case of a stag, free but in a park, which was gentle in its behaviour towards man at any season of the year. The late Sir Douglas Brooke told me that even in the height of the rut he would walk up to this stag at Colebrooke, and sent me a photograph, in proof of this, of the stag's head taken at the distance of one yard in October. This, however, must be considered a rare exception to the rule.

One yearling stag which Sir Douglas gave to a farmer living near his property chased all the cows away, came into the house and turned everybody out, smashed all the china he could see and ate up the potatoes which had been put ready for dinner. In consequence he was returned to Colebrooke for a few days, but created such havoc there that he was promptly dispatched to the Dublin Zoological Gardens.

In our islands Red deer have few enemies except man. Foxes and Golden Eagles frequently kill the calves, but even these predatory creatures have to exercise all their cunning and boldness to escape the watchful eyes and the powerful forelegs of the hind mothers. Eagles, in fact, seldom kill them, though they often try to do so, and when seen feeding on the carcase of a young deer it is more likely that the calf has died a natural death or been killed by a fox, for the Bird of Jove is not too proud to make a meal of any carrion he can find. The fox gets his opportunity by using his nose, for there are times when the hind is absent or feeding at some short distance from her calf, and then he finds it in its form and quickly rushes in and breaks its neck. It does not then matter as far as he is concerned whether the hind returns or not, for he will retire till nightfall, when the mother has deserted the dead calf, and commence his meal, probably bringing others to the feast. Eagles are popularly supposed to attack hinds when they are traversing narrow and slippery ledges, but in most cases

the evidence of death is purely circumstantial. There is a place on Glen Kinglass where there is a steep cliff at the foot of which dead hinds are found every winter. These are often devoured by eagles, but no eye-witness has seen a hind knocked off the ledge by an eagle, and the character of the pass is such that an accident may happen at any time in winter when there has been a frost. That eagles do attack hinds, and occasionally even adult stags, is, however, a proven fact. At times whole herds of deer have, like sheep, been enveloped in snowwreaths, but this is also rare, for deer always leave the deep corries in winter where drifts regularly form and resort to open, wind-swept hillsides, or flats in the river bottoms.

Mr Frank Wallace relates ("Country Life," September 14, 1912) an instance of an eagle attacking a herd of Red deer. He says:

"A stalker at Glencarron told me he had seen one of these birds round up a lot of stags 'like a dog with sheep,' when he dashed into the middle of them and drove a young stag of nine stone or ten stone down the hill. He struck him about the ribs with his wings, knocked him right over, and then, strange to say, flew off. On another occasion an eagle singled out a stag and pursued him in the same manner. The stag roared with fear, but eventually managed to get into a birch wood and brushed off his pursuer."

All large stags suffer from the attacks of parasitic flies in July and August. The Moose, the Reindeer, the Roe and other deer all have a separate species of fly which attacks them in the hot months in swarms. The particular pest of the Red deer is a large bee-like bot-fly known to scientists as Cephenomyia rufibarbis. It is a handsome insect, three-quarters of an inch long and covered with long silky hairs. The head is black and covered with long yellowish hairs, whilst on the lower part of the face there is a tuft of reddish-yellow hair, from which the species takes its name. F. Brauer, who discovered this insect in 1894, tells us that the female deposits her eggs in the nostrils of the deer. She squirts into the nasal channels a drop of fluid containing active maggots which adhere to the tender skin of the deer's nose by means of small hooks. With the assistance of these hooks, says the German entomologist,

"These troublesome maggots wriggle themselves onwards until they come to lie at the back of the throat, all the while feeding on the mucus resulting from the irritation, and increasing in size until they attain the length of an inch, and even an inch and a half. They are finally ejected from the throat by the coughing and sneezing of their host, when they 30

fall to the ground and enter the quiet pupal stage of their existence, becoming pupæ from half a day to two days after being ejected."

In the pupal stage this creature remains from twenty to forty days, when it emerges as the fully-developed fly. Red deer and Roe are also attacked by a parasite resembling the ox-warble.

Red deer will inter-breed freely with all their continental allies, as well as with Wapiti and Japanese deer. That these crosses and second hybrids will mate freely in confinement has been proved in various zoological gardens as well as by many private owners specially interested in deer. It is doubtful, however, whether the Wapiti cross in this country has been, or can ever be, as successful as it has proved in Austria, for various reasons. The chief of these is the great disparity in size.

Once upon a time our little island Red deer came from the same stock as the American Wapiti, but since those days the two have drifted far apart, both in size and conditions of life. In the case of the great Austrian stag, which often attains proportions nearly equal to those of the Wapiti, the differences are not so great. They both live in much the same sort of ground and climate. So numerous, in fact, were the heads of Wapiti-Red deer crosses to be seen at the great Vienna exhibition in 1910 that I heard many complaints on the part of continental sportsmen that such a thing as a pure Hungarian stag would soon be a thing of the past. No doubt Austrain heads were deteriorating much as our Scottish Red deer are in certain places, and in this infusion of new American blood has done much to create fine, heavy and handsome trophies with a very large fourth point; but, on the other hand, it has slightly destroyed what we must deem some of the greatest beauties in the old Red deer heads, namely, rough black horns, with "hookey" sharp points and even cup-shaped tops. In Scotland it has always been found useless to turn down larger and heavier deer than those which are native born, because strength and size are no match for activity. A pure Wapiti would never breed a single cross if allowed free in a Highland forest, nor would a first hybrid be capable of catching hinds, whilst a park stag, even if a natural born fighter, would only get a few and probably only those in the woods. It therefore has been found by those who are most anxious to improve the stock in their Highland forests that the best way to do so is to make an enclosure in some sheltered part of the forest near to the road and the stalker's house, where a good specimen of a park stag can be kept and into which the wild hinds of the forest can be lured by feeding, and so retained during the

breeding season. The hybrids resulting from this can then be turned out with safety with their mothers in the following spring and a fresh lot of hinds captured before the next autumn.

No doubt there are still a few sportsmen and Highland proprietors who object to these "horrible innovations," and wish to save the pure old Highland stock from the experiments of the Sassenach; but the grand old Highland stag only exists to-day in a very few places, except in a miserable and deteriorated condition, in such a form, indeed, that we should scarcely care to preserve him. Therefore it is hardly necessary to perpetuate in its purity a poor creature which is the product of neglect, overcrowding and man's greed. Most stalkers do not care in the least whether the stag with good horns which they have just shot, and are intensely proud of, is a first, second, fourth or fifth cross of a Warnham Park stag, which it probably is.

When we see that curious malformed head, known as "Lord Burton's twenty-pointer," and which I believe to be a pure Park stag presented to Glenquoich by the late Lord Ilchester, taken as the representative champion Highland head, it only goes to prove how easily deer stalkers can be misled, and how very little trouble they take to ascertain true facts relating to natural history.

There is nothing easier than to invent a story about some head and after this tale has passed through the hands of a few journalists even its original creator might be staggered.

One day, in Perth, I met an old Highland acquaintance, and he said to me, "I have been reading that book of deer horns of yours, and it is a curious thing that you have neither mentioned nor figured the finest purely Highland head there is; it is known as the 'Braemar head,' and is forty-two inches long and forty inches wide. A head of perfect size and shape.' I was, of course, at once interested in this giant and asked where it could be seen.

"That is easy," he replied, "for if you will come to my house next Sunday, I will show it to you."

The following Sunday found me looking at the great head, whose history I listened to with close attention.

"I had heard several yarns," said my host, "from the stalkers in the forest of X of a marvellous stag, the greatest ever killed in the district, which was shot by one Archie Macdonald, a famous character and poacher who dwelt in the village of Banchory, at the beginning of the last century.





Archie killed the stag up in the sanctuary of X one Sunday morning when all the good people of Deeside were at the kirk. He buried it, and in the following winter brought it down to his cottage, where it lay in the rafters till long after his death, as he was afraid to sell it. Eventually the head stalker of X heard of it and bought it from the widow for a small sum. Then it passed to his son, a shopkeeper in Braemar, from whom I bought it for forty pounds. You can see that the head is genuine, as it is so deeply impregnated with peat smoke."

"Yes," I replied, with some suspicion, "but no age or peat smoke would make the points of the horns dark brown as they are. May I have some steps?"

A close examination proved that the horns were perfectly smooth, and on being given permission to try them with a penknife I cut out a piece of wood.

The famous horns were entirely made of wood and were probably four or five years old; a fine piece of carving, which I fear the owner now scarcely appreciates.

As a matter of fact this specimen was a more-easily-to-be-detected fraud than some I have come across in Berlin and Vienna, where copies of stags' heads in iron, plaster of Paris and wood are so perfectly executed as to deceive most experts until they are handled, when the weight and the composition of the skull give a clue to the material.

All kinds of curious accidents happen to Red deer. Not long ago a hind got her head through a tin pail at Badenloch, and went about with this strange collar for months. A case of a stag getting its horns entangled in a wire fence and winding up the wire until it became a perfect nest on its head is known, whilst there are several instances of stags meeting death by being caught by the neck in the fork of a tree whilst browsing. Not long ago a stag was found dead, having thus hanged itself in Windsor Park, and another in Somerset. There is the case, too, of a stag slipping on the hill when feeding, its body and hind parts coming so suddenly forward as to break its neck.

Deer driving is seldom practised now in the Highlands except on the very largest estates at the end of the season when it is found necessary to move certain portions of the forest where the deer have become too numerous. Every year drives take place on Strathvaick, Mar, Balmacaan, Ballochbuie and a few other forests, but the sport, except as a spectacle, is not of a very high order, nor are the best heads killed in this manner. Too often the success of the day is spoilt by the shifting wind or by some

33

"rifle" firing too soon, and so turning all the deer back. In the great extent of country formerly rented by the late Mr Winans immense drives used to take place in Glen Strathfarrer, and as a result forty-eight stags of various sizes were once killed in one day.

Almost every large forest has produced its white hart or hind, and hardly a year passes without one being reported in some district. So long ago as 1622 we read of James VI writing to Sir Duncan Campbell, of Glenurchy, about a white hind which he wished to acquire, and which was known to frequent Corrie-Baa, in the Black Mount Forest. Accordingly "Johne Skandelbar, Englischman, with other twa Englischmen," were dispatched for this purpose, but doubtless from want of knowledge, they were unsuccessful. Curiously enough I saw a nearly pure white hind in Corrie-Baa in 1886. White stags have been killed at Invergary, Glenquoich, Loch Luichart, Braemore, Glen Doe, Guisachan, and many other places. In 1865 my father came close to a fine white stag on the Fannich March and was asked not to shoot it, as the proprietor of Braemore wished to spare so interesting a creature. He was therefore somewhat amused to find the white stag hanging in the larder at Braemore in the following year, being told that it had just been shot after many stalks, by the proprietor himself. There are always some white or pied stags and hinds in the small wood-sanctuary near the forest lodge, Black Mount. These are, however, never killed, and owe their origin to a white stag and hind presented by the King of Denmark to the Marquis of Breadalbane early in the last century.

The late Cameron of Lochiel, a great lover of the rifle, yet confessed to a penchant for a course at a stag with a deerhound, and this fine sport is only attempted nowadays at rare intervals in places where it is possible without disturbing a large tract of country. The late Mr Angelo, however, made a practice of coursing Red deer in the Highlands for many years in the Forest of Cullachy, which he owned, near Kingussie, and kept a fine kennel of deerhounds for the purpose.

The coursing generally took place on two large plateaux, the hounds being held in leash in couples at two separate points. A fast light bitch was generally used to make the running, and a heavier dog to pull the stag down or hold him at bay.

The movements of the stag marked to hunt were signalled by a stalker in advance, and when it moved into a favourable position where the hounds could see it, they were loosed. Sometimes as many as six hounds were

let go so as to shorten the course and keep the stag from travelling too far and playing havoc in the forest, but more often this was unnecessary, and two hounds did the work. Having once picked their stag, the hounds were seldom distracted, and would run their quarry through a large herd of deer without turning to right or left. The course generally lasted for two miles or so, and the best dogs were capable of dragging down, and even killing, the stag single handed. By his sportsmanlike conduct Mr Angelo no doubt sent a good many deer to his neighbours' ground, but I have no doubt he also had a great deal of fun for himself and those who were allowed to witness the hunt. With the deerhounds he usually killed about twenty stags every season.

J. G. MILLAIS.

WEIGHTS AND ANTLERS OF BRITISH DEER

Red deer are found throughout Eastern Europe, Western Asia, Northern and Central Europe, Barbary, Corsica and Sardinia. In all the countries in which it dwells, as, in degree, is the case in every park and forest where it is isolated, there are trifling differences between the races of Red deer. For all practical purposes, however, it is exactly the same species slightly altered owing to geographical distribution. Environment and climate play a very important part in the development or deterioration of this species, for no animal improves or retrogrades more quickly when placed in fortunate or uncongenial surroundings than the Red deer.

In the great marshes of the Danube, certain parts of Hungary, the south-eastern Carpathians, the western Caucasus, and in Asia Minor the Red deer grows to an enormous size, attaining even to 45 stone clean, 35 stone being no unusual weight in the Carpathians, whilst a stag killed on Mt Olympus, Asia Minor, is said to have weighed (dead weight) 75 stone,* probably reckoning 8 lb. to the stone.

The following table gives a list of the sportsman's weights (that is without heart, liver, and entrails) of British stags, reckoning 14 lb. to the stone:

SCOTLAND														Stones			
Parts of North-W	est !	Sco	tla	nd,	H	arr	is a	ınd	Tl	ne	Le	ws					9 to 13
North Uist																	
Skye																	
Open forest groun																	
Woodland stags																	
Arran																	
Jura and other isl	and	s.														•	$15,, 22\frac{1}{2}$
* Field, June 29, 1895.													35				

	Stones													
Cumberland (wild)														16 to 28½
Devon and Somerset (wild)														16 ,, 25
English parks		•	•	•	•	•		•		•	٠	•		16 ,, 32
IRELAND														
Killarney district (wild)														16 to 31½
Irish parks														18 ,, 27

The heaviest weight of Highland stags of which I have any record is that of thirty-three stags shot at Gobernuisgach, Sutherland, in 1893, during the tenancy of Sir Walter Corbett. The mean weight was 17 st. 4 oz.

In 1895 the weight of 1,176 stags from the mainland of Scotland was found to average $12\frac{1}{2}$ st. clean. In that year about 7,000 stags were killed, of which the general average may be taken at 12 st.

At Black Mount the average is 14 st.; Dalness 15 st.; Glenquoich 15 st. Some years ago, in one season, Lord Ilchester secured eighty stags at Ben Alder, whose average weight was 16 st. In great years, such as 1893 and 1912, all Highland stags averaged a stone heavier than usual. Few forests produce beasts heavier than 17 st., whilst one of 19 st. or 20 st. is a great rarity.

The conditions which produce great body growth are not always those which go to create fine antlers. A stag may become exceedingly fat on various food, both natural and artificial, but it seems that something more than fine weather and fattening products are necessary to produce fine horns. In the great year of 1893 there were a large number of fine heads as well as heavy weights, but in 1912, when the stags were abnormally heavy, there were exceptional heads in isolated forests, while the average horn-growth was only normal.

Abundance of food will build up a large body in a stag, but not a good head. To attain the latter it seems to be necessary that lime and nitrogenous matter should be present in the soil itself. Thus we see that Warnham stags will grow remarkable horns in a park where lime is abundant in the subsoil, and other bone and horn forming products are added by treating the grasses with phosphates, whereas if these same deer are transported to a good park, such as Woburn, where the soil is light and abundant artificial food is given to the deer, only heavy bodies are the result. In Sutherland, too, a county more or less devoid of lime, the stags

are much heavier in body, but distinctly inferior in horn, to those of the adjoining county of Ross. In most years the heaviest stag in Scotland will weigh from 20 st. to 22 st.—30 st. clean (the weight of a stag killed many years ago at Beaufort) being the heaviest of which I have any record.* Even in English parks such a weight has seldom been attained, 32 st. clean being the heaviest Warnham stag.

The following are the measurements of a very large Highland stag which had been imported into an English park:

Length from nose to end of tail, 80 inches.

Circumference behind the shoulders, 55 inches.

Standing height, 46 inches.

The horns of the male Red deer make their appearance when the animal is from eight to ten months old. In the wild race they are straight and simple spikes, about 4 to 7 inches long, with a small coronet. In a park, I have often seen young deer with six and seven points on the snags, and once one with nine, a remarkable pricket indeed, which had no fewer than nineteen points on his second pair of horns. In wild deer only the brow point is usually added in the second year, and afterwards the points grow according to the particular type of antiers inherited from the parents. After the brows are added, some wild stags never have any additional points, though the main beam may grow to a considerable length. These are known as "switch horns" by stalkers, and they are often the largest and fattest deer.

In wild stags we most commonly see eight points at four years old and twelve points at six. But there is no hard-and-fast rule, for wild stags are often small royals at four years old. It is somewhat unusual to find wild Scottish stags with more than twelve points, but on Exmoor and in Ireland stags with fourteen are not uncommon.

Horn growth is largely a matter of food, shelter and variety of range, chemical contents of the soil, and the conditions under which the deer live. It is not surprising that in pre-historic, and even early historic times, when the wild deer lived under far better conditions, both in the Highland forests and the woods of England and Ireland, they should have developed antiers far superior to those of to-day; but this was due principally to the small stock of deer that there was in former times, and to the fact that their range was never curtailed. As a matter of fact red

^{*} Mr Grimble mentions a Speyside stag of 33 stone, but I can obtain no satisfactory evidence that this weight was correct.

deer can be improved quickly, as they respond better than most animals to fair treatment. A wild Scottish calf caught on Ben Wyvis was turned into Warnham Park many years ago, and when killed at eleven years of age, weighed 22 st., and carried a fourteen-point head 40 in. long and 43 in. wide. It was not the least likely that this deer was other than an average one, and would, if he had survived until his prime, on Wyvis, probably have had a body of 14 st. and a thin head of eight or ten small points. In England and Ireland wild stags shed their horns in April, and the next pair are complete and hard in August, generally about the 20th of that month. Park deer are often a month earlier, and Highland stags from a fortnight to a month later. Stags in good health usually cast their horns annually about the same date, and, if not disturbed, frequently in the same spot. In parks this occurs from March 6 to March 30 for adults, and a month to six weeks later in Scotland. For a day or two before horn-shedding stags seem dull, listless and uncomfortable. If carefully watched at this time the animal may be seen hanging his head and suddenly jerking it up as if to free himself from the appendages. He may often, too, be seen shaking his head, and I imagine that the skin covering of the new horns presses against the sharp edges of the old horn and causes him some pain, for the new growth often makes considerable advance before the old is shed. When about to cast, any sudden movement will jerk off one antler, and sometimes both, but the second horn is usually shed within an hour or so of the first. At the moment of release, when the horns clatter on the ground, the stag appears to be very frightened, and starts away at a gallop, shaking his head and springing into the air; but after a few wild bounds he soon settles down, though frequently shaking his head to see if the horns are still there.

Owing to the fact that they undergo no loss of strength and therefore get into condition quicker, "hummel" or hornless stags, or "knotts," as they are called in the West of England, are frequently master stags, and, in another degree, switch horns and poor-headed stags are often the heaviest beasts and the best fighters. Consequently all this "trash" should be rigidly excluded from a forest if the best headed deer are to get the hinds. Very often the best horned stags are either timid or have little desire to obtain hinds, so that it is necessary to make the road to success for them as easy as possible. It is a common sight in parks to see the very best stag standing apart under some tree, perhaps roaring

occasionally, but taking no part in the fray, and often the reason of his fine horns is due to the fact that he cannot obtain hinds. In Austria three or four hinds to a stag is considered quite sufficient, and in forests where this proportion is maintained the deer invariably have fine horns. The new horns start growing at once, in fact they have already begun to press upwards round the sides of the coronet before the old ones are shed. The gradual process of growth need only be briefly described.

At first it is very slow, only round dark knobs covered with skin are seen on a park deer until April 1, when the knob is seen to be dividing into a fork. By April 9 the brow and the bay project a couple of inches, and the main beam is five or six inches long, growing outwards and upwards. By April 17 the brow, bay, and main beam are six or seven inches long. By April 26 the brow and the bay are hooking, and the top of the main beam is now forked and showing the beginning of the tray point. By May 4 the horn is nearly half grown, with the tray still short. By May 18 the main beam is from twenty to thirty inches long, and the first indication of swelling at the end shows that the tops will soon appear. On May 25 the top is forking into two, three or four branches. The horn now begins to grow very rapidly. Between June 1 and June 15 the whole of the top is formed into three large points or various branches. By June 27 both horns may be said to be complete, and the mucus beneath the skin covering commences to dry. By July 6 the whole of the lower part and the front of the tops are dry, but it generally takes another week or ten days before the back tops have absorbed all the blood and mucus lying between the horn and the skin covering. Between July 20 and August 1 the stag is rubbing off its velvet. The oldest stags are generally the first to clean, the other deer following in order of maturity, prickets not being clean till the end of September.

The foregoing remarks apply only to park deer, but all the conditions amongst wild ones are the same, except that the dates must be placed a month later. Collyns, after an experience of forty-six years amongst the Red deer in the West of England, states that he has seen but two stags killed before September 10 whose horns were perfectly free from velvet. This writer's remarks are doubtless correct, but it is curious that there are many stags in Scotland, in a good season, with clean horns before September 1. I have myself seen more than one Scottish red deer head quite clean on August 10. This, however, is very rare. Most Scottish stags are seen fraying their horns between September 1 and

September 12. They rub them on any hard substance that comes handy, preferring small trees of a certain size, that bend a bit and thrash their horns up and down and in and out of the bark both of the branches and the main stem. I have often seen them cleaning them on hard peat hags on the open moor and even on stones with moss on them. The somewhat tough strips of skin round the coronets and inside the points they often pick at with their feet, and force off the particles of skin they cannot reach by polishing. At first the horns are quite white, but they change to brown in a few days, when the superficial mucus dries. By rolling in the "soiling" pools stags make their horns much darker.

In "British Deer and their Horns" and "The Mammals of Great Britain and Ireland," I have endeavoured to explain at length and give figures of the principal British deer heads of past and recent years, so that in this work it is only necessary to summarize my former remarks and give notes on, and pictures of, a few exceptional heads that have lately come under my notice, and were not shown or described in the works referred to.

The antlers of British Red deer may be classified in the following manner:

- 1. Heads of Pleistocene and recent times, recovered from the earth in England, Scotland and Ireland.
 - 2. Park stags' heads.
 - 3. Heads of stags kept under semi-feral conditions.
 - 4. English wild stags' heads.
 - 5. Irish wild stags' heads.
 - 6. Scottish wild stags' heads (a) prior to 1850; (b) since 1850.

The antlers of ancient British Red deer are often of good beam measurement, but seldom of great length. Such an example as that found in the bed of the River Halladale, with a beam circumference of nine inches is, of course, quite abnormal, the best examples generally being of six inches and more. An extreme length of 48 inches, such as that possessed by the Bakewell specimen, is also quite unusual in British Red deer; but would not be very remarkable in a Carpathian or Caucasian specimen even of the present day, for in the great Vienna Exhibition of 1910 I saw several examples from 50 in. to 53 in. in length. Amongst Pleistocene Red deer of these islands, English specimens, especially those from the North—Lancashire, Westmorland and Northumberland—are generally the longest and heaviest, whilst Scottish specimens

are comparatively short and very thick. Irish Red deer heads recovered from the peat hags, where they are very plentiful, are of the finest shape, with especially well-developed tops. Yet one Scottish specimen, that from Ashkirk, now in the Edinburgh Museum, is quite an ideal head of the Irish type.

The most remarkable head discovered in Great Britain was found in a quarry at Bakewell, in Derbyshire, in January, 1785. These horns, which are of extraordinary size and thickness, lay for some time neglected in the ossiferous caverns beneath the British Museum until I pieced them together and realized how unusually fine they were. On my calling Dr Henry Woodward's attention to them he had the pieces joined and restored, and they are now mounted in a separate case in the Fossil Gallery of the Natural History Museum. The remarkable frontlet and antlers bearing no fewer than twenty-one points, with a span of forty-six inches, discovered by Mr G. P. Hughes beneath a peat deposit in the Cresswell Bog (Northumberland), is scarcely inferior to the Bakewell head.

Another magnificent example, $47\frac{1}{2}$ inches long, and with a beam circumference of 8 inches, was found during the digging of the Manchester Ship Canal, whilst another massive head bearing twenty-one points was recently found at Combermere, in Cheshire. After these come many splendid specimens from Morecambe Sands, Blackburn, and other places in Lancashire too numerous to detail.

In Scotland many fine heads have been found in the sands of Caithness and Sutherland, as well as in the peat bogs of Elgin, Forfar, Ayrshire, and the south-west of Scotland in general; but none of these approach the example found in the bed of the Halladale in 1869. The horns are extraordinarily massive; thicker, in fact, than modern Wapiti, and carry twenty-six points.

The best example of an ancient Irish Red deer is in the collection at Colebrooke, Co. Fermanagh, formed by Sir Douglas Brooke and his father. With a span of $42\frac{1}{2}$ in., it bears twenty-three points, and is in a fine state of preservation. There are five fine ancient Irish heads, which I have recently seen, in Viscount Powerscourt's collection, but they are all somewhat broken, and seem to be of more ancient origin than the Colebrooke specimen.

Another beautiful head was discovered lately in Co. Leitrim. It has a span of 39½ inches, and carries twenty-one points.

BRITISH RED DEER HEADS, PLEISTOCENE AND RECENT

Length on outer curve.	Circ. of beam.	Spread over all.	Inside span.	Points.	Locality.	Owner.	Remarks and by whom measured.
48	61/2	45	-	14	Bakewell, Derbyshire	British Museum	Unearthed 1785 and presented by Mr F. Gordon in 1891. The largest British example of a Red deer. Figured in The Mammals of Great Britain and Ireland, p. 95.
471	8 (?)	-	-	5×8	Manchester Ship Canal	Sir R. M. Brooke	Figured in The Mammals of Great Britain and Ireland, p. 95. (Owner.)
46	_	-	-	12	Newport, Monmouth	Sir G. Elliot	Figured in The Mammals of Great Britain and Ireland, p. 95. (Owner.)
45	_	_	-	15	Sandside, Caithness	T. Pilkington	Brows 18½ inches. (F. Wallace.) See page 86.
42	-	46	_	21	Cresswell Bog, North- umberland	G. P. Hughes	Recent. A head of perfect shape and quality. Figured in The Mammals of Great Britain and Ireland, p. 95. (Owner.)
40	71	43½	28½	12×9	Combermere,	Duke of	Figured in British Deer and their Horns,
40	_	-	-	12	Cheshire Elgin	Westminster Elgin Museum	p. 97. (Owner.) (H. Snowie).
381/2	61	45%	36‡	7×5	N. Wales	Sir R. Williams- Bulkeley	Figured by R. Ward, p. 11, 6th ed. (R. W.)
38	61	46	_	24	Ashkirk,	Edinburgh Museum	Figured in The Mammals of Great Britain and Ireland, p. 95. (Dr Anderson.)
37	61/2	-	_	24	N.B. River Boyne, Ireland	British Museum	Dropped horns. Figured in The Mammals of Great Britain and Ireland, p. 95.
361	5	35½	25	16	Ireland	Viscount Powerscourt	(J. G. M.) (J. G. M.)
36	57	42½	_	23	Fermanagh, Ireland	The late Sir D. Brooke	The best specimen of an ancient Irish Red deer. Figured in The Mammals of Great Britain and Ireland, p. 94. (J. G. M.)
36	81	44	_	26	River Halla- dale, Suther- land	Duke of Sutherland	Possibly the heaviest head found in Great Britain. Figured in The Mammals of Great Britain and Ireland, p. 94. Above the bay it is 9 in. in circumference. (J. G. M.)
36	5	36	24	19	Kerry, Ireland	Viscount Powerscourt	Figured in British Deer and their Horns, p. 98. (J. G. M.)
351	51	-	271	22	Ireland	Viscount Powerscourt	(J. G. M.)

J. G. MILLAIS.

PARK STAGS' HEADS

A great deal of attention has, of late years, been paid to the upkeep and improvement of Red deer in English parks; but however great this care may be, however good the feeding, and however select the breeding, I think it unlikely—if not impossible—that we shall ever get park stags approaching those which formerly dwelt in these islands during Pleistocene and recent times, unless we import South-Eastern Continental Red deer and breed only from them. The ancient stock was simply an offshoot from Continental Europe, and the animals found here had practically a free run to the South. They were few in numbers, the feeding was as good as in Austria, and the winters less severe; but, with isolation came deterioration, and with the further isolation of parks, as well as too many hinds per stag, came a further decrease in the size and length of the antlers. To-day certain parks can show stags' horns as fine as those of the Pleistocene Age, excepting in length, and in this they are a long way behind.

At the present day, since the Stoke Park herd has become extinct, the Warnham Court deer are in a class by themselves for weight of horn and number of points, but fine heads of from twelve to nineteen points are to be seen at Langley, Melbury, Vaynol, Woburn, Welbeck, Ashridge, Erridge, Knowsley and a few others.

The extreme span of the best park heads runs from 30 to 43 inches, that of the Warnham stag of 54 inches being abnormal. The length is from 33 in. to $43\frac{1}{2}$ in., and the beam from 5 in. to 7 in. in circumference; points from twelve to twenty-six, only very rarely exceeding the latter. A remarkable stag killed at Warnham in 1894 and born in 1880, grew the following series of horns (the antlers of the first few years were not kept):

1888, 29 points; 1889, 34 points; 1890, 34 points; 1891, 37 points; 1892, 47 points; 1893, 45 points (19 inches across the cup; weight of horns 17 lb.); 1894, 45 points.

Another remarkable stag from the same park, and possibly a son of the above, is now in my possession. The horns are longer and slightly heavier, but do not carry so many points:

1893, 4 points; 1894, 15 points; 1895, 17 points; 1896, 21 points; 1897, 18 points; 1898, 21 points; 1899, 28 points; 1900, 24 points; 1901, 25 points; (weight of horns 17 lb.); 1902, 21 points; 1903, 32 points. Weight of horns 18 lb.

During the past year (1912) there were five stags with over twenty-

four points, and the general average of the young stock is in every way excellent, so that Mr Lucas has difficulty in supplying the annual demand for stags to go to other English parks, Highland forests, New Zealand and Canada. The deer at Warnham are not fed in the winter, but numerous boughs of trees cut from the copses are given them in the spring; and they much enjoy peeling the bark off these. Half of the park is railed off every year and treated with lime and phosphates, and sometimes with basic slag. Park stags seem to thrive best on a heavy clay soil, as the grass on this gives greater nutriment, and has more bone-forming qualities than that of the light lands.

PARK STAGS' HEADS

Length.	Circ.	Spread over all.		Points.	Locality.	Owner.	Remarks and by whom measured.
44½ 43½	67 51	51 1	331	22 12×9	Warnham Woburn	C. J. Lucas Duke of Bedford	Measured by J. G. M. (R. W.)
421	63	40	_	12	Melbury, Dorset	Earl of Ilches-	Figured in British Deer and their Horns, p. 99. (J. G. M.)
411	5	41	32	7×6	Langley, Bucks	J. G. Millais	Figured in The Mammals of Great Britain and Ireland, p. 102. (R. W.)
40 40 ³ 40	5½ 7	41 41 43	31	7×7 5×5 32	Bristol — Warnham	Sir J. Smythe R. V. Berkeley J. G. Millais	Figured in The Mammals of Great Britain
"				92	Court, Sussex	01 01 1111111	and Ireland, p. 99. Weight of horns without skull, 18 lb.
40 39½	4 3 5 <u>3</u>	40½ 35¾	33½ 26¾	6×7 5×5	Woburn	W. Cooper Duke of Bedford	(R. W.) (R. W.)
39 39	5 1 6	33½ 34	273	6×6 19	Vaynol Park	W. Cooper Viscount	(R. W.) (J. G. M.)
34	6	45½	25½	44	Warnham	Powerscourt C. J. Lucas	Figured in The Mammals of Great Britain
33	6 <u>1</u>	54	23	26	Court, Sussex Warnham Court, Sussex	C. J. Lucas	and Ireland, p. 98. (J. G. M.) Right-hand figure, p. 97, in The Mammals of Great Britain and Ireland. (J. G. M.)

There are, of course, hundreds of examples of park deer shorter than 38 inches, and I have only given the last two because they are remarkable in other respects.

HEADS OF RED DEER UNDER SEMI-FERAL CONDITIONS

The German and Austrian sportsmen place in a separate category the heads of Red deer which have a considerable range—2,000 acres and above—over moors, woods, and grassy uplands; and where they live in a semi-wild state, and grow antlers somewhat similar to those of purely wild stags; but with the strength of beam and length of inferior park

deer. These so-called forests are always enclosed, or fenced in, on one or more sides where the deer are likely to break out.

In our islands it is somewhat difficult to draw the line between deer kept under such conditions and what are known as wild races; because nowadays the explanation of what is a wild animal and what is not seems to be peculiar and often misleading. Recently there was a case of a certain individual shooting a stag, which had escaped from a park into his woods. An action was brought against him by the owner of the park for killing this animal, which he said was his private property. The lawyer for the defence argued that, once the deer had escaped from the park it was a wild animal, and could be treated as such; but the prosecution made good their case, and the defendant was heavily fined. This seems to me a gross miscarriage of justice; because, a Red deer is never, under any circumstances, a domestic animal. It is always a wild creature, and from the moment it escapes from the park becomes as wild and cunning as any deer in a Scottish forest. Moreover, from the moment it gains its freedom, it causes damage to woods and crops. I leave it to my readers to determine whether they consider the deer of Arran, N. Uist, Rum, and other islands, which were recently afforested and stocked with park deer, should be classed in the same category as the deer of other islands such as Jura, North and South Harris, The Lewes, etc., which have always possessed these animals from time immemorial. On the other hand it is easy to see that a time is not far distant when sportsmen, who, as a rule care little for the history of animals, provided they get a respectable trophy to shoot at, will be blind to the fact that there is scarcely an island or a deer forest in the north where the animals will be of the pure old Highland stock, and will not be kept except under semi-feral conditions. For the present, therefore, let us go through the pretence of calling what are practically park deer living under somewhat wild conditions semiferal animals.

This class will embrace the stags of Colebrooke and Castle Wellan, Ireland, and Drummond Castle, Arran, Drummond Hill (Taymouth), etc., in Scotland. The woodland stags of Beaufort and Tay Valley may be regarded as purely wild, as they are not fenced in in any way.

The late Sir Douglas Brooke, in a letter to me, said: "As a rule semiferal stags are at their best from ten to eleven years, though they carry the largest number of times at nine years of age. A stag that was "master" at Colebrooke from one to twelve years old died at the age of thirteen.

His horns were as follows: First pair (as usual); second pair, 11 points; third pair, 12 points; fourth pair, 12 points; fifth pair, 13 points (weight, 7 lb. 4 oz.); sixth pair, 14 points (weight, 9 lb.); seventh pair, 14 points (weight, $9\frac{3}{4}$ lb.); eighth pair, 15 points (weight, $10\frac{1}{4}$ lb.); ninth pair, 14 points (weight, 11 lb.); tenth pair, 15 points (weight, $11\frac{1}{4}$ lb.); eleventh pair, 14 points (weight, $11\frac{3}{4}$ lb.); twelfth pair, 15 points (weight, $12\frac{1}{4}$ lb.)."

The largest head for all-round measurements of what is said to be a purely wild Scottish stag kept under semi-feral conditions, is No. 4 on the list. It was shot by Mr Thos. Pilkington at Sandside, in Caithness, in September, 1912. As I knew that Mr Pilkington had recently received park stags from Warnham, I wrote to him for particulars of his remarkable deer, and received the following reply:

"I have much pleasure in telling you all that I can about the stag in question, which was a purely wild-bred animal without any park blood in its veins. I have, as you know, Warnham stags at Sandside, but the stag we are concerned with appeared on my ground before their advent. He had a head so exceptionally fine that we spared him, year after year, until 1912, when we thought he had reached his prime, and so I shot him."

I have recently seen the head in the possession of Mr Pilkington in London and should say it is the largest and finest semi-feral head that has come under my notice. It is slightly better than a stag brought as a wild calf from Ben Wyvis and killed in Warnham Park at eleven years of age, whose horns measure 40 inches in length and 41-inch spread over all, but the two heads are much the same in character, and show what good feeding and protection will do for wild animals.

I suspected that the Sandside stag might have wandered from Berriedale in its youth, where Welbeck stags have been released amongst the wild deer for many years, but the Duke of Portland, in a letter to me (December, 1912) says: "I do not think, in fact I feel sure, that the Sandside stag had anything whatever to do with Langwell. Mr Pilkington had the deer caught and fed in his deer park till it was released and killed. At the present moment there is in the park at Langwell a young stag I have kept in and which promises to be a beast of the same class. Welbeck stags have been turned out during the rutting season at Langwell for the past thirty-five years."

It is a pity that the head stalker at Sandside should have published measurements of the "Sandside stag" in a Scottish paper, stating that it

was a purely wild stag, without adding the fact that the deer had been in confinement in a park for the past three seasons, because it led to a good deal of misapprehension as to its correct status.

The deer at Sandside are fed on locust beans and Indian corn, and that portion of the valley where the deer come for food has been dressed with basic slag, which gives a good supply of grass until late in the season. My friend, Mr Frank Wallace, who published an interesting article on the big stag in "Country Life" (December 14, 1912), gives the measurements of the dropped horns, as well as those of the last horns grown by the animal, as follows:

MEASUREMENTS OF SHED HORNS, SANDSIDE, 1912

																			Girth between	en
					1	Length	1.	E	rows.			Bays.			Trays	·		Tops.	brow and ba	у.
1907			Right			26			7 ½			_			7			$5\frac{1}{2}$, $6\frac{1}{2}$, 2	$3\frac{1}{2}$	
			Left			26			6 1			1			81			$6\frac{1}{4}, 7\frac{1}{2}, 1$	3½	
1908			Right			30			81			51/2			81			$8\frac{1}{2}$, $5\frac{1}{2}$, $4\frac{3}{4}$	$3\frac{7}{8}$	
			Left			29			81			6			101			51, 51, 61	4	
1909			Right			341			91			61			81			$11, 8\frac{1}{2}, 6\frac{1}{2}$	41	
			Left			34 1			9 .			43	i		11			121, 9, 5	4½	
1910			Right			351						91		Ĭ.	11			101, 7, 5, 5, 41	4½	
			Left	Ĭ		37 1		Ċ	10 .	•	Ċ	10	·	Ċ	121	·	•	13, 10, 61	41	
1911			Right	Ċ	:	38	Ċ				:	103	:	:	103	•	•	133, 11, 71	43	
	•	•	Left	•	Ċ	361					Ċ	101	Ċ		123	Ċ	·	12, 10, 8, 3	43	
			2016	•	•	302	•	•		•	•	104	•	•	124	•	•	12, 10, 6, 5		
					7	rays:	and					I has	e i	maa	le the	fol	low	ing rough calculat	ion as to the	
						Tops		P	oints.			an	tou	nt o	f new	hor	ท น	hich was grown et	very year.	
1907			Right			31			5	I	A g	gregat							• •	
			Left			31			6		-									
1908			Right			35			6	I	\ gg	gregat	e o	f h	orn=	125	i i	1., an addition of	½ in. in beam	ı
			Left			33			6		aı	nd 32	i ir	ı. ir	leng	th e	on p	receding year's s	rowth.	
1909			Right			4			6	A	A gs	gregat	e o	f h	orn=	147	in.	, an addition of	in. in beam	
			Left			4 1/3			7									receding year's		
1910			Right			41			8	A								an addition of ne		
			Left			4 1			6									eceding year's gr		
1911			Right			41/2			6	A								., an addition of		
			Left		Ċ	43	Ċ		7	•								ceding year's gro		٠,
							•	•	•		•	id , 1		111	cngtii	OII	pr (ceding year a gre	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
								B	row			Bay			Tray	,			Beam between	en
					L	ength	١.	р	ints.		1	points			point	s.		Tops.	bay and tray	v.
1912			Right			39			11 .		. '	101			121				5	
			Left			40						11			13			13, 8, 9, 4	5	
								•		•	•	••	•	•	10	•	•	10, 0, 2, 1		
			В	ean	ı be	etweer	n													
				tı	ay	and		Sp	an ove	er	Ti	p to	S	pan	ı. :	Spa	n.	Widest		
					to	ps. I	Poin		tops.			ip.				ute			Weight.	
1912			Right		- 1	5 .	8		15					343		38			st. 8 lb. with	
			Left			5.	7		141					_		_			eart and liver.	
										·					•					

Aggregate of horn=191 in., an addition of & in. in beam and 10 in. in length on preceding year's growth.

The semi-feral stags of Sandside attain a great weight; a royal killed in 1910 weighed 25 st. 10 lb.

HEADS OF RED DEER UNDER SEMI-FERAL CONDITIONS

Length.	Circ.	Spread over all.	Inside Span.	Points.	Locality.	Owner.	Remarks and by whom measured.
42½	_	_	_	6×6	Colebrook,	Sir D. Brooke	(J. G. M.)
42	_	-	40	7×7	Arran, N.B.	Duke of Hamilton	Shot by H. Padwick, Sept., 1872. Weight 28 st. 6 lb. Length of brow
41	6		23	19	Colebrook, Ireland	Sir D. Brooke	point, 22 in. (Sir D. Brooke.)
40	5	433	343	15	Sandside, Caithness	T. Pilkington	Weight, 23 st. 8 lb. (F. Wallace.)
40	51/2	-	291	8×8	Colebrook, Ireland	Sir D. Brooke	(Sir D. Brooke.)
39½	51	_	26 ³ / ₈	7×7	Colebrook,	Sir D. Brooke	The heaviest Colebrook stag, 26 st. 11 lb. (Sir D. Brooke.)
37 3		-	261	6×7	Arran, N.B.	H.R.H. Duke of Coburg	ii ii. (Sii D. Diooke.)
371	5	-	243	6×5	Arran, N.B.	and Saxe Gotha H.R.H. Duke of Coburg	
361	45	-	243	6×6	Arran, N.B.	and Saxe Gotha H.R.H. Prince Arthur of	(Owner.)
36	5	42	-	6×6	Castle Wellan	Connaught Earl of Annesley	

Measurements below these are too numerous to mention.

ENGLISH WILD STAGS' HEADS

The general appearance and peculiarity of Devon and Somerset stags' heads is far less generally known than those which hail from Scotland. In size, weight, and length of horn the heads of these southern British Red deer are, on the whole, superior to those of their northern cousins. The length of horn of adult stags is usually from 32 in. to 36 in., but one extra fine specimen of 41 in. has occurred.

It is rare to find heads with cupped tops, whilst fourteen pointers are not very usual. Where hunting takes place on the Exmoor side, about twenty-five stags are killed every year. The best examples are the heads which come from the Quantock deer. These range between Halswell, the seat of the Tynte family, and St Audries, the home of the Acland Hoods. Their chief stronghold in this part of Somerset lies in the coverts belonging to the Hon. Mrs Stanley, where some thousands of acres of coppice, heather, and sheltered bottoms afford a harbour for the best deer.

Next to the Quantock deer come those of Slowley and Dunster, where the character of the soil is somewhat similar to that of the Quantocks.







Fine heads also come from Lord Carnarvon's coverts in the valley of the Haddon, where fourteen and fifteen pointers are not rare; though in this locality the heads are somewhat narrow or "hoop-headed," as they say in the western dialect.

The deer of Exmoor proper pass regularly down into the woodlands of Horner, Culbone, Badgworthy and Bray. There is quite a separate herd, where the horns are good, in Sir Arthur Chichester's Youlston coverts. These are cut off from Exmoor by a new line of railway. A fresh herd has lately sprung up near Wellington and Tiverton, on the other side of the Taunton Vale; but I have seen no antlers from this district.

Hornless deer, or "knotts," are not uncommon in Devon and Somerset.

The finest example killed of recent years was taken by the hounds under the mastership of Mr Sanders in 1905. It is a very perfect fifteenpointer, with the brows and bays curiously far apart, and splendid tops.

ENGLISH WILD STAGS' HEADS

Length.	Circ.	Spread over all.	Inside span.	Points.	Locality.	Owner.	Remarks and by whom measured.
41	51	4I	321	5×5	Exmoor (1912)	Sir John Heathcoat- Amory, Bt.	Known as the "Stoodleigh Stag." Killed in 1897. Brow lines 17 inches. Figured in The Mammals of Great Britain and Ireland, p. 100. (Owner.)
40	57	38	28	7×6	Exmoor	Sir John Heathcoat- Amory, Bt.	(R. W.)
39 38½	5 <u>₹</u> 5∦	=	28½ 31½	6×6 6×6	Exmoor Somerset	R. A. Sanders Viscount Ebrington	(R. W.) (Owner.)
381	51/8	- 1	31 ½	12	Quantock Hills	Earl Fortescue	(R. W.)
37½ 37½	5 5½	48	30 <u>1</u> 35≨	7×7 6×5	Exmoor Exmoor	C. Nelder Sir J. Heathcoat-	(R. W.) (R. W.)
371	42	36	313	6×5	Quantock Hills	Amory, Bt. E. A. V. Stanley	(R. W.)
37	5	391	33½	6×7	Bembridge Wood	Capt. H. H.	Figured in Records of Big Game, p. 8. (R. W.)
362	6	_	281	13	Exmoor	Sir A. Acland Hood, Bt.	Known as the "St. Audries Stag." Killed October 25, 1893. Figured in The Mammals of Great Britain and Ireland, p. 100, (Owner.)
361	5\$	301	235	7×6	Stoodleigh	Ian. H. Amory	(R. W.)
36	43	301	243	9×7	Exmoor	R. A. Sanders	Figured in The Mammals of Great Britain and Ireland, p. 100. (Owner.)
36	51	_	_	15	Exmoor	R. A. Sanders	Figured in The Mammals of Great Britain and Ireland, p. 100. Killed in 1905 and generally considered the finest example obtained in recent years. (Owner.)

IRISH WILD RED DEER

Red deer were very abundant in Ireland in the Pleistocene Age, and the earliest writer on Irish history, an ecclesiastic named Augustine, who lived about the middle of the seventh century, mentions wolves, deer, wild swine, and foxes as the principal animals of the island. Giraldus Cambrensis (A.D. 1183-86) does not include them amongst animals not found in Ireland. Fynes Morison (1599-1603) thus refers to the species: "Yet in many woods they have many Red deer loosely scattered, which seem more plentiful because the inhabitants used not to hunt them, but only the governors and commanders had them sometimes killed with the piece." Smith, in his "History of Waterford" (1774), tells us that there were a few wild Red deer in the Knockmealdown Mountains, but they were then becoming rapidly extinct. Till recently there were a few in a wild state in the less inhabited parts of Connaught, Connemara, and Northern Cork, but now they owe their preservation to the efforts of the Herberts of Muckross and the Earls of Kenmare, in the county of Kerry, and these are the only purely wild herds of to-day, those in Roscommon, Wicklow and Donegal being the descendants of park deer, and are now fenced in.

On the whole the antlers and bodies of these Irish deer at Muckross and Killarney are somewhat finer than those of the Scottish forests, though neither so large nor so long as the West of England specimens. But they show more "character" than any other British Red deer, conforming as they do to the shape of the old Irish type of head with perfectly separated crowns of four points each. The average length of the best is not more than 32 inches, but fourteen pointers are more common than in England or Scotland. The heaviest Kerry stag is said to have weighed 33 st., and the late Lord Powerscourt told me that the late Mr Herbert of Muckross killed a stag of 30 st., but these weights are, I think, affixed from hearsay. The heaviest of which we have an exact weight is one killed by Mr Ralph Sneyd during his tenancy of Muckross. It weighed, clean, 29 st. 10 lb.

IRISH WILD RED DEER

Length.	Circ.	Spread over all.		Points.	Locality.	Owner.	Remarks and by whom measured.
35 34 32 31 31 31	42 5 42 5 42 5	 33 20 ³ 31 27	30 31½ —	9 6×5 5×5 7×7 7×7 7×8	Ireland Muckross Kenmare Muckross Kenmare Kenmare	Hon. A. Charteris Ralph Sneyd Lord Castlerosse Ralph Sneyd Lord Castlerosse Lord Castlerosse	(R. W.) (Owner.) (Owner.) (Owner.) (Owner.)

There are probably several heads longer than any of the above, but so far they have not been recorded. Mr Rowland Ward in his "Records of Big Game," p. 7, sixth edition, includes Irish park deer with the indigenous wild ones. I think this is a mistake, and scarcely consistent, since he separates English park deer from the wild ones. Wild Irish deer often reach great weights; a royal killed by Lord Castlerosse, at Killarney, in 1908, weighed 28 st. 7 lb., clean.

SCOTTISH WILD STAGS' HEADS

Some years ago, when writing a book on British deer horns, I made a point of visiting all the best public and private collections in these islands, especially in the north; and nothing struck me so forcibly as the scarcity of heads killed in Scotland prior to the year 1850, and the general rarity of the much-vaunted trophies of days of yore. I doubt very much if, at the present day, there are thirty good examples of old Scottish heads. All this points to the fact that in the early part of the last century, and in previous ones, a stag's head, however large or beautiful, was of no value either as an ornament or a sportsman's trophy. The latter one can understand, because in early times the death of a stag was more often due to a collective rather than an individual effort, or the skill and staunchness of hounds. The artistic beauty, too, had not then appealed to the prosaic Highlanders, as it did to the more cultivated Italians, Austrians and Frenchmen, and so beautifully shaped horns were not kept, except to be sawn up for personal or table ornaments. In the past the majority of the specimens were in no way superior to the best trophies of to-day; but the following five examples are far ahead of anything killed since 1850.

The two seventeen-pointers in Gordon Castle are easily the best British

stags' heads killed in our islands since the Pleistocene Age; and are such that even a good continental forest would be proud of them to-day. How such deer happened to exist at Glenfiddich and Gordon Castle at the beginning of the last century is certainly somewhat remarkable since no other heads quite of the same class are to be found in the old Scottish houses.

Of their history little is known beyond what is contained in the following letter which the Duke of Richmond and Gordon has kindly sent to me: "The Glenfiddich head was shot by the head forester in the Blackwater Forest, which is part of Glenfiddich. He killed it in the burn at the back of the lodge, and there is a cairn to mark the spot. The Duke of Gordon of that time (1831) sent word to his head forester to kill a stag, as he wished to send a haunch to his sister, the Duchess of Bedford, who at that time was staying at Kinrara. The forester, in spying the ground, found what he thought was a dead birch tree, and as he knew there were no birches in that part of the forest, he made further investigation. The result was that he found the seventeen-point stag and shot it.

"With regard to the other seventeen-pointer, killed in 1826, near Gordon Castle, by Alexander, Fourth Duke of Gordon, and then in his eighty-fourth year, I know nothing more about it than is recorded on the shield. But I may mention that some reason for the size of these animals may be found in their free range. At that time the deer had a free passage from the high ground of Glenfiddich to the dense woods about Gordon Castle."

SCOTTISH WILD STAGS' HEADS OBTAINED PRIOR TO 1850

Length.	Cire.	Spread over all.		Points.	Locality.	Owner.	Remarks and by whom measured.
41	7	_	35	7×7	Inverness-shire	Col. W. H. Walker	Killed in 1794. (R. W.)
38	61/2	_	_	9×8	Glenfiddich	Duke of Richmond	Killed in 1831, September 24; 37 st. 7 lb. as it fell. Figured in The Mammals of Great Britain and Ireland, p. 102. (Owner.)
36	72	42	36	6×7	Monymusk	Sir A. Grant, Bt.	Killed in 1795. (J. G. M.)
36				8×8	Glen Moriston	J. Grant	Killed in 1796. (Owner.)
35½	43	38½	27	5×5	Kinlochewe	Sir K. Mac- kenzie, Bt.	The last two are figured in British Deer and their Horns. A head of remarkable beauty. Killed in 1814. (F. Wallace.)
33	51	-	-	8×9	Gordon Castle, N.B.	Duke of Richmond	Killed in 1826. Figured in The Mammals of Great Britain and Ireland, p. 102. (Owner.)

It is the opinion of those best qualified to judge that between 1830 and 1870 the heads of Scottish stags were little, if at all, superior to those

of to-day, and such exceptional stags as were killed generally owed their excellence to the scarcity of deer in certain districts or to the superior condition of what are now known as the older forests. This is proved when we trace the history of any particular head of this period. The fine heads of St John and Landseer's day were either obtained on some bits of sheep ground, where stags were scarce, or in some of the old forests such as Black Mount, Ardverikie or Atholl, which, fifty years ago, were in a far better grazing condition than they are to-day. " If you only saw the awful amount of rubbish I used to have to set up in days gone by," said the late William Macleay, of Inverness, to me one day, "people would not talk such nonsense about the deterioration of Scottish deer." That "rubbish" was nearly as plentiful as it is to-day is doubtless a fact, and also that the sportsmen of days gone by grossly exaggerated the quality of their trophies is another fact which may be pardonable, but is also true. However, the all-levelling tape does not lie. I have seen and measured many of these "old" Black Mount and Atholl heads, the trophies won by Crealock, St John and Landseer, and none of them came above the standard of what we call "good" to-day, whilst the exceptional head of the highest class must have been just as rare then as it is to-day. Every season about six or eight high-class trophies over 36 inches, with perhaps 35 or 36 inches span, are obtained, and such a head is grown only by one adult stag in every 1,000, and then only when he has good wintering, range, and food, combined with a good "growing" season. Many things are required to achieve the "great" trophy which must be, under the circumstances, always rare. The best trophies of to-day come from the "new" forests, where the winters are mild and the grass is soft and sweet, or from forests that are well cared for and the deer heavily fed in winter. By well cared for I mean that the best and most promising deer are not harassed at the breeding season, and undesirable heads are properly shot down. The best forests for heads to-day, if we except woodland forests, are those in the neighbourhood of Strathglass, Glen Strathfarrar, Ardverikie, Strath Vaich, Meoble, Morar, Knoydart, Mamore, Affaric, Kintail, Berriedale, Sandside, Strathconan, Glenquoich and Glenkingie, North Uist, Ben Alder, and a few others. Many other forests produce exceptional trophies occasionally, but the average of heads is not so good as the first-named, as regular visits to Mr Macleay's shop in Inverness will testify. Many of the best heads do not come into the stuffer's hands, but an annual inspection of the trophies in the hands of William

Macleay will give a very fair demonstration of what Scotland produces. His stag-head statistics, carefully kept for a number of years, form an interesting study, which show us that, although deer have enormously increased, the number of good heads are well maintained, and their number influenced by good or bad growing seasons:

STAG SHOOTING STATISTICS

			SIAG SHOOTING SI												105				
on.						No.	of P	oints.						ch.	One Horn.	Hummel.	Malform.	Under Six Points.	al.
Season.	6	7	8	9	10	11	12	13	14	15	16	18	20	Switch.	One	Hun	Mal	Und	Total.
1890	57	37	90	64	94	49	32	6	3	1	-	1	-	16	3	_	1	46	500
1891	49	32	91	69	111	38	45	4	1	1	 –	-	-	2	_	2	1	54	500
1892	56	44	87	72	100	46	49	6	4	1	-	-	-	10	2	1	1	21	500
1893	33	23	79	62	97	70	71	13	2	2	1	-	1	11	1	3	7	24	500
1894	38	43	97	64	102	54	38	8	5	1	1	-	-	12	_	6	7	24	500
1895	49	38	75	69	114	55	50	6	4	2	1	-	-	21	1	4	5	6	500
1896	34	28	83	73	111	70	64	18	5	-	-	-	-	5	1	1	3	4	500
1897	43	46	88	62	108	53	54	10	2	2	-	-	-	10	3	_	6	13	500
1898	35	42	106	76	106	51	47	11	5	1	-	-	-	6	_	4	2	8	500
1899	39	33	125	67	108	61	37	4	3	-	-	-	-	5	1	3	3	11	500
1900	39	38	86	81	113	48	61	8	2	-	-	-	-	7	1	3	3	10	500
1901	21	30	103	74	121	58	50	6	2	-	-	-	-	14	1	1	7	12	500
1902	38	42	96	95	101	48	49	10	1	2	_	1	-	8	2	3	1	3	500
1903	35	46	87	59	118	51	68	11	3	1	_	_	-	12	1	3	5	_	500
1904	35	30	96	91	120	44	55	3	2	1	-	-	-	9	3	4	1	6	500
1905	26	31	88	74	106	70	69	8	9	2	_	-	-	5	_	5	4	3	500
1906	31	25	90	64	108	66	74	10	5	2	_	_	-	5	3	5	_	12	500
1907	33	26	89	75	114	56	72	11	5	1	_	-	-	13	_	1	_	4	500
1908	25	22	95	71	110	71	83	9	3	-	—	_	-	5	_	3	_	3	500
1909	25	33	91	70	106	69	79	7	3	3	_	1	-	5	_	3	2	3	500
1910	32	22	77	71	115	71	88	8	2	-	—	-	-	2	_	5	3	4	500
1911	31	18	61	66	108	78	101	15	4	1	-	1	-	3	5	6	1	2	500
1912	32	29	91	59	105	52	90	17	6	3	-	17	-	7	-	1	1	6	500
																			11,500

The above is a summary of the point value of the first 500 stags' heads received by W. Macleay for preservation during the past twenty-three seasons.

54

The longest Scottish head which I have seen and measured is one of 41 inches. It was got in Strathglass, near Fasnakyle, many years ago.

The greatest span over all of any Scottish head is one killed by the late Lord Tankerville at Ardverikie.* It measured 42 inches. The head obtained by the late Roualeyn Gordon-Cumming, in Glen Strathfarrar, is 39½ inches span, but this deer evidently injured the right horn during growth, which makes the span abnormal. In 1897 Mrs James Platt at Inverlochy got a head with a span of 38 inches, and in the late Duke of Fife's collection at Mar there are two heads with extreme spans of 40 inches and 39 inches. The big Guisachan royal is 39¼-inch span, and a stag shot by Mr Smithson at Killiechonate is 38 inches. The remarkable ten-point Kinlochewe head got in 1814 is 38½ inches over all.

The best Scottish head I have seen and measured (now figured) was obtained by a farmer in his cornfield near Aberfeldy, in September, 1889. It is a perfect royal with long points, and 40 inches long and 40 inches wide. Such a trophy, in fact, that the sportsman (in Scotland at least) dreams of but never sees. Practically equal is the big Guisachan royal killed by the late Lord Tweedmouth, but the points are not quite so long. This stag generally lived in the Beaufort Woods, and only twice visited Guisachan, but the second time old Maclennan saw him and came rushing into the house to announce the fact, and within an hour Lord Tweedmouth had killed him. Scarcely inferior is the great Eskdale head which is thicker and rougher than either; all the foregoing were "wood" stags. After this we can compare at least thirty super-excellent heads, on which all manner of tastes might differ, but which any sportsman might be proud to have slain after a lifetime in the northern forests.

The record number of points carried by a Highland stag is twenty-two. This head, somewhat malformed, is of a stag killed in the Cromarty Woods early in the nineteenth century. For some years it hung in Cromarty House, but was afterwards presented by Mr Hay Mackenzie to Lord Londonderry. Sir Philip Egerton says it carried twenty-two points, and the animal itself "appeared to have been diseased." See also "Lays of the Deer Forest" (Vol. II, p. 113), by the brothers Sobieski Stuart, and "Natural History of Deeside and Braemar," by MacGillivray, 1855.

With regard to the twenty-pointer shot by the late Lord Burton at Glenquoich, I have not the least doubt that it was an English park stag,

^{*}A head, belonging to Sir John Ramsden, obtained at Ardverikie many years ago, was set up by Messrs Spicer & Sons in 1912. It measures 41 inches in extreme span, and is probably from the stag killed by Lord Tankerville.

and have already (in "The Mammals of Great Britain and Ireland," pp. 104-105) given my reasons for thinking so. Briefly, they are as follows. I examined the head on the day it arrived at Mr Macleay's shop in Inverness. The head was that of a stag in a state of decline; most of the back teeth were gone, and the horns could not have weighed more than 3 lb. On Lord Burton's statement that it was a genuine "wild" stag I inserted a picture and description of it in "British Deer and their Horns," but shortly afterwards I met the Earl of Ilchester, who laughed at the idea that it was in any way a Scottish stag. In fact he had himself sent Stoke Park stags to Glenquoich as they were too dangerous to keep in his park at Melbury. I published these facts, not in any way to impugn Lord Burton's good faith, for doubtless he believed it was a wild stag when he shot it. but so as to keep the records of Highland stags as clean as possible. It is, however, certain that the stalkers knew the stag in question, and that it was one of those sent from Melbury turned loose in the forest. and that they did not mention the fact when it was killed.*

An eighteen-point head was killed in 1890, and another in 1902. Lady Breadalbane killed a seventeen-pointer a few years ago at Black Mount, and in 1912 Mr Benson killed a seventeen-pointer at Kilillan, but the horns were very short, only $29\frac{1}{2}$ inches.

Heads with points more than fourteen are very rare, only two, or at the most three, being killed in any one season.

Hummel, or hornless, stags are now very common in Scotland. Those with a single horn of only one long point are exceedingly rare. I have seen two such Scottish heads, one of which is in the smoking-room at Black Mount. A head of this description (figured in "Country Life," Dec. 21, 1912) was from a stag killed by the Devon and Somerset hounds in the autumn of 1912, and is the only example of such a head known in England. Single horns with two and three points are, however, common. Example of Red deer interlocking the horns, and so dying of starvation, are exceedingly rare, and I know of only one British example amongst Red deer. These two heads, locked together, hang in the library at Gordon Castle, and are figured in "British Deer and their Horns" (p. 139). Of their history, the Duke of Richmond and Gordon kindly sends me the following note: "Landseer was a frequent visitor to Gordon Castle, and was much interested in the interlocked heads hanging in the library, and from the

[&]quot;Recently a correspondence on the subject of this head has appeared in Country Life, and the fact that Stoke Park stags were sent from Melbury Park to Glenquoich was proved.

Killed in Aberfeldy, September 1899. Length 40 inches; span 40 inches.
J. G. Millais, 1899.







incident of their death he evolved his famous picture of 'Morning' (a sequel to 'Night,' in which two royals are seen fighting). These two stags were found in the burn at Fochabers. One of them was dead, and the other nearly so, when they were found by one of the stalkers."

Scottish horns with a beam measurement, between bay and tray, of over $5\frac{1}{2}$ inches are exceedingly rare. In 1912 Mr Sydney Loder got a remarkably heavy head, which, although not long $(31\frac{1}{4}$ inches) was $6\frac{1}{8}$ inches in circumference of beam.

The stalking seasons of 1893, 1911, and 1912 will always be remembered as having provided some remarkable trophies. Six heads obtained by Captain Combe at Strathconan in 1912 were $36\frac{1}{2}$, 38, 34, $33\frac{3}{4}$, $35\frac{3}{4}$, and $34\frac{1}{2}$ inches in length. Mr Macleay informs me that they were the finest lot from one forest in a single season that he ever received. They were figured by Mr F. Wallace in "Country Life," Dec. 28, 1912.

SCOTTISH WILD STAGS' HEADS OBTAINED SINCE 1850

	Length.	Circ.	Spread over all.	Inside Span.	Points.	Locality.	Owner.	Remarks and by whom measured.
	41 40 40	 61 6	40		 6×6	Strathglass Aberfeldy	J. Sargent — Duke of Atholl	(J. G. M.) (J. G. M.)
1	40	. 0	_	30	5×5	Glentilt	Duke of Atholi	Figured in British Deer and their Horns. (J. G. M.)
	-	—	42	-	-	Ardverikie	Earl of Tankerville	The widest modern Scottish head.
1	39	71	391	34	6×6	Guisachan	LordTweedmouth	
ı	39	-		_	5×5	Kinveachy	Major Porteous	Killed in 1912. (Spicer & Sons.)
1	38½ 38¼	5 8	39	301	11 5×6	Barrisdale Strath Vaich	W. Parrott J. C. Williams	Killed in 1910. (W. Macleay.) Killed in 1908, weight 19st. (Owner.)
1	381	518 554 5454 5454 618	331	293	6×6	Meoble	Walter Jones	(R. W.)
1	381	43	331	26	11	Isle of Rum	Sir G. Bullough	(Owner.)
1	381	53	33	27 }	6×5	Meoble	Walter Jones	(J. G. M.)
1	38	43	-	25Î	10	Strathconan	Capt. Combe	Killed in 1912. (F. Wallace.)
1	38	61	351	29	6×9	Mamore	Col.	The best head of 1911.
1		-			1		Cholmondeley	(Spicer & Sons.)
ł	378	_	-	261/2	7×7		Sir H. de Trafford	
1	371	-		29⅓	6×6	Strath Vaich	P. D. Williams	The best head ever killed at Strath
1			ا ا					Vaich. (Owner.)
1	371	_	32	-	11	Dunrobin	Duke of	(Owner.)
1	371	41	_	301	5×5	Wyvis	Sutherland R. Shoolbred	(0)
1	37 1	72		301	10	Conaglen	Lord Morton	(Owner.) (R. W.)
1	371	51	27 1	24	5×5	Forfarshire	R. L. Scott	(Owner,)
1	371	41 51 51 51 51	34		6×6	Rhidorroch	Countess of	(J. G. M.)
1			, i			2111123110011	Cromartie	(0. 0. 1.1.)
	37	6½ 5½	-	30⅓	6×7	Affaric	Capt. Sandeman	(R. W.)
	37	5 €	36		14	Glenbruar	G. Gray	Shot by my grandfather, G. Gray.
								(J. G. M.)
	37	5⅓	33	-	17	Black Mount	Marquis of	(J. G. M.)
	261	,	1	25		G1 1/	Breadalbane	Pro 11 Poul P
1	361	6	37	35	_	Glen Moriston	Col. W. Gordon-	Figured in British Deer and their
	361				12	Ben Clebrig	Cumming J. Baxendale	Horns. (J. G. M.) Killed in 1910. (W. Macleav.)
1	361	5	41	391	5×6	Glen Strathfarrar		Shot by the late Roualeyn Gordon-
	552	3	74	372	5.0	Olen Stratmarrar	** . Madeline	Cumming. (J. G. M.)
ſ								(3, 0, 1/1)

SCOTTISH WILD STAGS' HEADS OBTAINED SINCE 1850-Continued

Length.	Circ.	Spread over all.	Inside Span.	Points.	Locality.	Owner	Remarks and by whom measured.
36½ 36½ 36½ 36½	512 514 4434 444		30½ 23 27½ 32	11 11 11 12	Mull Strathconan Kilillan Affaric	Earl of Eglington Capt. Combe Col. Baldock H. Dennis	(F. Wallace.) (Owner.) Perhaps the best head of 1912.
361 361 36 36 36 36 36 36 36 36	44-181/2 1/2-1/4-1/2 4 5 5 5 5 4 4 1 4 1 4 1 4 1 4 1 4 1 4 1	26 27 36 36 30 31 4 30 ¹ / ₂	25½ 22 26¾ 28 34 27 28¾ 28¾	10 6×5 10 12 7×7 6×6 6×6 5×5 11 5×4	Strath Vaich Kintail Barrisdale Glenartney Berriedale Morar Caenlochan Meoble Kintail Ardgour	P. D. Williams S. Loder W. Parrott G. Gray Duke of Portland Walter Jones Mrs Henry Tate E. M. Crosfield S. Loder	(F. Wallace.) (F. Wallace.) (F. Wallace.) (Gwner.) (Killed in 1912. (F. Wallace.) Shot by Sir J. E. Millais. (J. G. M.) (Gwner.) (J. G. M.) (J. G. M.) (Gwner.) (Gwner.) (W. Macleay.) (R. W.)
36 36 36 35 ⁷ / ₈	51 41 51 48	323 	28 ⁷ / ₄ 31 30 ¹ / ₂ 31 ¹ / ₂	5×5 5×5 6×7 5×5	Glenkingie N. Uist Glenquoich Strath Vaich	Tempest W. M. Christie W. Brigstock J. E. B. Baillie E. M. Crosfield	(R. W.) Killed in 1908. (W. Macleay.) (Owner.) Considered the second best killed at Strath Vaich, 1912. (Owner.)
35½ 35¾ 35½	41 41 41	=	26 253 31	6×6 12 5×5	N. Uist Strathconan Loch Choire	C. H. Dendy Capt. Combe Duke of Sutherland	(Owner.) Shot in 1912. (F. Wallace.) (Owner.)
35 ½	43	-	27 4	12	Ardnamurchan	Donaldson Hudson	Killed in 1912. (F. Wallace.)
35½ 35½ 35½ 35½ 35½	5½ 4 4 4 4 4 4 4 4	30 36 3 32 ½	25½ 31¾ 26¼ 34 29¾	6×6 10 6×6 4×3 5×5	Sutherland Knoydart Isle of Mull Caenlochan Ben Alder	Abel Chapman A. S. Bowlby W. Mure Mrs H. Tate Hon, T. A.	(R. W.) Killed in 1912. (F. Wallace,) (R. W.) (J. G. M.) (R. W.)
35555574-14-14-14-14-14-14-14-14-14-14-14-14-14	4 4 4 5 5 5 4 5 4 5 6 5 5 5 4 5 4 5 6 5 5 5 5	331 33 35 	273 27 293 304 243 25 30 264 22 22 281 273 ———————————————————————————————————	5×6 11 4×4 6×4 6×5 6×6 6×6 10 5×5 6×6 6×6 6×6 7×6	Craiganour Meoble Barrisdale Coignafern Eskadale Knoydart Deanich Glenfinnan Braemore Meoble Glenfeshie Eskadale Knoydart Glentana	Brassey H. Samuelson W. A. Dewburst W. Parrott J. Bradley Firth Maj. A. Robinson A. S. Bowlby J. P. Aylmer J. H. Holden Mrs Higson W. Jones Sir J. Cooper L. Hardy B. Lort Phillipps Marquis of Huntly	Killed in 1911. (P. Spicer & Sons.) 1912. (F. Wallace.) (Owner.) (Owner.) (Owner.) (Owner.) (Owner.) (Owner.) (Owner.) (F. Wallace.) (J. G. M.) 1912. (F. Wallace.) (J. G. M.)
35 35 35 35	4 78 4 34 5 5 34	29 34 37½	24½ 28 33½	5×5 7×6 5×5 12	Glenkingie Rannoch N. Morar Guisachan	W. M. Christy E. Weller-Poley Major Gill Lord	(R. W.) (R. W.) (Owner.)
35 35 35 35 35 34 34 34 34 2 34 2 34 2	410041016 541016 555 555 44	28½ 29 27½ 33 29¾ —	26 ³ / ₄ 36 25 30 26 ³ / ₄ 31 ¹ / ₂ 33 ³ / ₄	5×5 10 6×6 4×4 10 6×6 6×6 6×6 5×5	Glenkingie Kintail Glencarron Gaick Kintail Fealar Ardnamurchan Fasnakyle	Tweedmouth Sir H. Hoare, Bt. J. Young LateLord A.Paget J. Hargreaves S. Loder A. M. Thomas C. D. Rudd Col. S. Clarke V. Watney	(Owner,) (R. W.) (J. G. M.) (J. G. M.) (J. G. M.) (J. G. M.) (Owner.) (R. W.) (Owner.) (J. G. M.) (J. G. M.) (Owner.) (J. G. M.) (Owner.)

THE RED DEER

SCOTTISH WILD STAGS' HEADS OBTAINED SINCE 1850-Continued

Length.	Circ.	Spread over all.		Points.	Locality.	Owner	Remarks and by whom measured.
34½ 34½	5 5‡	_	25½ 37½	7×8 6×6	Cluanie Braemore	A. H. Straker Sir J. Fowler, Bt.	(Owner.) A head of perfect shape. Figured in British Deer & their Horns. (J. G. M.)
34½ 34½ 34½	4½ 4½ 5½	331 34	25 31 261	6×5 5×5 6×5	Strath Vaich Dalnaspidal	P. D. Williams Mrs Hall Walker W. Brodrick Cloete	(Owner.) (R. W.) (R. W.)
34½ 34½ 34½ 34½ 34½	41 5 5 6 41	34½ 31½ 31½	27 251 25 281	6×5 12 12 9 10	N. Morar Strathconan Glentilt Caenlochan Cluanie	J. R. Hutchison Capt. Combe Duke of Atholl Mrs H. Tate St George	(R. W.) Shot in 1912. (F. Wallace.) (J. G. M.) (J. G. M.) (R. W.)
341	4	313	291	6×5	Glenquoich	Littledale Duchess of	(R. W.)
34 1 34 34 34 34	5 4 4 5 4		31½ 29½ 30¾ 26½	5×5 8 5×4 12 12	Knoydart Knoydart Glenmuick Achnacarry Glenbruar	Bedford Capt. H. Bowlby A. J. Bowlby Maj. Ponsonby J. C. Kennedy Sir W. O. Dalgleish, Bart,	(Owner.) (F. Wallace.) (R. W.) (F. Wallace.) (J. G. M.)
34 333 333 333 333 331 331 331 331 331 3	5 4 1 4 1 2 1 2 1 4 4 5 5 4 4 4 5 5 4 4 4 5 5 4 4 4 5 5 4 4 4 5 5 5 4 4 5	331 36 39 29 301 33 34 291	23 28 28 24 24 26 34 25 28 29 27 24 28 28 28 23	11 12 12 7×8 -12 5×5 9 5×5 6×5 12 11 5×5 6×6	Strathconan Langwell Kintail Ardverikie Strathconan Dalness Invermark Cainlochan Auchnasheen Loch Rosque Kintail Forest Lodge Barrisdale Ardverikie Arnisdale	Daigeish, bar. Capt. Combe Duke of Portland S. Loder E. J. Wythes Capt. Combe J. G. Millais Lord Hindlip H. C. Pilkington Sir A. Bignold Sir E. Loder, Bt. LtCol. H. Kays W. Parrott Col. Hall Walker T. Drake	Shot in 1912. (F. Wallace.) (Owner.) (Owner.) (Owner.) (F. Wallace.) (F. Wallace.) (F. Wallace.) (Owner.) (F. Wallace.) (F. Wallace.) (F. Wallace.) (F. Wallace.) (F. Wallace.) (Owner.) (R. W.) (F. Wallace.) (Owner.) (R. W.) (Owner.)

Heads of 33 inches and below this measurement in length are too numerous to mention. It need scarcely be said that mere length of horn, in which order it is necessary to catalogue them, does not mean superiority. In fact, a head such as the Kinlochewe ten-pointer, $35\frac{1}{2}$ -inch length and $38\frac{1}{2}$ -inch inside span, is a far finer specimen than the 41-inch Strathglass head, which is first on the list.

It is not difficult to tell the age of Red deer by their teeth until the seventh month of the third year. At this age the full complement is obtained, and afterwards the only change which takes place is that the crowns wear and the canines darken. In very old stags the molars are often worn quite down, and it is not rare to note the absence of the four incisors in the lower jaw. Professor H. Nitsche, whose studies of the natural history of deer are well known, has, in his "Studien über Hirsche," constructed a table

showing the dentition of Red deer, and the months in which the fresh teeth are attained. It is as follows:

TABLE SHOWING DENTITION OF RED DEER

	Date.	Incisors.	Canines.	Molars.
	June July August September .	1, 2, 3, 4	<u>1</u>	1, 2, 3 1, 2, 3
First Year.	October	1, 2, 3, 4	<u> 1</u>	1, 2, 3, IV 1, 2, 3, IV
Year.	May	1, 2, 3, 4 1, 2, 3, 4 1, 11, 3, 4	<u></u>	1, 2, 3, IV, V 1, 2, 3, IV, V
Second Year.	December	I, II, III, 4 I, II, III, IV	<u></u>	1, 2, 3, IV, V 1, 2, 3, IV, V 1, 2, 3, IV, V 1, 2, 3, IV, V
Third Year.	June July	ī, II, III, IV	<u>I</u>	1, 2, 3, IV, V, VI 1, 2, 3, IV, V, VI
Thi	November .) December .)	I, II, III, IV	<u>I</u>	I, II, III, IV, V, VI I, II, III, IV, V, VI

THE EVOLUTION OF MODERN DEER-STALKING

Deer-stalking as a modern sport may be said to have originated in the high forests of Athole and the Black Mount, and to a certain extent dates from the publication of Scrope's famous book (1838). The direct Impetus that was given to the sport was also in a great measure due to the clearance which followed the rise of the mountain sheep industry and its commercial success. This more than any other cause was also the reason for the expulsion of crofters, the destruction of the woods and the extinction of the old breeds of black cattle. With the removal of the great woods the Highland stag, which had for the most part existed in haunts similar to those of its congeners in the Carpathians and the Caucasus, became an open mountain dweller, and the fact was soon apparent that deer could thrive and multiply on the bare hills as well as sheep. Thus at the word of Scrope and other early writers the imagination of the sport-loving Englishman, searching for fresh adventure, was inflamed, and deer-stalking on the open hills soon became extremely popular.

No less powerful than the pen of Scrope to influence the mind was the brush of Sir Edwin Landseer, and in a lesser degree those of Charles Jones and Richard Ansdell, Landseer may be said to have created a new atmosphere in sport, for it cannot be denied that the most potent part of its charm lay in its fascinating mise en scène. He focussed for the first time the wondrous beauty of the Highland hills and cloudland, the romance and mystery of ten thousand changes, the rush and roar of the torrent, the freedom and unconventionality of the wild moorlands, the mystery of the hidden tarn, and most of all those intense bursts of sunshine that alight the panorama like the peeps of happiness that force themselves amidst the grey clouds of life itself. Landseer's art, like Scottish deer-stalking, can be criticized severely. You can say all sorts of hard things about it, often, alas! with perfect truth. Even his stags are not the stags of to-day or of his own time, but ideal monarchs of his own charming imagination, yet for all that there is an indefinable something about his pictures which even now grip the imagination as do no other representations of the mountain and its wild life. This is so, perhaps, because in this intensely realistic age we soon learn to hate what is photographically exact and to love the ideal. The sportsman of the right kind never becomes old in thought so long as he learns the paradoxical axiom that romance is truth and

imagination reality. Some one of us may in our lives see nearly all that Landseer depicted except his more than "record" heads and be satisfied, whilst others may not experience such good fortune. In any case we owe a never ending debt to the great artist for giving us the charm of the mountains and, as Barrie says, "The greatest thing in the world is charm." Charles St John, laboriously paring his lead bullet to fit the barrel of his smoothbore, whilst the "muckle hart" awaited the coup de grace; Scrope scurrying breathless to the foaming pool whilst Bran and Oscar yelped at the lowered head of the baying stag in the shallows of the Tilt; Landseer's inspiring pictures of the stag at bay in the waters of Loch Tulla, "Night," "Morning," "The Deer Drive"—and many others—all afford vivid representations of the stirring scenes of hill and loch which stirred the blood of the early-Victorian deer-stalkers. Sport it was, certainly of an entirely different kind from that of to-day, being akin to the chase of the elk with the "los-hund" as conducted in Sweden, but sport of an intense character that appealed to youth, and health, and strength of lung and limb. Certainly not without its savage lust of blood, but of the kind that young men love and old men remember. I made an atrocious shot once at Guisachan, but before the day was out how glad I was that I had done so, for it gave me a chase that I would not have missed for anything, and all the savage joy of hunting a beast myself and running it to bay. I confess it was brutal, but we are all brutes sometimes.

Away up on the top of the Dun hill we found two good stags at one o'clock, but they were in a difficult position, and it was five before we got in, and I had rather a hurried shot at the best as they moved slowly away. I hit the stag, a nice 10-pointer, too low and far back, and away he went towards Glen Moriston at a good pace. The gillie, with one of the yellow Guisachan retrievers, now came up, and old "Ben," a savage, ill-tempered beast, was slipped on the trail. The retriever took the spoor at once, and I easily kept with him for the first mile. I was young then and could run, whilst the added lust of the chase inspired me. Soon old Duncan Kennedy, the stalker, was left far behind, and the gillie and I ran together for another two miles. Then my companion eased up, and I continued another half-mile, just keeping in sight the gallant dog, which seemed to lope along at a tireless speed. The yellow spot would now come into view less often, and I began to feel the effects of the run, when all at once I struck a large burn, which flowed into the Moriston river, and

I knew that the chase could not last much longer, so spurred myself to redoubled efforts.

The stag if wounded badly was sure to bay soon, as he had kept straight down hill from the moment of firing the shot. I stumbled on and on, and could not see far into the valley, but no sign of hound or stag were there, till at last exhausted Nature forced me to call a halt. I kept stopping and listening, and at last began to retreat up hill in no very happy frame of mind. Hardly had I done so when almost beneath my feet I heard the faint bay of the retriever. For some time I could see nothing and then discovered the dog and stag hidden under an overhanging peat-hag in the swollen burn. It was some moments before I could obtain a shot, as the dog kept barking with his head within a foot of the stag's nose, the bodies of both being completely submerged in the pool.

Thus ended a day of excitement which I always remember with the greatest pleasure.

In early and mid-Victorian days misfires and the doubtful accuracy and weak penetration of rifles always added many thrilling incidents to the stalk. Young Robertson (son of the stalker who is holding the hounds in "The Deer Drive") and Donald McLeish, who as gillies had stalked with Landseer, told me that the great artist was a very poor shot, and was, in fact, always so intensely excited when he came near deer that he almost invariably missed. He was, however, frequently in at the death of many a noble hart that the deerhounds bayed. The incident of "The Stag at Bay" was an actual scene. Landseer fired at and missed a very fine royal on the slopes of Ben Toig, just above where the present Forest Lodge now stands. The two best hounds in the kennel were loosed by Peter Robertson and ran the stag into the waters of Loch Tulla, where they held it at bay in an arm of the lake which is to-day much the same as when the artist painted it. After some time Landseer came up and killed the stag, which had badly injured one of the dogs, which is seen wallowing on its back in the lake. I once killed a stag almost on the spot where Landseer painted "The Deer Drive." It is situated on the high pass between the great corries of Altahourn and Larig Dochart in the forest of the Black Mount, two of the finest corries in Scotland for deer and for wild mountain scenery. Both in the late Marquis of Breadalbane's and Lord Dudley's time it was the practice to drive the Altahourn corrie, if the wind was from the west. The deer always climbed the hill faces in the same way, converging at the top on one small pass, which two rifles could easily command, and could shoot as

many of the fat and panting stags as they desired before they moved on into Larig Dochart. It was after one of these drives that Landseer made his sketches. Larig Dochart and Altahourn are great stag grounds, perhaps as good as any in Scotland. On the former, one day in September, I saw no fewer than 400 stags in one great herd, and after waiting all day was rewarded by killing an 11-pointer, which was the best of the lot.

Scrope and Landseer having revealed the passion and excitement of hill-stalking, it soon became in a small way the fashion of the hour. But modes of transit, accommodation, and many other considerations still deterred it from being the sport of the many. As yet the big forests were all occupied by the owners and their friends, whilst the outlying places where there were a few deer were generally somewhat inaccessible though cheap in price. The late Lord David Kennedy told me that, as a young man, he drove all the way from his home in Wigtonshire to Suisgill in Sutherland, where he had the whole of the fishing of the Helmsdale and the right to go wherever he liked for deer for £100.

As the practice of stalking deer on the open hills came into vogue it introduced the professional deer-stalker who, knowing his ground as an open book, became an established institution. It is true that all novices must learn, and can only do so at the feet of the expert. Whilst it is equally desirable that the tyro should not spoil the limited extent of ground for the enjoyment of others, wherefore the Highlander, trained in all local knowledge, well acquainted with the local habits of deer and of tried endurance and honesty, came into general use for guidance in the sport. On the other hand the thrilling sense of personal achievement as a result of long and careful strategy which was the very core of the "old" deerstalking in a sense vanished, and the newcomer had meekly to follow at the heels of his mentor. Even to-day, when many tenants could with ease and certainty stalk and kill their own deer, the fashion of following the professional stalker and childishly obeying all his orders has become so much an institution that few men, however skilled, in the world's larger training-ground, care to break away from established custom. Certainly it is not right that any casual guest in a deer forest should be allowed to conduct the stalk, but where a man has had experience and knows his ground well, he will derive far greater pleasure in getting the "stalker" to follow him than always being "led." In the first instance success means that he has achieved little to be proud of, for modern rifles

IMPREGNABLE

PLATE IV.





are now too good to call forth any exceptional marksmanship on his part, whereas if he can himself spy his deer, account for all outlying beasts, conduct a stalk by marking exactly where he should go up, where he should come down, and from what spot he ought to get his shot, he is a real hunter and not merely an ordinary marksman, so is able to hold a rifle tolerably still.

I do not for a moment wish to underrate the services of the professional deer-stalker; his help is essential to forty-nine men out of fifty, and to the skilled hunter his presence is as a rule as delightful as it is to the beginner. There are none amongst us who have not enjoyed the "clean" society of Donald, his quiet friendship, his pawky humour, his excellent observation, and his dry common sense, whilst we know that his caustic criticisms and chatty remarks are as true as they are never ill-natured. His presence is good for us, and unlike many other things that are "good for us" we do not hate him. On the other hand, the more we know him the more we love him, for we feel that once his friendship is gained it is true as steel.

He is well described in some lines by M. I. Hope:

No great skill of the English tongue,
And never a talker much from choice;
But a sight beyond where clouds have clung
To make the heart of the hills rejoice.
And where is a truer welcome rung
Than is spoke by a sad, soft, Highland voice?

So in time those who relied on experts to lead them to the deer became more and more numerous, and seemed to regard the business of finding and approaching the quarry a matter with which they had little concern.

Until the year 1880 the majority of the deer forests were still old-established ones, but as sheep became less and less profitable, and rents for deer ground more lucrative to Highland owners, the increase both of the deer and new deer forests was rapid. There is nothing much easier than to turn a sheep run into a deer forest. All that is necessary is to take the sheep away, keep the place quiet and take down a few fences. The process, it is true, was not looked upon with favour by those who first possessed the deer, but that was not a matter that concerned the forest-creator, who saw only wealth ahead instead of empty pockets. Another matter of

65

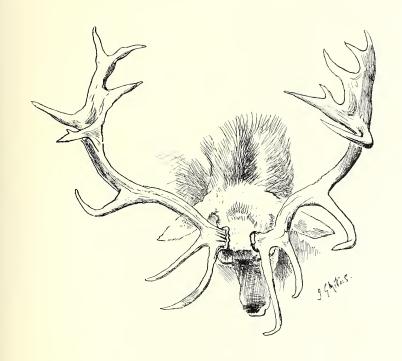
concern to the older proprietors of deer forests was that deer, especially the best stags, invariably preferred the new places to the old and sour pasture, and so they lost the best of their stock, as it were, in a single season. I remember well when the sheep ground of Glencoe was cleared—and in two years' time became an excellent small forest—what war and bitter words it called forth amongst the old stalkers on either flank against the new forest makers. But words hurt little, and we may yet live to see the *new* place described as the "grand old deer forest of Glencoe," when old enmittes will be forgotten.

With this new creation of dozens of forests, the new race of stalkers, all following the professional leader, are for the most part men who are little concerned with the sporting qualities of the stag, but more with securing numbers, weights and fine trophies. The sporting and local papers are half filled with accounts of the gory doings of people who like to see their names in print. So the desire to kill numbers of phenomenal weight and size has arisen, and the sport itself has greatly suffered in consequence. To this type of sportsman it is not sufficient that such and such a forest if properly shot is only capable of producing, say, twenty adult stags. He must have forty or fifty, at least, and the result is that all the young and growing stock, showing any promising horn-growth, are killed, whilst old stags with bad heads are neglected and—worse still allowed to live and reproduce a race of bad-headed individuals. As an old sportsman, who had just completed a short tenancy of one of the most famous forests in Scotland, where he had not seen a single good head, sadly remarked to me, "Three different tenants and three years of 'Mannlichering' will irretrievably ruin the best forest in Scotland." And this is true. The few good trophies that are annually killed in Scotland' come from a few "new" forests where the grass is good, the winters mild, and the tenants have long leases and shoot with intelligence. Quite ninetenths of the Highland forests are overshot, generally out of good-natured ignorance on the part of the tenants. And this overshooting of stags is much encouraged by the proprietor, whose only desire is to say that his forest produces so many stags, naming a figure grossly in excess of what the ground can carry, because he will truly gain an increased rent. It is nothing to him if his tenant only kills rubbish, but everything that he shall be well paid for it. Wherefore year by year the trophies of the chase become smaller and smaller. Also, as if to make "confusion worse confounded," nearly every forest is swarming with a plague of hinds, which

A Seventeen Pointer; 37 inches. Shot by Lady Breadalbane, Blackmount, Argyllshire.

PLATE XIX.

and the property of the second of the second





are not killed as they ought to be. These certainly bring more and more young stock into the world, but on the other hand they eat the place bare, and it is no uncommon thing nowadays to see some miserable little stag of twelve stones with six or eight points lording it over a harem of eighty or even one hundred hinds. When winter comes the stags that have rutted and are in a state of starvation should have the best of feeding on which to recuperate, whereas in reality they are forced to undergo the rigours of winter and spring with barely enough food to keep life in their bodies. To obviate this the more humane proprietors and tenants have resorted to the artificial methods of hand-feeding, which, though it preserves the stock, turns deer and deer-stalking still further towards the goal of pretence. Some go so far, so as to be sure at any rate of good haunches, to feed right up to the month of August, and we see striking pictures in the illustrated papers of "a herd of wild (sic) stags on the famous forest of X," taken by a photographer at a range of twenty yards. If we are deer-stalkers we smile, for can artificiality go much farther? Before this grand sport falls into ridicule all good hunters should strive to discountenance "the trail of the serpent" in the form of sham, advertisement, and artifice. Some years ago I read in a journal that "Mr X, the famous rifle shot, stalking on the D. beat in Glen Strathfarrer, killed eight fine stags at a single stalk. Such a feat constitutes a record." I thought it was certainly remarkable that a man should have found eight shootable beasts together and killed them all; but chance led me some years later to this same forest and beat, and I learnt the truth from the stalker, who was present when the deed was done. Mr X had come on to eight stags, which had, as has often happened, stood still in perplexity and "lost their heads" after the first was shot. The remaining seven were composed of three-year olds, with a sprinkling of knobbers, whereupon this "famous rifle shot," who rented the forest and would not be prevented by the stalker, in spite of protest, simply murdered the lot. That is not sport, and such a deed ought to be severely censured instead of praised.

Quite half of the deer forests in Scotland are owned or tenanted by gentlemen—I use the word in its literal sense—who both conduct the sport in a proper manner, and who share the chances of the hill with their guests in genuine sportsmanship. These, too, are the fortunate ones who get the best of the fun because they know that all hunt on equal terms. I have had the good fortune to enjoy their hospitality on

many occasions and have been as delighted as anyone to see my host get a good beast, because I know he has done so without taking any unfair advantage.

Nor should we blame any man who reserves the last fortnight of the season to himself and his family, for they are large forests indeed that can properly carry three rifles a day, since one or two beats should always have a rest. The sport may be somewhat of a selfish one—and what sport is not so in some degree?—but the danger of spoiling it lies in the dispensation of what may be termed unthoughtful hospitality.

On the other hand, there are gilded palaces in the Highlands where you leave for the hill at eleven, dress for dinner at 6.30 and have to sit up till 2 a.m., where there is a duke in the sanctuary, a lord on the best beat and a commoner on the sheep-ground. An Austrian Prince, one of the best sportsmen in the world, who liked to take his rucksack and live for a week under a rough shelter of logs, just on the chance of getting a shot at a good stag, told me one day that the foregoing kind of entertainment was the only kind of deer stalking he had seen in Scotland, and that he did not think much of it. And could one deny it, for all the attributes of real hunting had vanished. Worse even than this, I fear that there are men of so jealous a disposition that they will not allow their guests to shoot a stag, even though they have been expressly asked to come for that purpose. I had read of such things, but scarcely believed the story until I once actually experienced it.

Hill-stalking to-day has travelled far from its original traditions. For the most part a man does not have a ten-mile walk to his beat on the top of a mountain of 2,000 feet or more. Many of the newer forests are engineered out of their original state until the hills are often easier to traverse than Epping Forest. Motor-cars take the sportsman to the spot where the stalkers lie on their backs watching the stag already "found." Bridle paths and a hill pony save all possible exertion until the top is reached, and then the rest of the day is like walking in Pall Mall.

But what has changed the sport more than anything else is the invention of the high-velocity small bore rifle, with its 3,000 feet muzzle velocity and a flat trajectory, with the new pointed bullet, up to 350 yards. With such a weapon even a poor shot can scarcely fail to hit the stag at 150 yards if it is standing still, and a man is indeed a bungler that cannot get so near a deer as that. If we add to his great advantage a high-powered

telescopic sight that gives perfect definition and great magnification even in a bad light it will be seen that, as Sir Charles Ross says, "at short ranges the stag has not a chance." That is so if the stag invariably stands still, which he does not always do.

"I think my husband must be one of the best sportsmen and the best shots anywhere," remarked a good lady to me one day. "This year he killed twenty-four stags in twenty-four shots." Now, since the hero in question was of mature years, carried a considerable corporation, and never moved a yard without his motor-car when at home, I asked an old friend who had recently stayed in his forest how the Highland air achieved such physical excellence.

"Y-e-e-ss," he drawled, "old Jim [the hero in question] is a rare good chap, but he always stalks on the best beat with his pony, never fires unless the light is behind him and the distance eighty yards, and not at all unless the stag is broadside on and standing still."

The mystery was explained.

"Elimination of difficulty has been the guiding star of modern deer-stalking methods, but in making the sport easier we have robbed it of its romance. The distinctive charm of the old sport lay not only in the personal endeavour to outwit the self-preserving instincts of a wild animal at a time when these instincts were most acutely developed, but also in the fact that here gunpowder took second place, success depending chiefly on sound heart and lungs, quick eyesight, silent movement in constrained positions, and skill to catch the tricks of shifting wind. Modern methods have eliminated the personal stalk and have gone far to eliminate the wild stag. He is losing the hallmark of the hills and the indescribable flayour of the wilderness. Contrast the old and the new literature of the deer forest. The former is wholly concerned with the stag, the latter is mainly concerned with the scenery. The monarch of the glen is an excuse for a walk even when multiplied by six. There must be drastic changes, or the deer forest of the future will be valued merely as a mountainous Bisley for long-range practice at a live target."

Thus writes my friend, Mr Allan Gordon Cameron, who admires all that is best in the "old" sport with more than a little truth, but in the end I think he is somewhat too scathing. Good sport with the rifle in Scotland is not yet dead, nor yet too easy, provided it is stripped of its arti-

ficial environment as much as possible. "It seems a work of supererogation to encompass the death of a creature that has already been surrounded by a seven-strand wire fence," writes E. N. Buxton. That also may be so, but Mr Buxton took a deer forest after that, which proves that it still had some attraction for him.

So it is best to be illogical as it is best to retain our sense of romance, and rather to pity those who make a mockery of a gallant sport than to blame them. Such men have their uses, as they make wealth circulate, and doubtless bring happiness to poor homes by employing the men, whilst if their ways are not ours we are indeed fallacious if we imagine that all men enjoy doing things in the same way, even if that way is the right one.

Perhaps it is fortunate that tastes so widely differ. Rather let us try to form our sport to the views of old Horatio Ross, who said before the Committee appointed to discuss the Game Laws (1872-1873), "I have had the happiness of being a deer-stalker for more than half a century." External influences did not hamper him, and I do not doubt that were he alive to-day he would enjoy the fun as much as ever he did. I have had the pleasure of stalking deer regularly for twenty-eight years, and it is now pain and grief to me that I am writing these lines in the last fortnight of the stalking season, when I have an invitation to stalk for ten days in one of the most charming little forests in Ross-shire. We cannot always do as we wish, though hope gives us the encouragement that it will mean a longer time spent amongst the deer next year.

All forms of sport have their disappointment; the fox-hunter has to contend with frost, the grouse-shooter with heavy rain, the salmon and trout fisher with bright sun, but no sport except when exercised on bad ground, or sheep ground, has so few real drawbacks to a man in good health as deer-stalking. Except in heavy mist, when stalking is out of the question, on high ground, there is no form of sport that is more interesting, for the ways of the deer are of every changing variety even if a shot is not obtained, whilst often the best days for stalking are in the worst possible weather. That good sportsman, the late Cameron of Lochiel, briefly summed up its pleasures in the following words:

"The deer-stalker, according to my own experience, starts in the morning always in a cheerful frame of mind. His cares and troubles, if he has any, are left at home. He anticipates a delightful day whether he has luck or not, and he is rarely disappointed. He gets plenty of the 70

SCOTCH HEAD, 1912.

Length, 3 gin.; circumference, 4 gin.; tip to tip, 26in. Length, 35 tim.; circumference, 4 gin.; tip to tip, 22 tim. Widest inside, 33in.; spread, 35 tim. Widest inside, 31 tim.; spread, 34in. 10 pointer. Shot by Major Porteous, Kenveachy.

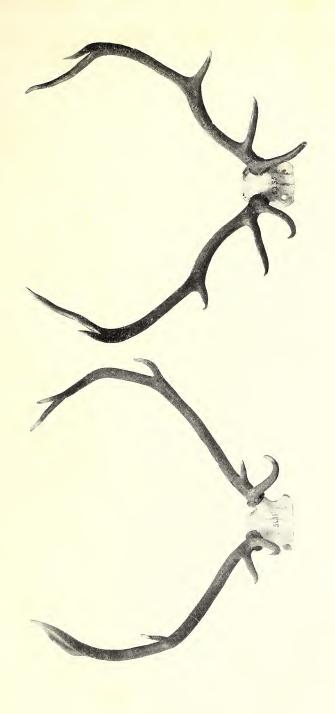
Photo by Ernest Wells, Leanington Spa.

Shot by E. M. Crosfield, Esq. SCOTCH HEAD, 1912.

Photo by Ernest Wells, Leamington Spa.

PLATE XX.







most healthy kind of exercise, in the purest of atmospheres, among the grandest scenery to be found in Britain. Unless stalking in a bad forest or on sheep ground, he spies deer, and from that moment till the shot is fired which is to decide whether he is to go home a happy man or the reverse, his attention is so absorbed that hours fly like minutes and minutes like seconds. Watching a herd of deer, sometimes for hours, is often sufficient enjoyment for those who love to observe the habits and note the instincts of wild animals. Then there are the difficulties with which the deer-stalker has to contend before getting within shot of the deer; the exciting moment when the sudden appearance of a hind or a sheep, or change of wind, threatens to upset his most carefully considered strategy and spoil his stalk; then the last crawl to some particular boulder or heathery knoll within shot of which the big stag is grazing, or the more easy approach to an overhanging precipitous rock where he may lie down in comfort and 'wait for him to rise,' and, lastly, when he does rise, the thrilling moment before the shot is fired. 'To be or not to be!' Can any man who has gone through such scenes and experiences say that even an unsuccessful day in a deer forest is not a thing worth living for?"

Bad weather, the spoil-sport of so many pastimes, is seldom experienced in the north until the end of September, by which time the stalker is usually in a high state of physical fitness and should be quite capable of withstanding the slight hardship of driving wind and rain. Moreover, It is nearly always possible to gain the shelter of some "knowe," or rock, during the long waits which are sometimes essential for the deer to get into position or others to move out of the line of approach. Cunning methods of light and warm clothing too-easily carried by any man-now assist the stalker as they never did in days gone by, so that it is not necessary to be wet and uncomfortable even in the worst weather if the stalker knows how to guard against it. Wherefore it is a great mistake to refuse to take the hill when everything looks black and cheerless outside. All we should ask is that the "tops" are clear and the day a long one. Deer are much less restless in bad weather and easier to approach, although harder to spy, and some of the best days I remember were begun under the most unfavourable conditions.

"I remember once," says Lochiel ["Fur and Feather Series," p. 72] when staying with a friend who owns one of the best forests in

Scotland, refusing to go out on a day when it was raining 'cats and dogs' and blowing half a gale. There was a young relative of my host staying in the house, a very keen sportsman, whom I knew would be sent out if I declined, so I let him have the chance. He accordingly started, and came home, having killed in fair stalking six stags, one of them with a magnificent head, and fired off seventeen cartridges. The next day was even worse. I again declined. My young friend took my place, and got two more."

The reader may not be interested in the cost of deer-stalking, but it is necessary to touch upon it so that we may consider the sport in all its aspects. Deer forests may be rented from £4,000 to £150, whilst the general expenses largely depend on the extent of the ground, house and degree of entertaining. An old friend who has rented sixteen different Scottish forests, and who has given me many happy days after deer, recently paid £2,000 a year for a good forest in Ross-shire, carrying three rifles daily. He kept his books carefully, and discovered that all expenses included from August 16 to October 15 amounted to £6,600. In spite of the fact that the house was seventeen miles away from a small town, or the railway, and that he entertained very generously this seems to be an enormous sum—£100 a day for sixty-five days, in which fifty-two stags were killed; but I am sure that it is in no way an exaggeration. A man therefore must be indeed rich to undertake such responsibilities. On the other hand, it must be remembered that the greater part of this outlay went in the entertainment of his friends, for many good forests are run on half this sum, whilst I know of another case of a friend who rented a Perthshire forest for £750, where he and a comrade lived simply at the lodge with two servants, and killed forty-five stags, at an expenditure of a hundred or two beyond the amount of the rent. Under any circumstances a man pays more for the sport of deer-stalking, especially if he entertains, than for any other British sport, although I know of three cases of tenants who have each paid £600 for the doubtful joy of catching one salmon. Sport, however, must not be reckoned by the price paid, for the best is sometimes cheap and the worse expensive, but rather on its own merits. If a man likes to pay a colossal rent for some place that from his point of view may enjoy special amenities that is his own matter, for wealth being a purely comparative item it scarcely enters into the bargain. So there are plenty of forests of moderate rent where the sport is even better than that which can be obtained at the expensive

castles, and it can be enjoyed and with far greater satisfaction to the tenant if he is a stalker.

There have been of recent years various official returns of the Deer Forests of Scotland on the motion of members of the House of Commons. These compilations, of which we are promised a fresh one shortly, are entrusted to the district assessors of taxes, who do their best to secure accuracy, but are as a rule hopelessly ignorant of both deer and deer forests, and their economic advantages. These returns, made in 1891, 1899, 1905, 1907 and 1908, are full of inaccuracies, are influenced by evidently hostile intentions and framed for obvious political reasons. As descriptions of the present and future uses of forests they are quite valueless as a foundation for legislation, though it must be pointed out that up to the present no hostile steps to interfere with the present state of things have yet been taken. As a result of the first Commission in 1884 it was ascertained that the number of deer forests then existing was 98, whose aggregate extent was 2,006,926 acres. Later the famous "Deer Forest Commission" published a report to the effect that a very large area of deer and sheep-ground was available and ought to be applied to crofts and small holdings. But the report was received, even in Scotland, with such general distrust that the Government took the same view and did nothing.

In all cases where the subject of deer forests has been under discussion, expert evidence has been painfully wanting, and if given it has been ignored; for it is patent to all unprejudiced observers who have studied the subject that the charges that deer forests have led to depopulation and loss of employment are without foundation, whilst the many advantages, both to lairds, farmers and crofters, amply justify their existence. The history and literature of the subject, combined with a knowledge of what uses the north lands may be put to, will show at once that nothing can be done with the greater part of the Highland wilderness except to make it a resort for deer, and it is incapable of any other use, such as agriculture or arboriculture. A few years ago Lord Tullibardine, with characteristic broadmindedness, conducted a party of farmers, crofters, town-dwellers and in fact any one who wished to come to see for themselves what a Highland deer forest was like and if they would care to settle there. After many hours' tramp over the mosses and peat hags of Glen Tilt the visitors shook their heads sadly, and went their way.

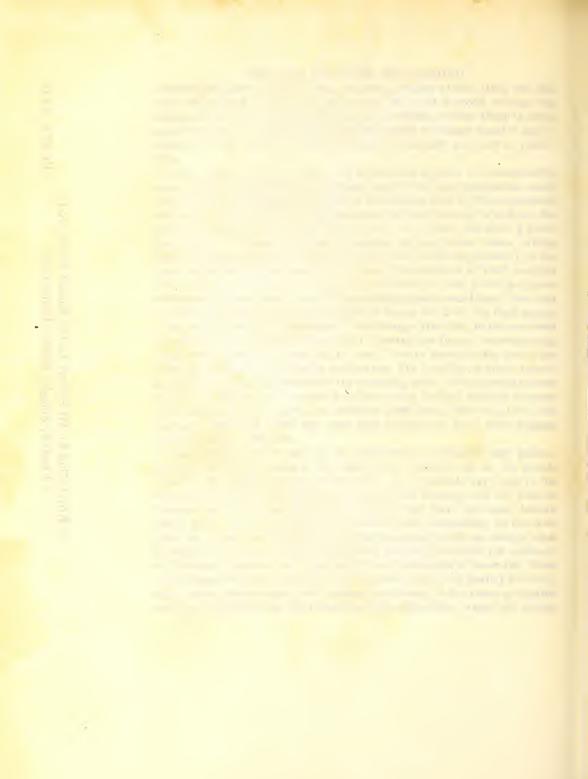
The great increase of deer forests is due to certain economic causes— L

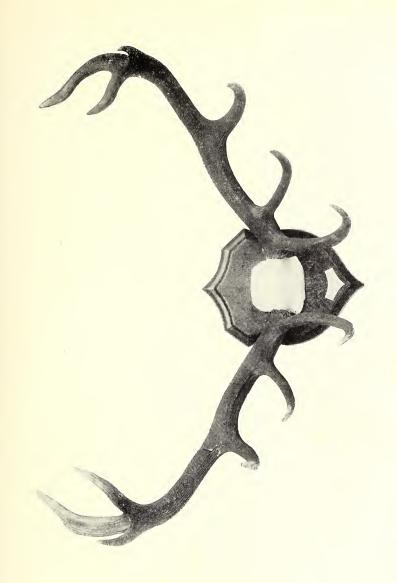
notably the depreciation of sheep-farming, which at one time was the most flourishing business in the north. We need scarcely discuss the causes that have produced the failure as a business to raise sheep in large numbers, but it was found that landlords could no longer stand a depreciation of rents, which varied from forty to seventy per cent in reduction.

It is certain, therefore, that a half of the land at least now occupied by deer forests and employing the greater part of the local population, could not be used for anything at all were it not utilized as it is. The accusation that deer forests have led to depopulation has been proved to be false, for from areas where most of the deer forests exist there has been a great emigration to Canada and the Argentine during recent years, whilst those who have remained have generally found local employment in the deer forests or grouse moors. The Royal Commission of 1883 testified that "they had not had any evidence of evictions for deer forest purposes established before them," nor after searching inquiry could they "bear out the allegation that by the displacement of sheep, for deer, the food supply of the nation has been diminished." Mr George Malcolm, in his excellent "List of Deer Forests in Scotland, 1912," also proves that an overwhelming proportion of the land given up to deer "lies in elevation far above the range of profitable or possible cultivation. The sterility of these forestgrounds is further illustrated by the following notes of their height above the level of the sea, viz., seventy-four have their highest altitude between 3,000 and 4,296 feet, sixty-one between 2,000 and 3,000 feet, forty-one between 1,000 and 2,000 feet, and only twenty-two have their highest altitude below 1,000 feet."

The popular cry to-day of the theoretical economist and philanthropist is always "back to the land," and "cheap land for the people who are the rightful owners of the soil." It all sounds very well to the man in the street, who knows as much about farming and the hills of Scotland as he does about the solar system, but there are many factors which go to make the realization of the scheme impossible. In the first place the young men themselves of the farms and crofts no longer wish to settle in the home valleys but rather gravitate towards the colonies, or the more cheerful and often better-paid industries of town life. Even the business of the small holder, near to towns, with his poultry farming, milk walks, fruit-raising and market gardening, is far more profitable and more cheerful than the lonely life of the hill-crofts, where life means

PLATE XXI.







only existence. As Mr Malcolm observes, "the crofter and his family remain what they have always been, the slaves of a hopeless, unrewarding land system, which imposes upon them unremitting toil and constant struggle with the inclemency of the climate and the infertility of the soil." This new awakening on the part of the young Highlanders is principally due to the spread of education; their eyes, so long closed, are now open, and they take a larger view of life and its opportunities for bettering their lot. Hence the abandonment of the native valleys and the failure of the Crofting Land System.

Again, too, we have heard much about forestry as a power to re-establish the people in the Scottish Highlands, and the matter has received the attention of Parliament, which, in 1885, 1902, 1907 and 1910, appointed various commissions to study the question and make reports. A Department of Forestry is advocated on the grounds that the supply of timber is rapidly diminishing and that the demand is in excess of the supply. That may be so, but first of all it must be proved that we are able to grow timber of commercial value in Scotland (elsewhere in the British islands scarcely enters this argument) at a cheaper rate than we can import it from the Scandinavian forests and other countries. To make timber a success a Highland laird, even if he has the means to make a great outlay at the start, and ground that is not too high on which to plant, will have to wait at least seventy years before he reaps any profit, and this he cannot do, as Mr Malcolm remarks, "without sacrifice of other interests, which are of no less importance." Moreover, any raiser of trees in this country will shortly have to compete with an immense quantity of exported timber of the highest quality which will shortly come to this country from British Columbia when the Panama Canal is opened in 1914. That is a point which seems to have been overlooked by all recent advocates of reafforestation in this country, and having recently seen these vast virgin forests stretching unbroken from Vancouver to the Alaskan boundary, a distance of over 1,000 miles, I have often wondered since what chance we should have once the great saw-mills there and steamers get to work.

As an example of futile suggestion the Commissioners of 1909 included as plantable areas all mountain and heath land up to an altitude of 1,500 feet. It would have been a good plan if they had asked more experienced planters to give their views before making so wild a suggestion, for it is well known that no trees can be grown to commercial profit at even half that altitude in the north-west of Scotland, whilst there are plenty

75

of trees planted forty and fifty years ago at an elevation of 700 feet that are still of stunted growth. It is a curious fact that in certain areas of the north there are still found the roots of old Scots firs of large size up to elevations of 2,000 feet, but mostly at a lower level, which shows that the trees of the old Caledonian Forest were of large size, yet the fact remains that trees to-day cannot be induced to attain these proportions. Whether this is due to the advanced infertility of the soil or other causes we do not know. "A gradual change of climate," says Mr Malcolm, "produced by less sunshine, much more rain, and more frequent storms of wet-bearing winds, which every Highlander and many scientists of the present day believe has occurred within the past couple of centuries in the Northwestern Highlands, and is even thought by some to be noticeable within living memory, seem to be the root cause of the lessened power of treegrowth." In Scotland, too, except in very sheltered valleys, there are endless difficulties to be faced by the planter, such as snow, which breaks the branches, violent gales, insect pests, damage by game and squirrels, and fires. All of these are serious matters which at any time may destroy the prospects of eventual profit.

The following list is a fairly accurate one of all the Highland deer forests of any size. In it are not included a large number of general shootings on which a few stags are sometimes shot, and which may or may not be quite good deer-ground. The number of stags killed is only approximate, and is compiled from various sources. In many cases it is supplied by the owners, and does not necessarily imply that the number given are annually obtained. What constitutes a "deer forest" and what does not seems to be only a matter of opinion on the part of the owner.

LIST OF SCOTTISH DEER FORESTS, 1913

Name.	County.	No. of Stags.	Proprietor.	Area in Acres.		tude. Lowest.
Aberarder Abernethy or Dell Abergeldie Achanault & Strath- braan and Loch Rosque Achanacarry & Loch- arkaig Affaric Aliane Alladale Altandown	Inverness Aberdeen Ross and Cromarty Inverness Ross and Cromarty 'Sutherland	30 60 90-100 60 80 15 60	Cluny M'Pherson DowagerCountessofSeafield R. H. L. Gordon Sir A. Bignold, Bart Lochiel Heirs of Mrs Chisholm Major Matheson Sir C. Ross, Bart Duke of Sutherland	6,320 26,000 2,760 30,000 23,360 32,000 8,774 17,000 6,000	2,750 3,224 1,500 1,423	

LIST OF SCOTTISH DEER FORESTS, 1913-Continued.

Name	Combi	No. of	n	Area in	Alt	itude.
Name.	County.	Stags.	Proprietor.	Acres.		Lowest.
Altnabreac Amat	Caithness Ross and Cromarty	5	Hon. Mrs. Pelham Sinclair Trustees of George Ross	4,000 1,000	665 1,488	296
(North Harris) . Applecross	Inverness Ross and Cromarty	75 75	Sir Samuel Scott, Bart Lord Midleton	36,672 37,000	2,227 2,936	Sea level Sea level
Ardgour	Argyll Ross Argyll	19 20 10	Capt. M'Lean Marquis of Zetland Alexander Crossman	30,000 5,000 17,970	=	=
Ardnamurchan Ardross (Dibbiedale)	Ross	30 60-70	C. D. Rudd C. W. Dyson-Perrins	18,850 42,000	2,249	660
Ardtornish Ardverikie and part of Strathmashie .	Argyll Inverness	25 100-120	G. Craig Sellar Sir J. W. Ramsden, Bart	30,000	1,500 3,569	Sea level 810
Arisaig	., Argyll	12 20-30 5	Mrs. G. S. Nicholson Trustees of J. L. Phipps Marquis of Breadalbane	13,000 7,900 3,000	3,200 2,878	Sea level Sea level 700
Atholl	Perth Ross and Cromarty	100 35-40	Duke of Atholl Sir Kenneth J. Matheson, Bi	36,000 22,085	3,671 2,612	620 405
Auch	Argyll Ross and Cromarty	15	Marquis of Breadalbane Sir A. Bignold, Bart	15,000 4,500	3,523 1,831	300
Auchnashellach Backnagairn	" Forfar	40	E. Bainbridge Sir Victor A. F. Mackenzie, Bart	19,800 6,000	3,141 3,314	120 1,050
Baddoch and Spittal Badenloch Ballochbuic, Bal- moral and White-	Aberdeen Sutherland	45 50	A. H. Farquharson Duke of Sutherland	22,000 17,760	=	_
mount Balmacaan	Aberdeen Inverness	80 50	The King Dowager Countess of Sea- field	19,310 28,000	3,786 2,200	1,050 50
Balnagown Barrisdale Beaufort Castle (Boblaney and	Ross Inverness	40-50	Sir Charles Ross, Bart A. S. Bowlby	20,000	=	=
Torlum) Bemdamph and New	"	25	Lord Lovat	21,000	_	_
Kelso Beinula Benalder and part of	Ross and Cromarty	40	Earl of Lovelace Heirs of Mrs Chisholm	15,575 20,000	3,060	Sea level
Strathmashie Ben Armine and	Inverness	60-70	Sir J. W. Ramsden	30,000	3,757	1,153
Loch Choire Ben Damph	Sutherland Ross	30-40	Duke of Sutherland Capt. the Hon. L. F. King- Noel	50,500 18,000	2,338 3,000	460 —
Ben Hee Ben Klibrick Benmore (Mull) .	Sutherland ,, Argyll	_	Duke of Sutherland Duke of Argyll	15,800 20,500 30,000	2,864	324
Benmore Ben Wyvis Blackmount Blackwater (part of)	Sutherland Ross and Cromarty Argyll Aberdeen	45–50 50 90–120	Sir Charles Ross, Bart Rupert Shoolbred Marquis of Breadalbane Duke of Richmond and	35,000 20,000 90,000 1,840	3,273 3,429 3,602 2,068	244 713 Sea level 970
Borve (N. Uist) Braemore Braulen and Glen	Inverness Ross and Cromarty	18 60	Gordon Viscount Fincastle Sir J. E. Fowler, Bart	8,000 37,000	3,547	Sea level 590
Strathfarrer Brodick (Arran) .	Inverness Bute	50 45	Lord Lovat Trustees of late Duke of Hamilton	30,000 5,120	3,773 1,572	200 Sea level
Carryarrock Castle Leod	Inverness Ross and Cromarty	10	Sir J. W. Ramsden, Bart Countess of Cromartie	7,000 20,000	_	=

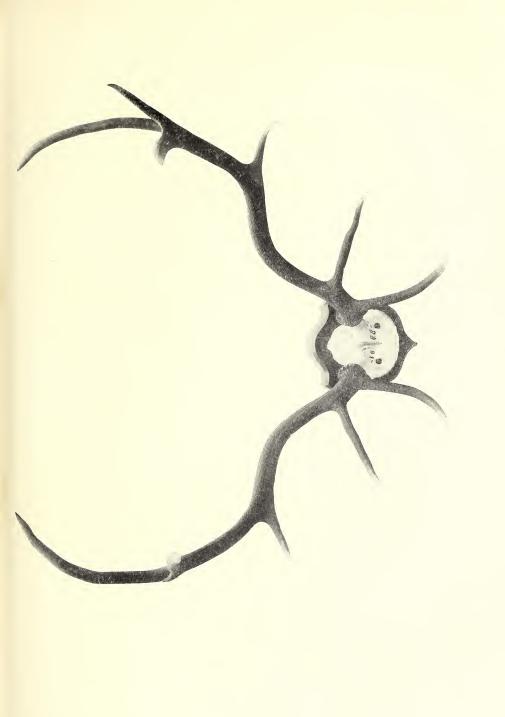
LIST OF SCOTTISH DEER FORESTS, 1913-Continued.

Name.	Co	No. of	P	Areain		tude.
Name.	County.	Stags.	Proprietor.	Acres.	Highest.	Lowest.
Ceanacroc, S	Inverness and Ross	3 90 {	J. Murray Grant	10,000	_	_
Cluanie N	", "	, ~ (J. E. B. Baillie	18,000	_	_
Cluanie & Glen Shiel	Inverness Ross and Cromarty	50		2,396 23,084	3,342	606
Clunes	Perth	10	Duke of Atholl	11,000		_
Coignafearn	Inverness	60	The Mackintosh	29,501	2,652	1,100
Conaglen	Argyll	10.10	Earl of Morton	11,000	3,000	46
Corriehallie	Ross and Cromarty	10-12 10	Capt, Gillanders Major McKenzie	6,643 5,400	2,500	610
Corriemony	'Inverness'	30	Trustees of late L. McPher-	9,000	_	=
Corrie Mulzie Corrour Fersit and	Ross and Cromarty	30	Wm. Ewing Gilmour	5,321	2,220	700
Benevrich	Inverness	-	Sir John Stirling Maxwell, Bart	56,251	3,611	1,020
Corrie Kinloch	Sutherland	_	Duke of Sutherland	10,560	3,040	34
Corrie Varkie	Perth	10	Trustees of late Sir M.	4,000	_	_
Coulin	Ross and Cromarty	40	Menzies, Bart Sir Wm. O. Dalgleish, Bart	14,140	3,034	350
ruinie		40	Countess of Cromartie	30,000	2,800	173
Craiganour	" Perth	18	Lady Menzies	15,000	2,500	700
Craskie	Inverness	20-30	Mrs Chisholme of Chisholme		2 200	
Cuchullin	,,	5	R. L. Thomson M. K. Angelo	14,000 7,000	3,309	Sea level
Dalnacardoch and	**	20-30	W. K. Augelo	7,000		
Stronphadrick .	Perth	_	Duke of Atholl	15,000	_	_
Dalnavert and S.	_					
Kinrara	Inverness Caithness	10 5	The Mackintosh Sir J. G. Tollemache Sin-	1,500	4,000 1,142	701
Dainawillan	Caitnness	٥	clair, Bart	5,000	1,142	_
Dalness	Argyll	20	Hon. Sir Schomberg Mac- donnell	8,000	3,766	290
Dalnessie	Sutherland	_	Duke of Sutherland	10,000	-	_
Deanach	Ross and Cromarty	40	Sir C. Ross, Bart	16,000	1,000	720
Dorisduan	"Caithness	5 5	Sir Keith Fraser, Bart The Crown	9,000 3,000	657	_
Drummond Hill	Perth	8	Marquis of Breadalbane	2,500	1,500	380
Duchally	Sutherland	10	W. E. Gilmour	3,744	_	_
Dunalastair	Perth	20	Mrs La Terriere	20,000		-
Dundonnell Forest .	Ross and Cromarty	40	Hugh Mackenzie	37,000	3,485	15
Dundonnell House . Dundreggan and	" "	8	" "	25,000	_	_
Inverwick	Inverness	70	J. Murray Grant	13,000	1,850	290
Dunmaglass		12	W. Sopper	15,600		
Dunrobin	Sutherland	20	Duke of Sutherland	13,800	1,706	91
Erchless Eriboll	Inverness Sutherland	30 6	Heirs of Mrs Chisholm W. E. Gilmour	8,000	_	_
Eskadale	Inverness	5	Lord Lovat	36,000 12,000	_	_
Fain Forest & Foich	Ross	12	Sir J. E. Fowler, Bart	6,500	_	_
Fannich	Ross and Cromarty	50	Vernon Watney	20,000	3,637	822
Fasnakyle	Inverness	60	Heirs of Mrs Chisholm	25,000	2,884	290
Fealar	Perth Sutherland	50	Duke of Atholl Duke of Sutherland	14,000 9,286	3,424	1,200
Fisherfield and Let-	Sufficiand		Duke of Sufficiant	7,200		
terewe	Ross and Cromarty	100	Marquis of Zetland	52,009	3,217	32
Flowerdale	,, ,,	23	Sir K. T. Mckenzie, Bart	10,000	2,500	32
Forsinard (Hope and	Sutherland		Duke of Sutherland	13,800		
Gaick	. Inverness	60	Sir G. Macpherson Grant,	26,200	3,000	1,150
Calor	, inverties	••	Bart State	-5,200	3,000	1,100

A Wide Head, 39 in. span. Killed by Mr J. C. Williamson, Strathviack Forest, 1898. Copyright, J. G. Millais.

PLATE XXII.







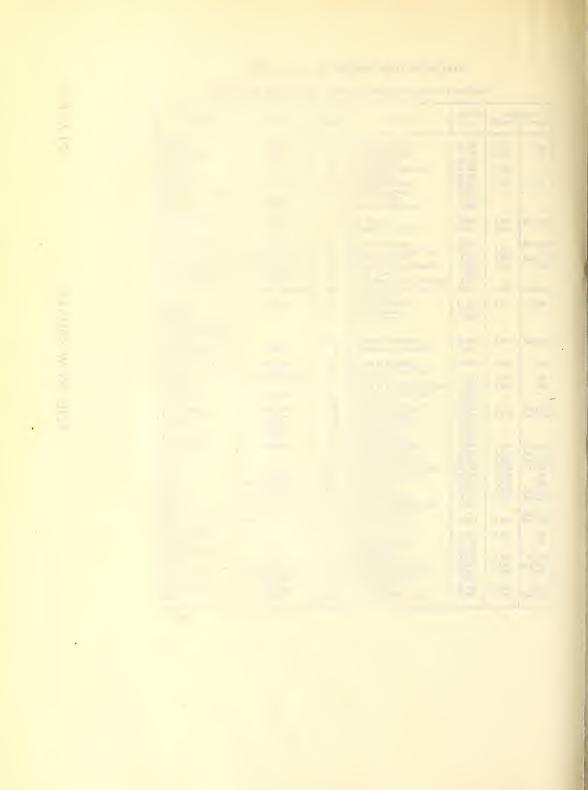
LIST OF SCOTTISH DEER FORESTS, 1913-Continued.

	1			1		
Name.	County.	No. of Stags.	Proprietor.	Area in Acres.	Alti Highest.	tude. Lowest.
Carbot	Ross and Cromarty	3	Countess of Cromartie	6,000		
Garbat	Sutherland	_	Duke of Sutherland	9,200		
Glasletculleoch	Ross and Cromarty		Vernon Watney	2,000		
Glenaladale and	1035 and Gromarty	Í	vernon watney	2,000		
Glenfinnan	Inverness	35-40	Col. J. A. M'Donald	18,000	_	_
Glenaray	Argyll		Duke of Argyll	30,000	_	_
Glenartney	Perth	25	Earl of Ancaster	6,857	3,224	500
Glenavon	Banff		Duke of Richmond and	40,000	4,083	1,190
		80-100	Gordon			
Glenbruar	Perth	45	Duke of Atholl	12,000	3,200	1,400
Glencally	Forfar Ross and Cromarty	27	Sir John G. S. Kinloch, Bt W. Dyson Perrins	3,000 4,000	2 242	400
Glencanisp	Sutherland		Duke of Sutherland	32,450	2,243 2,779	Sea level
Glencannich	Inverness	48	Heirs of Mrs Chisholm	13,000	8,877	710
Glencarron and	Inverness	.0	Tiens of Mis Ginsholm	15,000	0,011	'10
Glennaig	Ross and Cromarty	45	Lord Wimborne	15,160	3,452	400
Glencassley	Sutherland	8	W. E. Gilmour	14,000	_	
Glencoe	Argyll	_	Lord Strathcona	2,000	_	
Gleneripesdale	Sutherland	45	T. G. and H. Newton	26,000		- I
Glendhu		40.45	Duke of Sutherland	34,726	2,597	
Glendoe	Inverness Forfar	40-45	Lord Lovat Heirs of Duncan M'Pherson	17,190	2,839	50
Glen Etive	Argyll	40	Ian T. Nelson	14,000 10,153	3,143 3,776	1,240 Sea level
Glenfeshie	Inverness	50	The Macintosh	5,599	3,338	1,050
		50	Sir G. M'Pherson Grant, Bt	35,900	4,149	1,050
Glen Fiddich	Banff	50	Duke of Richmond & Gordon		2,583	810
Glengarry	Inverness	45	Trustees of late E. Ellice	17,730	3,066	92
Glen Kingie	,,	25	Lochiel	16,580	3,290	360
Glen Kyllachie	,,		W. Dalziel M'Kenzie	4,000	-	- 1
Glen Mazeran	,,	30	Duke of Richmond & Gordon	12,000	4 000	
Glenmore	4, ",	40			4,083	1,035
Glenmuick	Aberdeen	80	Sir Victor A. F. Mackenzie, Bart	12,000	2,722	1,050
Glenquoich	Inverness	100	Trustees of late E. Ellice	46,301	3,395	Sea level
Glenrossal	Sutherland	10	W. Ewing Gilmour	18,000	5,575	Sea level
Glenshian and Ran-	Sutherland		W DWING OILINGE	10,000		
nachan	Inverness	8	Mrs James Head	8,000		_
Glenshieldaig	Ross and Cromarty	_	C. J. Murray	12,100	1,700	Sea level
Glentana	Aberdeen	62	George Coats	26,030	3,077	454
Glomach	Ross and Cromarty	35	R. T. Bowerman	7,150	2,750	220
Glut	Caithness	30	Sir J. G. Tollemache Sin-	14,900	1,442	_
Gobernuisgach	Sutherland	30	clair, Bart W. Ewing Gilmour	17,500	2,393	94
Grimersta (Lewis)	Ross	6	Major D. Matheson	10,460	2,393	
Gruniard	Ross and Cromarty	30	A. H. M. Cattow's Trustees	16,000	2,508	279
Gualin	Sutherland		Duke of Sutherland	1,450		
Guisachan	Inverness	70	Earl of Portsmouth	20,000	2,991	400
Gulvain and Achda-						
lieu	n ."g	_	Lochiel	21,740	3,224	Sea level
Inchbae	Ross and Cromarty	40 45	W. D. M'Kenzie	21,000	2,573	380
Inchnacardoch	Inverness Sutherland	45	Lord Lovat Duke of Sutherland	8,800	2,541	50 Sea level
Inchnadamph Inversilort and Ran-	Sumerianu	-	Duke of Sutherland	11,320	2,341	Sea level
nachan	Inverness	12	James Head	11.853	2.947	Sea level
Invercauld	Aberdeen	40	Alex. H. Farquharson	20,020	3,586	1,100
Invereshie	Inverness	25	Sir G. M'Pherson Grant, Bt	7,000		
Inverewe	Ross and Cromarty	30	Osgood H. M'Kenzie	13,000	_	-
Inverinate (with						
Ranachan)	Ross	25	Sir Keith Fraser	13,000	2 020	-
Invertael & Glenbeg	Ross and Cromarty	40-50	W. Ewing Gilmour	14,000	3,039	500
Inverlochie	Inverness	45	Lord Abinger	32,000	3,990	350
L						

LIST OF SCOTTISH DEER FORESTS, 1913-Continued.

Kinloch Kinlochbeg or Black Corries Kinlochbeg or Black Corries Kinlochbeg or Black Corries Kinlochbeg or Ki							
Invermark	Name.	County.		Proprietor.			
Inversand			Stags.		Acres.	Trignest.	Lowest.
Inversand		7.4		D 1 (D !! .	22.250	1.000	000
Inversanda							820
Jura					7,500	2,224	84
Nos and Cromarty 10						2750	_
Killian and Faddoch Kilmaliev Killian and Faddoch Kilmaliev Kilouran Kiloura		,,				2,750	_
	Kildalton	D 12		lan Ramsey		2740	-
Kilouran Kafgil Kilouran Kanoda Kafgil Kilouran Kanoda Kafgil Kilouran Kafgil Kilouran Kanoda Kafgil Kilouran Kafgil Kilouran Kanoda Ka		Ross and Cromarty		Rupert Shootbred	22,000	2,749	622
Sutherland Sutherland Sutherland Glensanda Argyll Sutherland Glensanda Argyll Sutherland Glensanda Argyll Sutherland Glensanda Argyll Sutherland Glensanda Carries Calines Calines		A 11				_	_
Singairloch and Glensanda					2,000	_	_
Giensanda Kialoch Sutherland Sutherl	Kilouran	Sutherland	3	Duke of Sutherland	3,000	_	i —
Kinloch Corriers Content Con		A e .11	٦,	11 C	12 000	2 422	Sea level
Sinlochbeg or Black Corries Ross and Cromarty Ross and Croma							Sea level
Black Corries Kinlochewe		Sutherland	_	Duke of Sutherland	30,000	3,040	_
Sinlochewe Ninloch Hourn		1 A 31	50	T -ud Canadhaana	25 (00	1	C 1 1
Inverness Caithness Cait	Violenkawa	Poss and Cromers			23,000	3 000	Sea level 32
Ross and Cromarty Simple	Vislash Hauss		60		7,000		Sea level
Inverness Calibrate Cali			50		33,000		295
Kinneachdrach (Jura Kintail Argyll Ross and Cromarty Sundandamph Luskentyre Lude Lude Levishie Ross and Cromarty Lude		Inverses			14 000	2,404	295
Kinveachy Kinv			20			-	_
Kinveachy Inverness 20	Kintail		50			3 500	Sea level
Inverness 20	Kintaii	Ross and Cromarty	30		23,000	3,300	Sea level
Knockfin Knockfin	Kinyeachy	Inverses	20		11 000	3 337	1,000
Ronockie	Knookfin		20			3,337	1,000
Rosy and K Carnach (including Barrisdale)	Knockie		6				
Gincluding Barris dale)		"	ľ	1. W. Grant	0,000	1 -	_
dale)							
Lagkan (Mull)			100	Arthur S Rowlby	38 000	3 410	Sea level
Langwell and Brae-more Langash (N. Uist) Lockmelm Lockmelm Lockmelm Letter Morar Letter Morar Levishie Sutherland 30 Louberoy Loch Assynt . Sutherland 1nverness 20 Lude Loch Hour . Lude Perth 5 W. M'Inroy 9,300 Lubendamph . Ross 5 Sir C. Ross, Bart 46,000 Lubendamph . Ross 5 Sir C. Ross, Bart 46,000 Lubendamph . Ross 5 Sir C. Ross, Bart 46,000 Lubendamph . Ross 5 Sir C. Ross, Bart 46,000 Lubendamph . Ross 5 Sir C. Ross, Bart 46,000 Lubendamph . Ross 5 Sir C. Ross, Bart 46,000 Lubendamph . Ross 5 Sir C. Ross, Bart 46,000 Lubendamph . Ross 5 Sir C. Ross, Bart 46,000 Lubendamph . Ross 5 Sir C. Ross, Bart 46,000 Lubendamph . Ross 5 Sir C. Ross, Bart 46,000 		Ardyll				3,710	Sea le vel
Duke of Portland Sa, 500 C, 312 Calchness Ca		Aigyii		maciatile of Locitodie	0,000		
Langash (N. Uist) Lockmelm . Ross and Cromarty 17 Letter Morar Loch Assynt Sutherland 30 Louberoy Ross 5 Sir C. Ross, Bart 46,000 - Lude Lude Ross 5 Sir C. Ross, Bart 46,000 - Lude Lude Ross 5 Sir C. Ross, Bart 46,000 - Lude Lude Ross 5 Sir C. Ross, Bart 46,000 - Lude Ross 17 Marchand 10,350 2,537 Mamore Macdonald 10,350 2,537 Mamore Macdonald 10,350 2,537 Mamore Macdonald 10,350 2,537 Mamore Mar Mar Marchand 10,350 3,700 Mar Card Macdonald 10,350 3,700 3,700 Mar Card Macdonald 10,350 3,700 Mar Card Macdonald 10,350 3,700 Mar Card Macdonald 10,350 3,700 3,700 Mar Card Macdonald 10,350 3,700 3,700 3,700 Mar Card Macdonald 10,350 3,700 3,700 3,700 Mar Card Macdonald 10,350 3,700 3,700 Mar Card Macdonald 10,35		Caithness	70	Duke of Portland	38 500	2 312	100
Leckmelm Ross and Cromarty					30,300	2,312	100
Ledgowan Carrivan Carrivan	Leckmelm				6 400	2 100	500
Letter Morar Levishie		,		Heire of I M'Donald Rose	8 350		550
Levishie Sutherland 30		"Inverness"				2,000	
Loch Assynt				J. M. Grant			
Louberoy Louberoy Ross So Roser Birkbeek 14,000 3,500 3,500 Control Control		Sutherland				2 653	Sea level
Louberoy	Loch Hourn	Inversess			14 000	3 500	Sea level
Luibnadamph			۱ °٤ ا	Sir C. Ross Bart		3,300	Bea level
Luibnadamph	Lude		5	W. M'Inrov	9.300	_	_
Luskentyre	Luibnadamph		20	Mrs Chisholme	8,500		_
Macdonald			17			1 654	Sea level
Mamore	Macdonald				10.350		Sea level
Mar	Mamore	"	70		36,000	3,700	Sea level
Monar New Nos and Cromarty New York		Aberdeen	150		80,100		1,060
Monar	Meoble						30
Morar Newton (N. Uist) Newton (N. Uist) Park Newton (N. Uist) Newton (N. Uis			55	W. Stirling			663
Morsgail Ross and Cromarty 20 Major Matheson 13,311 1,250 Sen 1,500 Sen 1,							Sea level
Moy Newton (N. Uist) Ross and Cromarty Send Cromarty	Morsgail		20				Sea level
Park Roso and Cromarty 30-40 Major Matheson 41,913 1,500 Sea	Mov					1,200	
Park Roso and Cromarty 30-40 Major Matheson 41,913 1,500 Sea	Newton (N. Uist)					_	Sea level
Patt, Reochan and	Park	Ross and Cromarty			41,913	1,500	Sea level
Corryeach				,	1,,,10	2,000	- 54 10 701
Portclair Inverness J. Murray Grant 5,500			35	R. J. Bowerman	14,615	2,950	390
Narsword Narsword	Portelair	Inverness			5,500		50
Ransoch Perth 30 Lady Menzies 11,000 3,000 1,000	Raasay and Rona		5			_	
Reay Sutherland 60 Duke of Sutherland 56,037 2,980 Sea Rhiddorrach Ross and Cromarty 50-55 Sutherland 3 Sutherland 3 Sutherland 3 Rothiemurchus . Inverness 70-80 J. P. Grant 18,466 4,248		Perth			11,000	3.000	1,153
Rhiddorrach Ross and Cromarty 50-55 Countess of Cromartie 39,000 1,800 Rose Hall Sutherland W. E. Gilmour 6,300							Sea level
Rose Hall Sutherland 3 W. E. Gilmour 6,300 — Rothiemurchus . Inverness 70-80 J. P. Grant 18,466 4,248							265
Rothiemurchus Inverness 70-80 J. P. Grant 18,466 4,248	Rose Hall.					1,000	_
	Rothiemurchus					4,248	840
					27,000		Sea level
21,000 Sta		****			,,	5,000	234 .0 , 01

PLATE V.







LIST OF SCOTTISH DEER FORESTS, 1913-Continued.

Name.	County.	No. of Stags.	Proprietor.	Area in Acres.		tude. Lowest.
Rumsdale	Caithness	10	Sir J. G. Tollemache Sin- clair, Bart	7,000	742	_
*Sandside			Thomas Pilkington	5,500		
Scaliscro	Ross and Cromarty	5	Major Matheson	6,099	800	Sea level
Seallasaig and Eilan-	•					
reach	Inverness		Heirs of Sir H. H. Scott	11,000		
Scarba	Argyll		F. C. T. Gascoigne	3,675	1,490	Sea level
Scatwell	Ross and Cromarty	18	Robert English	8,500		_
Sconser Forest	Inverness	7	Lord Macdonald	11,233		-
Shieldaig	Ross and Cromarty	15	Sir K. J. M'Kenzie, Bart	7,600	2,500	32
Skeabost	Inverness		Lachlan Macdonald	3,100	600	Sea level
Skibo · · · ·	Sutherland	12	Andrew Carnegie	4,000		
_	5 .6	100 150	$a \cdot a \cdot 1$	(wood)	0.550	005
Strathconan	Ross and Cromarty	100-150 20	Capt. Combe	59,000	3,550	395
Strathgarve	Ross	90-100	Capt. Stirling Major M'Kenzie	6,600	2 5 4 7	750
Strathvaich	Ross and Cromarty	90~100 4	Lord Macdonald	26,000 9,000	3,547	750
Strolamus	Inverness	60	Lord Macdonald Lord Lovat	21,290	3,254	200
Struy	Argyll	5	Marquis of Breadalbane	15,000	3,523	300
Succoth			Sir Rodney S. Riddell, Bart	10,000	3,323	300
Sunart Pollock	,1		, ,	2.500		
Tallabheith	Perth	18	Lady Menzies	15,000	2,500	700
Tarbert (Jura)	Argyll		Trustees of late J. Campbell	22,000	_,500	700
Tolmuick	Ross and Cromarty		Countess of Cromartie	1,500		
Torloisk (Mull)	Argyll	8	Lord Alwyne Compton	25,000		
Torridon	Ross and Cromarty	30	Duncan Darroch	11,630	3,456	95
Tulchan	Forfar	60	Earl of Airlie's Tutors	9,160	3,500	1,500
Urchany and Farley						
(included in Beau-						
fort Castle)	Inverness	8-10	Lord Lovat	4,340	1,386	460

^{*}Entered in lists of Deer Forests 1899-1905, but the proprietor now objects to this.

J. G. MILLAIS.

SCOTTISH DEER STALKING

There are so many occasions on which everything goes wrong, and nothing will go right, that it is always pleasant to remember those happy times in our lives when "there are no flies in the jam." In Scottish deer stalking, we who have to depend on the generosity of our wealthier friends for our favourite sport will experience many occasions when the wind is wrong and we cannot wait, or are not asked, till it is right. When the mists hang for days when we would be on the tops, when deer are scarce, or even-what is fortunately rare-when favouritism is practised, and we are not meant to get a good one, and when gross mismanagement, through excessive shooting, spoils everything for all parties. So the good times, when our host is a sportsman, and deer are plentiful, and there are no vexatious conditions to worry about, are what we all desire, and what we best like to remember. Here is just a week at Braulen in October, 1900, when my host, George Henderson, who has given me many good days at the stags, said "Go and shoot what you like." That was just like him, but I did not mean to shoot even one a day unless I found a good one, though, as events turned out, "all went merry as a marriage bell." I recount this week more especially as I had the pleasure, on two days, of being my own stalker in Scotland for the first time, and that is a joy one seldom experiences in the north.

Deanie Beat, Braulen, October 8, 1900.

I regret the fact that Campbell, the head stalker, is ill, but that he has not appeared to-day has caused me no little pleasure as, for the first time, I am trusted to do my own stalking. A ride of a mile or two takes the traveller down Glen Strathfarrer to the cottage where dwells Johnny Campbell, the gillie, who is to keep me right in case I show any disposition to wander on the Struy or into the Strathconan sanctuary—a not wholly impossible contingency in one who has little respect for "marches." There is a tumbling mountain stream that comes roaring out of the hills in lovely "Bass's pale ale" colour at this spot, and along a crooked path we ascended for some hundreds of feet before taking our first "wee spy." It did not last long, as the view of our beat was as yet insufficient, but we had time to find two or three small stags on the hill far above, and to warn me that we must be careful in showing ourselves after the next 500 feet, for sharp little eyes might see us and move something good

on the slope, above which we could not yet see. At 1,000 feet we crept from the burn edge on the Struy march and had a good spy over the greater part of the Deanie Beat, which now lay spread out in one long slope to the east, reaching from the Farrer below to the high peaks nearly 3,000 feet above, which mark the march of Strathconan. To the uninitiated it always seems remarkable, and in some cases annoyingly so, that the local man can always find three lots of deer to one you find yourself. But consolation may be learned in the fact that he is indeed a duffer if he cannot do so, for the very simple reason that he knows, or ought to know, exactly the spots where the deer are likely to be feeding or lying at certain hours. His knowledge of deer and spying power may not be superior to your own, but, on his own ground, he must always be the better man with the glass, whereas if you were to take him to some unknown forest or foreign lands, he might be at as much trouble to find a beast as you yourself. I was therefore neither chagrined nor jealous that Johnny found three lots of deer before I found one. In mine, however, was the "beast." I just saw his horns sticking out of a peat hag in a small hollow below the highest tops, whilst a further careful search disclosed the heads of five hinds all deeply buried in old heather and rank grass. From our position he looked a fair beast and better than anything else in view, and though his head was not good, I thought he would do to spend the morning in the practice of stalking.

We now crept back, taking the shelter of the burn, and with ease reached the hill above our beast, finding nothing in the way, until we reached the shoulder immediately above the stag. This part of the stalk presented no difficulty, but once there, I found that the depression of stones, a small watercourse, was too shallow to hide us, and that the only line of descent was within full view for at least 150 yards. As the wind was steady and all the deer lying facing west and looking downhill, I decided to take the risk of an open crawl. This being safely accomplished, I now crawled to within 100 yards of the deer. I must have made some slight noise as I pushed the rifle round the shoulder of a small rock, for the deer were all up and walking away when next I viewed them. Fortunately the stag was clear and my shot was successful in taking him just above the heart.

We now had lunch, and then ascended to the top of the range, going as far west as the limits of the beat. We saw below us seven stags as good as the one I had shot, and two rather better, just what are called "good

shootable beasties," but I was now looking for something of a higher class, for had I not heard rumours of a good royal and a big ten-pointer that had been on Deanie at intervals all through the season, and they were most likely to be on the western edge of the lower slopes, and were sure to have a big herd of hinds with them. It was for this herd that Johnny and I searched as we kept descending the hills. The afternoon was gone, and we had reached "the Rocks" beneath, where remained one small corrie, which we could not spy, when I heard a stag roar loudly below. In a moment a fierce bellow answered, and looking round the boulders I saw the sight that all deer stalkers love—two master stags, facing each other with a herd of at least 150 hinds and small deer scattered between them. It was a grand sight which I could have sat and watched for hours with pleasure, but that was not to be. The light was going fast, and even as I looked at them, the leading hinds made a travelling move in the direction of Struy. There is a certain look about the face of an old hind that means to go right out of any place into the distance that is unmistakable, and when one of these old grey-faced suffragettes means to travel, the whole string behind her is certain to follow. Unless having actually taken the wind they do not go fast at this season, for the master stag generally comes last and whips in stragglers, so I determined to keep parallel to them, and to take the opportunity of cutting in for a shot, as it was by no means certain I could head them without being seen or giving the wind. The deer were about 300 yards below, now moving slowly. Once I tried to cut down the hill but found myself blocked by three hinds on the near flank. I then retreated up the hill again, and, after a short run, caught up my lost ground. After various advances and retreats to try and come within shot of either of the two big stags, I found myself, at 5 p.m., at the end of the rocks, seeing the retreating sterns of the whole herd walking over the flat above Campbell's house. The light would be gone in half an hour, and the Struy march was only a quarter of a mile away, whilst it was certain that the deer would not halt before they reached that forest. There was now only a remote chance of cutting off the deer, and that was by running straight uphill to gain the shelter of a low ridge which might, or might not, conceal our movements from the deer in front and below, and then to dash along to the march itself and try to head them. No sooner thought of than away we went up the hill. It was a hard struggle to reach that top, and a harder one to plough through the hags before we reached hard ground and the descent. With panting lungs and burning

eyes one now had to run and watch as well. Yes, there they were, but surely we were too late. All the hinds were strung out and trotting slowly 400 yards away, whilst the rest of the herd were emerging from a depression below, some walking, some running. It was a moment of intense excitement as one strove to quiet Nature, and wonder if, when the stag appeared, he would offer a presentable target. At last both stags appeared, quite 180 yards away, at the tail of the string. I sat with my back to a rock, and waited for the last, whose head I could not see in the gloaming, to stop or turn sideways. No-on and on he walked till I imagined he had reached the ultimate range at which I could possibly shoot. Then he lowered his head, slewed sideways to nibble a bunch of grass, and I pressed the trigger. The next moment I saw the stag pawing the air with his forelegs and shaking his head wildly. I thought at first I had hit him in the neck, but presently he began staggering from side to side just as I was going to give him another shot, and then I knew he had received a heart shot. By the time I got up to him he was nearly dead, and Campbell completed the execution with his knife. I had killed the royal—15 stone 10 lb., and a fine beast. It was a great finish to the memorable day, for the distance of the shot was 210 yards.

October 9. Up to the high beat of Stob-n-na-lappich with Duncan Cameron, a man of severe aspect, but considerable stalking ability. It was in the open flats beneath the high peak that the deer were driven from the whole of Glen Strathfarrer in Mr Winans's time, and where forty-eight stags, represented by all sizes and ages, were killed as the result of one of these theatrical slaughters conducted by the millionaire. Duncan and the other stalkers had many tales to tell of these drives, which only took place once, or perhaps twice, in the whole season, and poured not a little contempt on such methods of killing deer. Immense numbers of men were employed to head the deer to the final pass or corrie where the rifles were posted. The one man who had any fun out of this spectacular butchery was one Archie, who was posted on the hill behind the late Mr Winans, who, unlike his sons, was a somewhat indifferent shot. Archie was employed to kill any stag that was thought to be wounded by the American millionaire, and which came up to his post of concealment. It need hardly be said that, as the stalkers pawkily remarked, he did not look very carefully for any blood sign when a hart of exceptional size and beauty of horn came trotting by.

Duncan Cameron knew exactly where we should see our first stag, and there at that exact spot, on the left slope of the main glen, we found him —a fine beast—with about forty very watchful hinds. After spying them for some time I remarked to Cameron that we should have difficulty in "getting in," as the deer had all the appearance of animals that had recently been moved—a point with which Duncan concurred. Moreover they were standing looking about on the edge of a small ridge that received the wind in gusts from the north-west and south-west. This only left us a somewhat open line of approach from the south, for all to the north, east, and south-east was open, and below the deer. Our first attempt was a failure, as one of the hinds got a glimpse of us as we crossed a small opening between two depressions. The deer, however, did not go far, so we again advanced, and again they moved upwind. Duncan now counselled a different plan of attack, as he said the deer had moved up into a spot where they met the north wind, and that it would be a good plan to circle to the west and to chance coming in from the north-west whilst they were watching their back tracks. The plan succeeded perfectly up to a certain point. I had reached the last knoll, and was cocking the rifle, when I heard a rush and, looking up, saw the whole herd dashing away at full gallop. The stag was a good last, and quite clear, so I sat down quickly with my back to a mound of grass, and, getting the sight on him at once, knocked him sprawling to the earth. He recovered, however, and went staggering on, but when I was about to give him another, he fell with a splash into a peaty pool, and remained there kicking in his death struggles. The stag was a nice beast of 15 stone 2 lb., with a "wild" head of eight points.

Hardly had Duncan finished the gralloch when the music of two stags answering one another turned our attention to the head of the glen, about half a mile away. Apparently the shot at the last beast had caused no disturbance, whilst the hinds of the fallen one, after circling round, had passed along uphill to the west. The glass showed us a small, but very warlike, stag, inciting another, who had about seventy hinds with him, to battle. The master stag was on the skyline, and looked good enough to shoot, so we at once set about one of the easiest of stalks. In fact I had hardly to crawl at all, except during the last few yards. Looking over a grassy bank there they were at 120 yards, with the whole scene as peaceful as an English park. I waited till the stag faced me and dropped him dead with a breast shot. He was not as good as we had hoped, being only 14 stone

2 lb., but the view on the skyline had deceived us, as I have no doubt it will do again.

Duncan and I were eating our lunch complacently after gralloching the last stag, when I chanced to gaze towards the beautiful hills of Monar, now bathed in sunshine. There was a black spot there that seemed to move—though too far for the eye to guess what it might be. I picked up my telescope, and at once saw that it was a splendid stag, of the first class, as black as a sloe, and on the run. He was even then crossing the march, and entering our ground.

"He's on the traavel for hinds," remarked Duncan, without emotion; "an' I doot he'll no stop this side o' Benula," a criticism as chilling to one's hopes as it was truthful.

The grand fellow, who had just been rolling in some peat hag, kept steadily along, at what may be described as a "running walk," a pace nearly all deer adopt when moving from one place to another in search of wives. There was no chance to cut him off without being seen, so we could only keep him in view as he moved along the steep face of Stob-n-nalappich and hope that he would stop and gaze upon the attractions of certain lovely females that lay on the face before him. No—not a bit of it; he never paused, though he must have got their wind, but passed right on over the march into Benula, from which he probably came earlier in the season.

After this episode we climbed almost to the top of the high mountain, disturbing dozens of ptarmigan from amongst the rocks, and spied the western face of the mountain. Here we found a good stag which, unfortunately, became alarmed as we came within shot. The hinds at once surrounded him, and in trying to make a fancy shot, so as to hit the stag in the head, I missed altogether. The deer then dashed downhill with the stag in the midst of the herd, making another shot impossible.

October 10. This has been a great day; that is, one of fluctuating success and varied interests, such as the deer stalker loves. It was a lovely crisp October morning with a clear sky and a "nip" in the air when Evan MacDonnell and I ascended the hill to the Home Beat, which contains the best ground for stags on Braulen. Our first destination was the base of the huge Punchbowl between the high ridges that mark the confines of the forests of Monar and Strathconan. This large corrie is generally unstalkable, except from above, when there is a strong south wind blowing, as on all other occasions the wind curls round and round, and renders the life of any stag with a nose perfectly safe.

As MacDonnell predicted, the corrie was full of stags, some very fair ones too, and in particular a most desirable nine-pointer with good black horns and long yellow points; a head well worth getting.

We spent nearly the whole morning trying to get at this beast, but as we advanced we were on all sides met with curling winds, and had to retreat. At last MacDonnell suggested that I should climb the mountain and go to a certain pass on the Braulen side of the Monar march, and stop there whilst he moved the deer out of the Punchbowl. By noticing certain rocks I at last arrived at the place near the skyline, and had hardly got there when I saw deer coming uphill in all directions below me. After taking in the situation I saw that most of the stags would top the mountain several hundred yards to my right, so I raced there just in time to get a shot at a galloping stag that looked like a ten-pointer. Panting with the run, however, I missed, and the stag turned, stern on, and dived down the hill into Monar before I could get in another shot. Three other stags now came galloping up the hill and stood for a moment regarding me with fear and wonder. With some hesitation I let them alone, as not up to standard, and these soon disappeared in the mists below. Still others passed to my left up the pass I had abandoned, and I did not fire at any of them for the same reason. Then came a single switch-horn, a big fellow that puffed and blew like an apoplectic alderman, and he, too, went his way unsaluted, as his head was too bad to consider. I could easily have killed him; but before the day was over I was glad I had not done so, as the delay of gralloching would have spoilt the afternoon.

After lunch we moved eastward to the best of the ground, and where MacDonnell predicted we might easily see something exceptional.

Now, on the previous day, the stalkers had spied on this beat, and close to the Strathconan march, a great stag, the best that had been seen in the forest for many a long day. They had stalked him twice, but each time had moved him, until at last he went over the boundary into Strathconan. It was now my good fortune to find this fine stag.

Right in the middle of a sloping hill face, that was all one long marsh from top to bottom, was the great one, a fine royal, with about seventy hinds, and on either flank was a big stag with thirty or forty hinds. All these three master stags were roaring at each other, and chronic confusion was maintained by a big hummel, who dashed hither and thither in full pursuit of two smaller stags, for what reason, except uncontrolled jealousy, I could not see, as neither of the youngsters had any hinds with them.

On the hill itself the wind was perfect, otherwise the conditions of stalking amongst so many deer would have been impossible. It blew steadily from the base uphill, and after a big circle, so as to be beyond all chance of prying eyes, we got into a good position on the summit, from which we could see a considerable portion of the hill and the deer below. We advanced a little and then came to an abrupt halt, faced with the magnitude of the task ahead. Already hinds were creeping up our flanks on both sides, and we dare not go too far downhill, for at any moment a puff or curl of wind might take our scent to one of these, who were certain to be within view of the mass of deer below. Whilst thus waiting and discussing the situation I observed an interesting little incident in bird life in the shape of a peregrine falcon pursuing five grouse which it had just missed. This ding-dong chase lasted for at least two miles before pursuer and pursued passed out of sight.

Whilst this incident was in progress we noticed that the hinds that had threatened our flanks had fed away over the top behind us, so we at once advanced by means of a prone crawl. The stalker must get used to an occasional ducking, but I doubt if I have ever been more thoroughly soaked than during this 300 yards crawl, flat on our faces, down this swampy hillside. There was no solid ground at all, but just short sedgy grass growing out of the marsh. There was not a dry spot on MacDonnell and myself when at last we arrived at a tuft slightly larger than the rest and could just see the top of the back of the royal still about 250 yards below, and surrounded by hinds. Hinds were again on all sides of us now, some not fifty yards away, and our position was critical, when, at the very moment I feared a long shot would be our only chance, a welcome snow shower came tearing up the hill in our faces. This was our opportunity. Disregarding the deer on our flanks we half ran and half crawled in a rapid downhill dash, and as soon as I saw the first hind, which I knew to be near our stag, look up and cock her ears, I sat up and peered for the royal in the mist of snowflakes. Yes; there he was, but looking horribly distant. But, fortunately, he was still the rutting stag, caring for nothing, and had not noticed the alarm spreading on all sides. I raised the rifle and put the little Mannlicher sight on his side, and pulled at once. I saw him "lift" to the shot at once and stagger a yard or two. That was a good enough sign, for Mac-Donnell had already clapped me on the shoulder in silent congratulation. After a momentary pause I saw the stag recover himself and

89

gallop away down the hill amidst at least one hundred deer. Soon he fell back to the rear, but seemed to be going as strong as ever, and I became anxious. Some 300 yards away the whole mob disappeared into a hollow and I watched the string emerge on the other side with somewhat mixed feelings, for if the stag took the little hill with ease, he had not received a mortal blow. But what is that? The last three hinds suddenly wheel, halt, and stand staring behind them into the hollow. That can only mean one thing: the big fellow is down; so away we run, to find the best in the forest kicking his legs in the direction of the Strathconan march he would never cross again. Our prize was a good royal just over 17 stone, and such a beast as one does not often kill. The pride of killing two royals in a week had a distinct fall before the evening was out. On the way home we tried to stalk a good nine-pointer; I think the one we had seen in the morning, but were so careless as to move him, and in trying to hit him in the neck as he ran, at 150 yards, I missed handsomely, and returned home somewhat humbled in spirit.

October 11. Once again on Deanie Beat, taking orders from myself, and living in hopes of seeing the big ten-pointer that had been with the large herd of deer from which I had killed the royal three days ago. We found several small lots of stags to-day, but it was mid-day before I discovered the large herd with the ten-pointer, somewhat high up on the west face of Deanie, and near to the sanctuary. They were in a bad place, and I had to retreat twice owing once to changing wind and once to outlying beasts that commanded the situation from above. About 3.30 young Campbell and I were holding a consultation, being in some doubts how to proceed, when Nature again came to our assistance and moved the deer most successfully without frightening them. The Strathconan tops were wrapped in black clouds, and shortly snow began to fall, coming from the north. At first the deer scarcely noticed it, but as it increased in intensity they started, and began to move downhill to the shelter of the "Rocks." It was a pretty sight seeing the whole herd of some 150 deer running before the storm with ears laid back and tails tucked in. They never paused until they reached the broken ground and then curled round and took the shelter of the large boulders, all running under cover of a steep face.

The deer were now crowded on a high place which commanded all views and the wind from every airt, except the peat hag flats below, came to them. On the extreme edge of this heathery ground, which was

broken and irregular, was a high mound within shot of the deer, and by watching the misty air currents I could see that the wind did not drift to them from this point. It meant a wet and difficult crawl over the flat, with eyes glued on the deer all the time, until the last 200 yards, but I resolved to try it as the only hope of getting a shot. In the midst of the flat was a perfectly open bit of marsh some fifty yards across, which was the critical point, but by watching the weather, which was now somewhat broken, I thought we might steal a moment to cross when the mists or uncertain light might help us. A fresh shower was coming on, so we started, and having reached the edge of the open place, I waited till the snow began, and stole across the flat, inch by inch. When next I looked at the deer, mostly lying and keenly watching all below, I saw we had been successful, not a hind had moved, whilst the ten-pointer was bellowing away with all his might. We had now about 250 yards of peat hags to cross. Here and there the cover was good enough, in other places we had to exercise the utmost caution not to make a false move, for deer pick you up very smartly if they are lying down and watching downhill. Once three hinds sprang to their feet on the hill nearest to us, and I thought all our trouble was for naught, but it was only a three-year-old stag that had moved them and tried to cut them out from the herd. The ten-pointer at once rushed at him and drove him over the hill above, and the hinds soon settled down again.

On and on we crept, only another 100 yards and we would gain the shelter of that rising mound, within shot. Everything seemed in our favour, when the atmosphere suddenly warmed, and the sun, glorious at all times, except at that moment, burst forth. One felt like some child detected in a crime. All our murderous intentions must now be palpable. The lump of peat in front of our noses could be no hiding-place. Those hinds staring at us scarce 400 yards away were not such fools as to overlook two clumsy bipeds lying in the open. But for once they did. Like men, who so often commit the same error, they were all gazing intently into the distance, looking for some enemy that was, in reality, under their very noses. We should have still been lying in that wet hole, shivering with cold, had not the sun again become obscured. It seemed an age, however, perhaps half an hour, before I dared to move, and then a little mist helped us to gain the shelter of the rising mound. After our long wet crawl I was now so stiff and cold that I had to try and get up some circulation before looking round for the shot, but as the evening was fast approaching,

and the light none of the best, it was necessary to waste as little time as possible. Leaving Campbell with the stick and telescope, I cocked the rifle and pushed my way ever so gingerly round the mound. What was my surprise to see immediately in front, and lying on the same mound as myself, the back of the head and horns of a large stag. He was not thirty yards away, and directly in line with him, about 100 yards distant, was the ten-pointer staring at his rival, and occasionally roaring. Ever so carefully I had to raise the rifle to avoid hitting the stag so close at hand, and on releasing the trigger I had the satisfaction of seeing my stag cringe and walk away slowly after the hinds, and fall on to his knees. The big stag that had been lying in front of me made a tremendous spring out of his bed and dashed downhill to the left. By this time I was again loaded and ran forward and sat down so as to command his retreat, he was now going up the hill, and a second glance at his head satisfied me that he had better live for a year or two, so I did not fire. After allowing the hinds to go quietly away Campbell and I walked up the hill to where the stag had fallen, but as we came up to the stricken beast, and were looking at him -apparently in death throes—he suddenly sprang to his feet and faced us. Then he turned round and dashed down into a gully at full speed. The next moment he was racing up the opposite incline, but as he did so I fired and broke his back, which caused instant death. On examining the dead stag we found that my first bullet had gone right through the top of his heart, which, when examined the same evening, was cut right in two, the main arteries ruptured by some expanding strip of lead. I have in my life killed hundreds of wild animals, and this is the only occasion I have ever seen one run a short distance, fall, and then be capable of rising again and running away. No doubt this stag would have fallen dead after going a short distance without a second bullet, but the fact of its being capable of getting up again after a heart shot, going down a hill and galloping up the other side, is somewhat extraordinary. I mentioned this fact to my friend, F. C. Selous, who tells me that he has also once had a similar experience. He shot a hartebeest, which ran a short distance and fell. As he stood over the dying animal he noticed that the bullet was correctly placed in the heart, and as he drew his knife to bleed the animal, another antelope came by, which he at once pursued and shot. When returning to find the first antelope he was astonished to see no signs of it except its tracks. The spoor led away for miles, and the hunter never recovered the hartebeest. Before now men, shot through the heart, have

lived, and then died of old age, but these instances are very rare, and the wounds were made by solid and not expanding bullets.

The ten-pointer was a fine beast of 15 stone, with nice black horns and strong points.

October 12. A perfect deluge of rain, but it does not do to stay at home on such days. If you can see at all it is best to go out, for the best stag in Scotland is as likely to be found in rain as in sunshine. So Duncan Cameron and I trudged away to the Black Hills in such torrents of falling water that we were soaked to the skin by eleven o'clock, though both of us wore mackintoshs of a kind. We kept moving all day and found little, as the telescope was out of the question, and the weather such as to drive all deer to the north side of Scour-n-na-lappich. On the north side of the Black Hills there is a straggling wood of rowans and birch trees, and on the edge of this we found a fine stag with about thirty hinds, in the middle of the afternoon. The deer were constantly moving and suspicious, and in trying a descent through the wood we were detected by the hinds, who rushed away and kept the stag moving for two hours afterwards. They did not, however, move off the beat, so we kept them in sight in the hope that they might settle down before the evening. The light was going when, at last, they stopped amongst some rugged peat hags, and as they remained in this position, keenly intent on their back tracks, the only possible line of advance, we had to try them, or abandon the pursuit without a shot.

It was not possible to be wetter than we were at the time, so an additional cold bath in sustained movement presented no terrors. On descending into the valley we found that the hags where the deer stood were so large as to obscure them from view, so we had a comparatively easy advance up to the firing point. It was certain, however, that I should only get a very quick shot at the stag as the herd was sure to bolt immediately I disclosed my head or the rifle at close range. I was ready, therefore, for a running shot as I peeped round the side of the black mound of turf. In an instant I saw nothing but the vanishing sterns of bobbing hinds, but the stag, whose whole body was completely hidden by a large peat hag, just looked up for a moment at the object of disturbance. I at once took a snapshot at his neck, and rolled him over dead on the spot. He was a good beast, just under 15 stone and a good deal "run."

October 13. To-day, alas the last of this delightful week, I went to a new beat, Cairnsorie, on the south side of the Farrer, and almost opposite to Deanie. The stalker was one John Fraser. The ground was not

high, and almost entirely covered with deep heather, which, if burnt, would make excellent grouse ground, for which, in fact, the whole beat was far more fitted than for deer. Braulen requires a small area of grouse ground away from the main deer forest, and here it is just to hand for the sake of a little careful burning, but whether the proprietor will see his way to doing so is another matter.* We wandered about in delightful scenery with about as much chance of seeing a good stag-at this season, at any rate—as a pink buffalo. In fact, we saw nothing till the afternoon, when Fraser offered to produce the one stag he knew to be on the beat, a big switch-horn, that dwelt in the wood above Loch Mhuiln. Woods at the base of high deer forests nearly always contain a stag or two at all seasons, even though the grazing is nil and the browsing poor, so that hope was once more rekindled when Fraser directed me towards a certain spur on the top of the ridge above the wooded slopes of the loch. The descent to the water was steep and moderately open, so that any deer climbing the face were sure to be somewhat slow, whilst there was a good chance that they would be "viewed" before taking the pass that led over the shoulder where I sat concealed by a small bush.

Meanwhile Fraser had plunged downhill to give his wind to the woods and to tap gently with a stick on the birch stems. It was a perfect October morning, with the sun shining on the blue waters of the loch, on which streamed showers of golden birch leaves. The hills above were as green and purple as Scotland only paints them, and all Nature was hushed after the storms of yesterday. I sat and smoked a pipe of contemplation and expectancy, for a deer drive, with one driver, was in progress, and more likely to be a success than some of those conducted by swarms of men. Deer are obstinate and suspicious creatures like ourselves. You can suggest and even prey on their fears, but you must not insist or coerce. If you do they will resent it and do exactly what they are not wanted to do. I know of one estate in the Highlands where two deer drives take place every year, and never a good stag is killed, though sometimes one is seen-by the beaters, of course. An army of men surround the hills and block all known deer trails, except those guarded by the rifles, but somehow it is never a success. There is too much noise and smoking, too many charming ladies in resplendent tartans, and too many heads on the skyline, too many flashing rifles brandished in the air, too many

^{*}Since these lines were written Cairnsorie has been turned into a small grouse moor and the ground properly burnt. Mr Henderson has killed as many as 450 brace of grouse there in one season.

wild shots at the first "knobber" that shows his nose, and too little consideration given to the wit of the quarry. The illustrated papers which convey thrilling accounts of these drives only depict "magnificent trophies" of 9 and 10 stone. Doubtless these people enjoy themselves in their own way, but that is not the way to successfully drive deer.

Almost at the first tap of Fraser's stick there was a movement in the woods below. First one large hind and then another came into a little space of green. They were now moving slowly uphill, in Indian file, passing in and out of the trees. When they appeared, climbing towards the open, and constantly stopping to look back, I counted twelve hinds and a young three-year-old stag. Up and up they came with ease and grace, following the windings of the main trail, which passed close to my left. In fact, they came so close at last that I feared they would detect me and break back, so I lay out flat behind the bush until the small herd had gone safely by. Again I looked down the hill and saw four more hinds taking the ascent, and in a few moments five young stags ranging from three to possibly five years following them.

None of these deer seemed much frightened, for the wood had not been previously "moved" during the season, so they took the path they doubtless used to go out to feed at night, without suspicion. They soon passed on to the ridge above me where, although they had not yet got the wind, they might see me and give the alarm, so I kept closely hidden till all danger was over. The sound of Fraser's stick some 400 yards below proved that the extemporary drive was almost at an end when, looking down, I saw a single hind followed by a big yellow stag walking slowly up the hill not 100 yards away. They seemed to have materialized out of space, for it was easy to observe anything below at 200 yards, where all the ground was open except for stunted birch. However, there was the big switchhorn. He refused to stop, though I whistled to him twice, so I took him as he moved, and shot him behind the shoulder. He only staggered a few yards and fell dead. A good stag of 15 stone, but much "run." So ended a delightful week of Highland stalking. I had enjoyed six days on the hill, killing eight good stags, of which three had fine heads, though by no means exceptional. I could have easily shot twenty "shootable beasts" if my host had wished them to be killed, but he is not the kind of man who desires to kill seventy stags on a forest where forty ought to be shot. It would be a good thing for other forests if there were a few more tenants like him.

J. G. MILLAIS.

ODD DAYS IN VARIOUS FORESTS

The great charm of shooting in the Outer Islands which lie off the coasts of north-west Scotland is its infinite variety. I never yet knew the man, however, who was a real sportsman, and who enjoyed shooting stags only in the Western Islands for any lengthened period, because the time soon comes when he feels that to encompass the destruction of an animal that cannot get away, is not quite playing the game. On the other hand, when an occasional day at the deer, just as a change from other sport, is offered, it is always delightful. So we must not class island deer stalking quite in the same category as that to be found in a large and open Scotch forest, for from what I have seen of it, it is too tame and too easy. This is accounted for by the fact that nearly all wild animals are tame or wild, according to the size and form of their range within the island or continent they inhabit. In Jura they are tamer than in Scotland; in Arran they are tamer than in Jura; and in N. Uist and the Lews they are more easy to shoot than in either. It is a bad stalker indeed that cannot get a shot at a warrantable stag in South Harris, for instance, for in nine days out of ten the wind blows steadily from the west, and there are no large corries or punchbowls to break it up and make it curl, whilst the ground where the deer are always found is one long series of terraces, covered with large boulders, down which the stalker drops to his game without a chance of being seen.

But for wild free sport, stripped of all the trappings and show that go to make up the sport offered by the average Highland castle, hired at an enormous rent, the Western Islands are second to none. Some of the best days of my life have been spent there in hunting seals, snipe, geese, ducks, otters and rare sea-fowl, whilst the sea-trout fishing, if you are lucky enough to strike the right fortnight in the year, is first-rate. Perhaps the best, as well as the most difficult and dangerous sport of all is the hunting of the great grey seal, an animal so elusive, and living in such wild places, that he is seldom killed. I have made no fewer than six separate expeditions to the Western Islands and to the Shetlands to obtain specimens. These were generally full of interest, excitement, and usually ended in failure to obtain the big bulls, but perseverance at last had its reward, and I killed three large males and two females, one of which is now in the Natural History Museum at South Kensington. That, however,





is the kind of sport few men care to indulge in, for the discomforts were many, and the feeling of remorse in shooting several fine animals which were lost at the critical moment, caused fearful regrets. The most remarkable grey seal, perhaps the largest ever seen in the British Islands, and which I reckoned to be nearly eleven feet long, was lost owing to the stupidity and cowardice of a drunken boatman who smashed it on the head as it lay dying on the open sea, instead of hooking it with the seal-gaff. It was an awful moment, and one that always haunts me.

A typical week's sport in the Hebrides was once given to me by my good friend, George Henderson, who in 1897 rented the forest and lands of South Harris, and as it affords some idea of the kind of sport that may be obtained there, I shall endeavour to narrate it.

It being somewhat dangerous to enter the harbour at Rodel, our little steamer faced about and ran us into the harbour of Tarbert, from whence we had a rough drive of twenty-five miles in pouring rain and a gale of wind over the Harris hills to Rodel Lodge, situated at the southern extremity of the island. The next day it was reported that the sea-trout and salmon were running, so we all fished, and I got one salmon $6\frac{1}{2}$ lb. and twelve nice sea-trout weighing 9 lb. Returning at 4 p.m. I got a trap and drove seven miles to Borve, where the stalker's house is situated, and there spent the night.

About 9 a.m. McLeay, the stalker, and I ascended the hill, and almost at once spied a good eleven-pointer, of course well known to the stalker as was every other shootable stag in the forest. We had only a short circuit to gain the wind and come in from above him, and it was not long before we were crouched behind a large rock within eighty yards of the stag, who was unconsciously feeding below us.

It so happened that this was the first day on which I ever used my dear old Mannlicher rifle, a trusty friend that gave me yeoman service for twenty-five years afterwards and, until the invention of the recent cordite rifle, perhaps the best weapon in the world for all-round sport. With it had come two different types of bullet, one solid and the other rachet-split. As the latter seemed to be the most suitable to use on deer I inserted a clip of these into the magazine and essayed my first shot. I was lying on a couch of moss and perfectly still when the rifle went off, yet the stag only started slowly and ran a few yards and stood again looking about. I fired again, and distinctly saw two flecks of dirt fly up in different places below the stag,

97

which, now thoroughly frightened, sprang out of sight over a rise and disappeared up the hill.

This was disappointing, I scarcely knew whether to blame myself, the rifle or the cartridges, but although feeling convinced that the latter were at fault I reloaded with the solids and followed the stalker gloomily up the hill.

If our stalk had taken place in the Highlands the probability is that we should not have seen that stag again, but after two hours of searching we not only found him, but reached the summit of the hills and tried a fresh stalk.

The stag, however, was now "kittle," and kept moving below us from terrace to terrace, it being two o'clock before I again reached a position where a shot was possible. Just, however, as I raised the rifle the stag ran, and then stood breast on, looking at me at about 120 yards, when I dropped him dead with a shot through the neck. Two men, who had been spying our manœuvres from far below, now appeared and cut the stag in halves, and thus laden they walked away to the road. This method of butchering on the spot is usually employed in the Hebrides, as the ground is too boggy for horses. Since the stags seldom weigh more than nine or ten stone clean, a strong man is easily able to perform this task.

In the afternoon a storm which had been threatening all the morning burst upon us. The wind and the rain lashed us with such fury that we were glad to attain the lee side of the hills and take occasional peeps round the crest in the hopes of surprising a shootable stag, for spying was out of the question. It must have been about four in the afternoon when, drenched to the skin, we turned homewards in the direction of the stalker's house and suddenly came on five full-grown stags lying on a spur not 300 yards away. They seemed quite indifferent to the conflict of the elements and lay chewing the cud of sweet reflection. Not having seen us, it was easy to get out of sight and then creep in upon them to within eighty yards. At this moment the gale was simply raging, and I had to call loudly to McLeay to make him understand which stag I intended to take. The crack of the Mannlicher seems to have been quite inaudible to the stags, for the one at which I fired simply dropped his head and went to sleep for good; the others never moved. I then fired at the second best, and he rolled over and gave a kick or two in dying, causing the other three to rise to their feet and stare at him. One of the three then stepped gingerly

forward and smelt at his dead companion, looking up quickly with some signs of fear. Yet they did not go, but remained walking about below us for fully five minutes, finally passing away over the ridge out of sight. This was one of those occasions when the "record" hunter could have fairly, or rather unfairly, distinguished himself, for it would have been the simplest thing to have killed the other three stags, which were all quite full grown, but my host had given me a liberal allowance, and I had no wish for the fame that attaches to a man who gets five or eight stags in a corner in a gale and butchers them.

We had done quite enough, and even as it was, I felt that although such a chance does not often occur, it made stalking altogether too easy.

However, I was now very pleased with the hitting powers of the Mannlicher, of whose efficiency I had heard many encomiums, as well as disparaging remarks, for when we first saw the tiny bore and bullet we were inclined to be somewhat sceptical of its degree of shock. Now we know that with the nose of the bullet filed or with hollow-point and lead slightly exposed its accuracy is remarkable, and the shock quite sufficient to stop anything except the very largest animals. A subsequent test of the rachet-bullets proved that they were quite unreliable, often flying off at a tangent, splitting in two, and even breaking to pieces altogether.

The next day I had an excellent time with the sea-trout on the lower Obbe loch, getting twenty-four, weighing 26 lb., amongst them a beautiful five-pounder, which put up a good fight. The following day was also devoted to fishing and produced one salmon, 9 lb., and twelve trout, 12 lb. September 29 was, however, such a fearful day, even for the Hebrides, that we went out only for a few hours in the morning, and shot some very tame grouse.

September 30 proved to be a lovely day, all traces of the gale of the day before had gone, and the Sound of Harris, with its hundreds of rocks and islands, seemed to be an idyllic landscape of green and blue. "Just the day for the yacht and a little seal hunting over on the N. Uist coast," suggested my host, so away I went with the ladies of the party, whilst the other men went to fish. On the yacht came one Rorie Morrison, of Rodel, a noted Hebridean pilot, who knew every rock and seal haunt on the coast, and who had been Lord Dunmore's seal hunter for many years.

When we reached the North Uist coast, we left the ladies on the yacht, and, taking one of the small boats, Rorie and I landed. Then we climbed to the summit of a high hill, which commanded a splendid view

of the whole of the Sound of Harris. The tide was only half ebbed, but the sight of so many hundreds of green rocks in a waste of sunlit sea was wonderful. Wales, Donegal, Shetland and Orkney are remarkable for their great precipices and the heavy seas which break on them. The Western Islands for their silver sands, Scotland for her mountains and rivers, and England for her parks; but nowhere in Great Britain is there such a remarkable view of islands as in the Sound of Harris at low water. There are hundreds of these, all of bright emerald green in the sunlight, and in the evening, when we saw them at low water, the sea was like a molten sheet of gold dotted with jewels, whilst in the background were the blue hills of Skye and Harris.

With all this host of resting-places I could not, even with the aid of a telescope, make out any seals, till Rorie asked if I had found any. I replied in the negative.

"Well," he said, "yer no lookin' the richt way. D'ye see yon grey rock close in shore by they yows?" indicating with his finger an unlikely looking place near the mainland of N. Uist. "If they're up anywhere yon's the place."

Of course he was right. What a sight filled my glass as I brought it to bear on the rock in question-at least, there was no rock visible, for the grey object was a mass of seals, all huddled together as thick as swine at a country fair. Plans for the stalk were now discussed. It was arranged that I should descend the hill and then pass on to the N. Uist shore and get far behind the seal rock—that is, under the wind—and come in under cover of the peat lands. Rorie explained to me that the distance from the main island to the rock on which the seals rested was about eighty yards, and that a somewhat deep channel flowed between. He told me that, after I had fired my first shot, I must look out for seals appearing in the water of this channel, where they were sure to come if I kept out of sight, and that if any seals were shot there they could be recovered at low water, and he hoped I would shoot several, as the people of Obbe would be glad to have them. After arranging these preliminaries, I started off, having a walk of three-quarters of a mile before it was necessary to be cautious. A spy now showed me that the seals were quite quiet, but it also disclosed the unwelcome fact that the sheep, which we had first seen well up on the land, had now wandered down in scattered parties all along the line by which I hoped to make my final advance. This was somewhat disconcerting, and particularly so as the wind, which up till now had been fitful,

had died away. After waiting for half an hour all the sheep fed away except ten, which stood in their usual provoking manner, staring about for something to be frightened at.

Being mostly lambs I expected to be able to scare them mildly out of the way. A close, and very wet, crawl of about 200 yards through peat and slime, brought me rather unexpectedly to another branch of the sea on Loch Portin; and by keeping close to the water I crept along to a point which I judged must be beyond the sheep and not very far from the seals. As I advanced slowly along the shingle of high-water mark, I happened to turn round for a moment and found myself facé to face with a very large seal, not twenty yards away, who was regarding my ungraceful movements with great interest. There was more than a little temptation to shoot him, for the sandy bottom of the sea was not six feet below him, but I withheld my hand as I wished to have a good look at the seals on the rock first, and this I knew I should spoil if I fired. A moment later I almost wished I had taken the certainty, for, on creeping up a bank to take a peep at the seal rock, I found myself looking into the face of an old Highland ewe. We tried to stare each other out of countenance, but it was of no use; there was a loud hiss and a rush of many feet, as a small flock dashed landwards past me, and I raised myself just sufficiently to see a mass of seals nearly all asleep, lying on the rock about eighty yards away. There was just a chance that the tame wild animals might not take the alarm and from the wild tame ones, so, sinking out of sight, I kept still for five minutes. On looking up again, I saw that the seals were perfectly quiet. A little wind was coming in from the sea, so I got the glass out and proceeded to count them.

On this small rock there were sixty-two, the largest number I have ever seen close together, though I have since seen as many as three hundred in scattered groups, under the great precipices near Hevnadale Head, in the Shetlands. They were nearly all fast asleep, with dry coats, except one old beast, who lay on the very top of the rock, who kept raising himself up and keeping a look-out. In all assemblies of seals there is always a sentinel to give the alarm, and on him the rest depend for their safety. I remained for some ten minutes watching the animals through my telescope, looking them over to select one with a good coat. They had all changed into the winter pelage at this season, and presented every variety of the dark and light spotted types. There seemed, however, to be no very large seals amongst them, the herd mainly consisting of adult females and

101

immature ones. At last I elected to fire at the watch seal, which seemed as good as any. Few animals make such a comic commotion as seals do, when a rifle is fired. On the land their contortions are far from graceful, and the spectacle of sixty-two fat seals struggling and falling from the rock, splashing in terror into the silent sea, is a sight to be remembered. For a moment the seal at which I had fired lay on the top of the rock, and then, after some spasmodic jerks, it turned over and reached an inclined plane, down which it rapidly rolled into the sea and disappeared.

After the sound of the shot had died away, the sea became dotted with black seal heads, and most of these soon disappeared, except a few inquisitive youngsters which came back close to the rock. I waited, out of sight, for five minutes, and was about to signal to Rorie to come on, when I observed two more large seals coming along the coast in my direction. Presently one of these appeared in the shallow channel sixty yards away, and on the spot where Rorie had told me I could kill seals without fear of losing them. The first of these new-comers offered an easy chance and lay over dead at once, and the second one, coming up without having heard the shot, shared a similar fate, but sank immediately. Before Rorie arrived I killed six seals in six shots, and after an hour's work we recovered them all except one, the one first fired at, which had become stuck in a hole at the base of a big rock. Our little boat was nearly deep to the gunwale with men and seals as we returned to the yacht after the most successful day that Rorie could remember.

A day's seal shooting often falls to the lot of the deer-stalker, and it is well to remember that it is not good sportsmanship to kill the common seal in deep water except in the early months of the year, when the animals are very fat and almost certain to float. In the autumn only about two seals out of every five will float, and these are generally males which have recovered their condition after the autumnal pelage moult in August or immatures that have not bred. Also it must be remembered that there is only one sure shot to kill a seal dead and that is in the head and neck. A mortal body shot always gives the seal time to make two or three wriggles towards the water or off the rock from which it dives and is almost invariably lost. Common seals are now so numerous that there is no reason why chance shots should ever be taken at them if a specimen is desired. The best time to shoot one is after the deerstalking season is over, about October 20, when the animals have gained their beautiful winter coat. A fine still day should be chosen and the shot taken as the

seal lies on the rock. If the seals are not ashore at low water it is best to leave the pursuit to another day. Where the sea breaks and makes a noise against cliffs it is not unusual to get more than one shot before the herd takes alarm, for I once killed three fine adult males on the island of Yell on the same rock before the others recognized the crack of the Mannlicher. The skins of the common seal make the most excellent cartridge bags as well as mats for the smoking-room, while the oil and fat is always appreciated by the local villagers, who use it for cattle medicine and harness dressing.

In the case of the great grey seal the hunting is always dangerous and difficult. This seal lives in exposed situations, facing the great breakers of the Atlantic, and, as Mr Harvie Brown has remarked, after several unsuccessful efforts, the hunter is more likely to lose his life than to take that of the grey seal. Yet it involves a certain fascination under which I have myself fallen, for none of us care to be beaten, so we go on trying until success crowns our efforts. It was only after many failures that I saw how useless it was to kill this large animal in the water, for it invariably sinks within thirty seconds of being killed.* If the hunter could have an Esquimaux lying at hand with his kyak and spear ready to dash up and harpoon the beast as soon as shot everything would be all right, but clumsy Scottish boatmen handling heavy cobbles in a big sea is quite another matter. They have often just time to reach the seal and see it sink. So the animal must be shot when ashore on a rock and this is not easy. The chances in a season may be only rare, and even then, after the seal is shot, it may roll. I lost two fine males under such circumstances. Any sportsman who wishes to shoot a big male grey seal must be possessed of infinite patience and be ready to undertake long voyages in small boats in rough seas. I took the shooting of Balranald in North Uist for two seasons in the hope of achieving my desires, and the result was six males shot and lost, and one adult female and two immature males killed and recovered. Then came three unsuccessful attempts in the Orkneys and Shetlands, and finally I killed and recovered two big males and a female in North Rooe and Yell. One of these I got quite by a fluke, for I wounded it and it drifted far out in the Sound of Yell, where some haddock fishers found it floating and gaffed it with their halibut gaffs. I recovered the skin and skull several days later.

*Since writing the above I am informed by the Rev. C. Wood, of White Bay, Newfoundland, who has shot several of these seals, that if killed in March, when they are very fat, the Square flipper, as it is called in the new world, generally floats as well as any other seal.

Now to return to South Harris. The day after the seal hunt was devoted by my host and myself to a visit to the island of Taransay, where there was a small snipe bog. It lay right on the side of the village where the crofters and their children were constantly moving about, yet we hardly set foot on the marsh when up got a snipe. For an hour we beat slowly and killed thirty-three—a capital morning's sport. The afternoon I devoted to skinning seals, and next morning drove seven miles to the stalker's house, where I had breakfast, and then walked on to the Luskantyve beat of the deer forest.

October 4 was a glorious day. Twenty-five miles to the south-west was the great island rock of Haskeir, and forty miles to seaward was St Kilda, looming grey out of the oily sea. A procession of waders, now fast making their way south, passed along the coast and made the scene at once interesting to the naturalist who could distinguish their varied calls. Ring plover, redshank, turnstone, dunling, a few knots, an occasional greenshank, a few whimbrel, and hundreds of curlews were always within sight or sound, whilst little flocks of "blue rocks" dashed backwards and forwards in their flights to and from the feeding-grounds, or to caves where they dwelt. Eiders and red-breasted mergansers floated or dived off the rocks, whilst far up in the sky over our heads were a pair of ravens uttering their hoarse croaks.

"It's a curious thing," remarked McLeay, the stalker, observing the direction of my gaze, "that I have never yet killed one of those old residents. That and another pair of ravens live here all the year round, and I have not yet succeeded in shooting or poisoning one of them. They are much too cunning. Next month we shall have the 'travellers.' They come in flocks from the north and I kill forty or fifty of them every winter. These Harris ravens are as sharp as a Glesgie lawyer." Soon we turned inland and ascended by a gradual rise to ground that somewhat resembled a Highland forest. One large open corrie cut in the hill-side, and on the southern slope of this we found a shootable stag. He was only an eight-pointer, but perhaps as good as ever he would be, so we at once commenced to stalk.

Hinds were very numerous on this beat, and we saw some before we left the coast feeding on the sea-kelp. To avoid various small herds of them we had to make a considerable detour, but after that the stalk was very easy and we got down to our stag, which I killed at eighty yards. It was some hours before we found more stags on one of the many terraces facing the sea. Again the stalk presented no difficulties, and we got

to within 150 yards of the herd, which consisted of five fully-grown stags and a lot of smaller animals. The two best fed together on the right, and we had to wait some time before different animals moved out of the way before a final advance and a shot were possible. At last the coast was clear and we ran down the hill, covered from view by several immense grey boulders until I reached a point I knew must be within easy range. Peering round a rock I saw the two best stags, a nineand an eight-pointer, standing close together. I killed the first with a shot through the neck and gave the other a heart shot as he trotted off. After giving time for the other deer to move away we went to look at the fallen, but search as carefully as we could there was no sign of the second stag. We therefore followed the herd, and after carefully spying it saw there was no wounded animal amongst them, so returned and continued our search for more than an hour. I felt certain, however, that I had killed the stag, as I had heard the bullet strike and saw the deer "lift" to the shot, but at last we had to give it up and complete the gralloch and cutting up of the first stag. Two days afterwards McLeay found the stag dead and almost completely buried in a cleft between two rocks where it had fallen.

We now made for the lodge, but on the way met with a stag which was considered shootable. As I had not killed the number allowed me, we essayed the stalk, which was of simple character like all the others. Just a drop down the hill—a short crawl over small ridges sprinkled with large rocks and an easy shot at eighty yards, ending in a kill.

Next day I fished and caught twelve sea-trout in the morning, and in the afternoon George Henderson and I shot six brace of grouse and four snipe. Thus ended a delightful nine days of Hebridean sport, which I had thoroughly enjoyed. The seven stags weighed nine, nine, thirteen, nine, ten and nine stones. The weight of the one temporarily lost was not taken. These show that the deer of these islands are small, whilst the one of thirteen stone was probably a first cross with a stag which some years before had been imported from the mainland. Recently the usual big Warnham stag has been imported to South Harris, but I have not heard if any stock has been raised from him.

Deer-stalking, however, is not always so easy as it is in the Hebrides. I have recollections of a week at Black Mount in September, 1890, when deluges of rain fell and the wind persistently kept in the north and put the stags on to the big open hill-sides facing south, all approaches being guarded. One day on Loch Baa flats I made four separate stalks with

105

Buchanan. In spite of long crawls in peat-slime ditches our patience was always requited by seeing our stag moving away out of shot from the point where we had hoped a chance was possible. In the evening we moved up to the face of Corrie Baa, just outside the sanctuary, and found a magnificent lot of stags, one of them carrying something approaching the finest head I had seen on Black Mount. It was 5 p.m. before we got near him and, the mist rising for a moment, we made out the fine-headed one standing on a ridge with six others about 250 yards away. The deer were unsettled and moving, so when the mist again descended we ran on for another hundred yards and could then just see their horns moving on the skyline but well within shot. I lay down at once to take the shot and wait for the curtain to lift. Presently it cleared sufficiently for a sight to be taken, and at the very moment of pressing the trigger there was a rush on the part of the deer immediately behind the one at which I had fired.

"You've got the wrang ane," gloomily remarked Buchanan, as he snapped up his glass. Alas! it was too true. A small beast of twelve stone had seen us and made a plunge forward at the very moment I had fired and received, in the heart, the bullet I had intended for the big one. It was a very sad and soaked funereal procession that wended its way home.

Three more days of continuous beating to and fro in the rain followed this unfortunate incident. Every day we saw plenty of stags, but they were practically unstalkable, unless some turn of fortune had thrown the game into our hands. In those three days I made eight or nine stalks and never once got within 250 yards of a shootable stag, for Black Mount, with its great "open" corries and flats, is not the place to achieve success easily when the elements are adverse. However, the fickle goddess was not entirely spiteful and smiled again, when Grant took me to his high beat on the last day and I killed a beautiful eleven-pointer after a delightful day of varying incident.

It was very seldom a stalker achieved an easy stalk on Black Mount. Even early in October, when the stags began to break out of the Sanctuary, they seemed to be more alert than in any other forest in which I have hunted. I went one day in October with McLeish to the east face of Benau-Luss, Glenkinglass, to try for a ten-pointer that had beat even that cunning old fellow for many seasons. He told me that he had stalked this stag repeatedly, but had never even obtained a shot at him as he kept as sharp a look out as his own hinds. McLeish said he had known this same

stag for twelve years, and much wished to kill him as he was past his best. After a stiff climb we heard the stag roaring on the top of the mountain above us and, as the mist was heavy and the wind curling all round the top, the old stalker advised, what was somewhat unusual, a direct advance from below. To get within 250 yards of the deer was easy, but then difficulties presented themselves in the form of four hinds looking straight at us and another four or five watching the shoulder of the only other means of approach. We waited long in the hope that they would move, but they appeared to have taken up their position for the day, and although not lying down they kept so steady a watch that it looked as if they had been stalked every day for months. Cold and uncomfortable as it was, I could not fail to admire their intelligence and persistence.

"We canna stop here a' day," remarked McLeish at last, as a bank of cloud hid us as well as the deer. "Let us get on."

We advanced straight up the hill and when the mist rose the hinds had gone and we could only hear the stag bellowing on the other side of the top. I had no idea what the wind was like where the deer were, for it was blowing all ways in our present position, but McLeish was not the least in doubt, and severely ordered me to "Lie down a' wee behind yon rock," whilst he took a look ahead. He returned almost immediately, and lay beside me without saying a word. I felt instinctively that questions were out of place and simply waited. Presently a roar louder than before came out of the mist, and McLeish quickly undressed the rifle and handed it to me. I must confess to having felt a bit nervous, as this was McLeish's record season, he having achieved twenty-four stalks that year and seen twentyfour stags killed under his guidance, and I had no wish to spoil so remarkable a performance. But a look at his calm old grizzled face was enough to reassure anyone and the confidence that a stag had to die only entered my mind. The next roar was still nearer and then came a perfectly dense bank of mist to envelop all things. Again and again the stag bellowed, and the sound showed he was well within shot.

"Look now," said McLeish, as the mist veered upwards. I did look and saw only the head of the stag staring at us some eighty yards away. With half an eye on the mist, which I could now see descending again rapidly, I knew it was probably my only chance, so placed the sight in the space to the right and below the neck of the beast and let go. The echoes died away, and I felt I must have missed. This was not, however, McLeish's opinion. "I think a' heard the clap," he said as he rose and put the rifle

in its case. We advanced, and there was no sign of the stag. Presently he cleverly took the line of the galloping stag over the hill. I roamed away to the right, and after a vain search returned to the hill, where I found McLeish standing and scratching his head. It was not until I was almost beside him that I found he was standing over the dead stag, luckily hit just in the right place.

This concluded McLeish's stalking on Black Mount after over forty years' service, and I doubt if Scotland has ever produced a better man on the hill or one who knew more about the true science of deer-stalking. He has now retired on a pension, with a little farm attached, but I rather think his simple soul often soars away from bullocks and potatoes to the high corries of Ben Starab, where the deer are roaring and where all his happy days have been spent.

"A man who has killed a deer is like a dog who has killed a sheep—he is sure to want to do it again," said Edward Ross, and there is no truer saying.

The day following this interesting stalk I had a tremendous tramp, from daylight to dark, over the highest mountains in Argyll, with James McColl. We went right over the top of Stob-a-na-nalapinach (the peak of the wild boar) and looked into Corrie Hurich. We saw many fine stags, but blinding snow and hail showers unsettled the deer to such an extent that they were running hither and thither all day for shelter, and we never got a chance. One inspiriting run of about two miles put some warmth into our frozen bodies, but did not achieve the desired object, which was to head a party of travelling deer with a big stag amongst them. They were too quick for us, however, and we only succeeded in moving two other lots of deer in the course of the run. McColl was always rather a sinner in this respect, and did not compare well with the other Black Mount stalkers in point of skill.

The next day I tramped back to the Forest Lodge, and my host kindly offered me a day on Ben Toig with the head stalker, McIntyre. I had never previously been on the "Home" beat, as it was generally stalked from Forest Lodge, so I looked forward with great pleasure to the experience, as it was the best beat in the best forest in Scotland. I think I never saw more deer in one day in a Scottish forest (except once from the road looking on the big glen at Strathvaich) than I did on this day, October 9, 1894. They were literally everywhere, and it required some skill on the part of McIntyre to rise to the summit of the hills overlooking the west side of

Ben Toig itself without moving the large parties of stags and hinds to be seen in all directions. Of course we spied everything as we advanced but could see nothing of a kind that ought to be shot at this season until midday, when we found five stags, one of which was a fair one, on the hill above the Lodge. Somehow they got our wind when we were still far distant, but luckily circled and passed away to the west without disturbing Ben Toig, where we expected to find something desirable. After luncheon in the very welcome sunshine we turned round the hill and carefully spied Ben Toig itself, and here found no fewer than five big stags with hinds and several parties of unattached bachelors. The best stag of all, a huge fellow, he must have been at least eighteen stone, lay on the steep hill of Ben Toig, and we at once marked him as our lawful prey.

The green little terrace on which the stag and his hinds rested was just a buttress in the centre of a very sharp descent, and though we got above him and literally let ourselves down yard by yard, some noise, or perhaps a curling eddy of wind, caused the deer to rise and travel by zigzag paths to the bottom of the hill, where they were joined by some twenty unattached stags of various ages. This involved a new movement on our part, for to continue the descent meant that they would get the wind to a certainty. Accordingly we retreated up hill and so back to our first position, essaying a stalk from the west with a gentle wind in our faces.

All went well until within 300 yards of the deer, who were unsettled and watchful, when we suddenly felt a puff behind the ears, and retreat was again the order of the day. A long wait of two hours now ensued in the hope that the herd should move its position, and this at last happened. First an old hind led the way up wind on to the foothills below where the wind was excellent for us, and then all the others slowly followed, the big stag bringing up the rear and roaring frequently. I thought my chance had at last come when we started after them, but not more than a few hundred yards had been traversed when McIntyre suddenly collapsed to the earth and pulled the rifle out of its case and pushed it into my hand. A beast was lying in some rocks not thirty yards away, and though he had neither seen nor smelt us he had certainly heard something. I looked over the rocks just as he sprang from his couch and trotted downhill directly towards "our" deer, which he was sure to send flying in all directions. I had to take him, and so got a quick half-quartering shot at sixty yards just as he vanished out of sight. At the sound of the shot five

109

other stags, who had probably been lying below, came trotting into view and stood for a moment hesitating about one hundred yards away. The last of the string was a good one, so I took him and had the satisfaction of seeing him stumble out of sight. I knew the shot was correct, so did not trouble further but went to follow the line of the first stag at which I had fired and of whose fate I was in doubt. As a matter of fact he must have fallen almost as soon as he topped the ridge, for he lay dead in the hollow below, an old animal of thirteen stone going back, whilst the second stag was a beast in its prime of fifteen stone.

This somewhat lucky right and left did not quite compensate for the loss of the big fellow whom we saw driving his hinds up the hills opposite till he vanished in the mists of the Sanctuary at Corrie Baa.

Although deer are not, as a rule, any better sighted than man, it is wonderful how quickly they will pick up a figure moving on the sky-line at a long distance and recognize its danger or otherwise. I saw an interesting instance of this in 1911 on a small piece of deer ground at Castle Leod in Ross-shire. My friend Bernard Hornung and I went to try and get a deer one morning and soon spied twelve stags standing on our ground not very far from the Wyvis march. We sat down, and were considering the best means of approach when we saw the deer suddenly look up towards the Strath Garve march, fully two miles away. The object of alarm was just apparent to us in the shape of two stalkers' heads directly on the skyline, but the stags never hesitated a moment, but trotted slowly towards us till they passed within easy range. My friend fired and killed the two best, and as the chances of getting deer on the ground were not often favourable, I ran after the others, expecting they would halt and give me a shot if they stopped near the deer fence some distance below. I fired three shots at 300 yards as soon as they stood, and knocked down two more, both of which got up and followed the herd. One of these was too bad to travel far and soon lay down, when I killed him, whilst the other went away on to ground which we did not wish to disturb and where the stalker found him dead the next day.

Deer are far too numerous in this part of Ross-shire. Two days afterwards George Hornung and I looked into the Wyvis Sanctuary and saw at least 400 stags and I never saw such a collection of bad-headed beasts. Amongst the whole lot there was only one stag, a ten-pointer, with a moderate head, all the rest seemed very poor, and must be half starved on this cold rocky ground in winter. About a quarter of these deer moved

on to our ground in the evening, but they were constantly on the move, and we succeeded in killing only three small beasts.

The ease or difficulty of approaching deer seems to depend very much on the formation of the ground and the way it faces according to the prevailing winds. Whilst the great open "pocket" corries of Central Argyll are always difficult to stalk in, those rolling flats and long faces of western Ross-shire, where the west wind blows almost regularly throughout the stalking season are often easy. I find on reference to my diary that I had six days' stalking in September, 1898, on Braemore and I had seven stalks and killed eight stags, two of Kinlochmoidart. them fine beasts over sixteen stone. One day in Braemore I had a misfortune, one that happens to every one, of hitting a stag high through the shoulder blade. The bullet, I presume, did not open, for after lying prone for a few seconds the stag rose to its feet, rolled into a hollow where I could not see it and then dashed off and went right out of sight. This is the sort of occurrence that usually happens only to royals and fourteen-pointers, but in this case it was a very moderate "switch-horn," so the circumstance was not so regrettable. I trust, however, that the beast recovered.

The stalk Fred Stuart and I had with the big stag at Kinlochmoidart was most enjoyable, and one I shall always remember, for it took place in the most glorious scenery in the whole of Scotland, and that is to say in the whole world. Nowhere in our islands are such exquisite landscapes to be found as exist in that north-west corner of Scotland between Loch Sheil and Malig, to the west of the new West Highland Railway. Here the climate is very mild, and magnificent deciduous trees, such as oak, sycamore, walnut, ash, and other kinds, flourish in the river bottoms, above them comes the fir and birch area, then the heather belt, and lastly the green deer forest. It is a perfect mixture of fine southern vegetation with that of Highland character, and when the sun lights up this "wet pebble" it gives glorious surroundings in which to enjoy sport. At that date few stags were killed at Kinlochmoidart—about five in a season—so it was very kind of my host to grant me another day on the hill, for I had already killed a good beast on the first day.

There was talk of a very big eleven-pointer which had been seen more than once in previous years and we hoped to find him with his hinds out on the hill to the east of the house, as that was his usual abiding-place when he left the woods. A climb of about 400 feet took us to the best spying

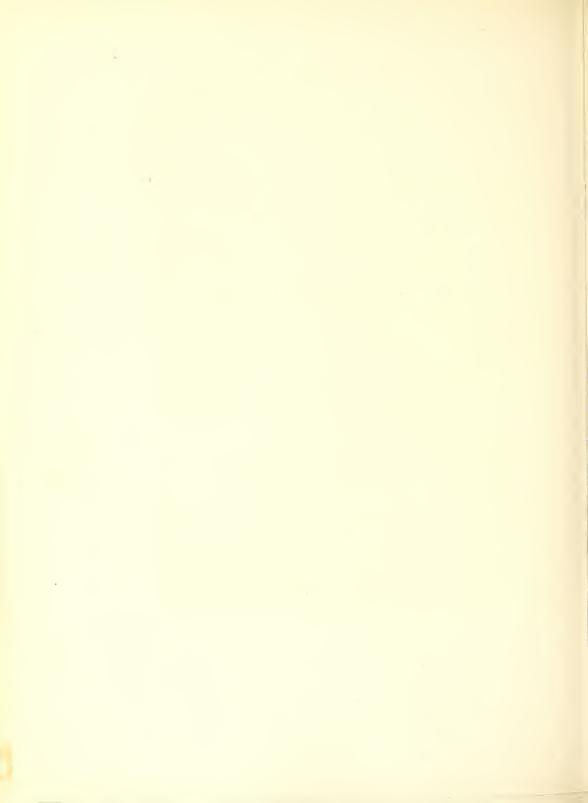
point, and from here we at once found the eleven-pointer lying in the centre of the hill but surrounded on all sides by hinds and small stags. The only chance was to wait, and wait we did till 4 p.m., when the deer, as usual, began moving about, but not in such a way as we had hoped. The face down which we had to descend was nearly in full view of animals below, and in every direction was a deer of some kind, that at any moment might start and spoil the stalk. It took us nearly an hour to get round and below two small lots of hinds, and then a small stag right below nearly upset all calculations. He at last rose and we had to chance giving the wind as the light was going. Still another party of ten deer had to be passed before I got to the stony ridge which overlooked the big stag, and when we got there I found, to my chagrin, that he was at least 250 yards further down and a dozen hinds and young stags were lying within fifteen yards of us. Whilst hesitating what to do, the big stag and his hinds moved down hill into a small hollow, and calculating that the deer close to us would be out of sight of them, I left Fred and the stalker, and ran down the hill as fast as I could to the shelter of some rocks overlooking the object of my desires. Looking back, I saw the deer I had passed running in all directions, and so pushed the rifle round a rock, and found the big fellow facing me at eighty yards. He fell dead at once to a bullet in his chest. His hinds remained without moving for more than a minute, apparently unaware that their lord and master was dead, and it was not until one of them climbed out of the hollow and saw deer moving on the hill above that she took alarm and communicated it to the others.

J. G. MILLAIS.

"THE BIG STAG."

In those deeply interesting talks we have in the smoking-room, or, better still, out on the forest itself, after lunch and a pipe, the subject which invariably crops up is "the big stag." Every forest in Scotland has, has had, or is going to have, its "muckle hart." Some there are, situated in the right places, which seem to possess so many that their appearance is scarcely noticed, whilst others never have, or are likely to have, one at all. The "great one" generally appears at intervals, and usually bears a "charmed" life, that mysterious existence not possessed by the ordinary beast of fourteen or fifteen stone, and the fact that he goes and comes, and has no permanent abiding place, invests him with a peculiar halo of romance. The stalkers are always anxious that





the "laird himsel" shall fire the fatal shot, but something always happens either in finding the deer, in the stalk being muddled, or, worst of all, in the errors of human eyes and nerves. So the "big stag" slowly vanishes and does not always return. If he does do so he is missed again, or is killed by the least important of the guests, or perhaps the lessee's grandson, who has gone out with a pea rifle to stalk a blue hare.

Yet we all love to hear of the "big stag," and hope that some day we may meet and kill him, and that our host will be an angel and give us the head. Before that happy day occurs to the reader, however, there will be many contretemps for the chances of attaining the desired end are small—there is so much against the stalker who is a mere guest.

In the first place he goes to a forest for a short week or, if he is lucky, for a fortnight, whereas his host, who is himself here to slay the mighty one, is there all the season, and the stalkers are sure to favour their master, as they have every right to do. Secondly the "great one" is not a fool, and will scarcely expose his royal person much before October 5, up to which time he is either hidden away in some crannie above the clouds, safely buried in the sanctuary, or reposing on mossy couches in the heart of some dense wood, from which he will only emerge at sunset or in the night itself. If he is seen or known to frequent a certain hill, glasses are on the look out for him, and the favoured one is given the shot. In proportion to his size and the number of his points is the estimation in which he is held, and the greater these merits the less chance has the casual guest even to see him. Still we may all see him some day, which gives us hope, for he has a kindly knack of doing the unexpected, and appearing at times when he is thought to be far away.

Until I went to Dalness in 1897 I had met two of those great stags, and on both occasions luck had been entirely against me, for had conditions prevailed, as they do in real big-game hunting, I should most probably have killed them both. The first misfortune occurred in a large forest in the west of Scotland, where stags were both good and numerous, but fine heads very rare. The day was of the usual west coast type, though somewhat better than usual. In fact, it was pouring in torrents. The stalker and I had seen a good stag with some hinds grazing in a corrie below, and after a rise to the mist edge, we descended somewhat abruptly to come in on our stag. As we did so I saw a single stag lying facing us on the hill opposite, and was aware, even without the aid of a glass, that we were in the presence of something remarkable. D., the stalker, seeing

113

me looking at the stag, which carried a great head, just opened his glass, took one look, snapped it up, and continued the stalk.

But the deer in front no longer interested me. We feel no enthusiasm in the work of the "cubists" when the National Gallery is open. So it was with no sense of actual sorrow that I saw an old hind in the vale below cock her ears and suddenly trot off up wind into the sanctuary, carrying behind her the rest of her party, including the stag we were actually stalking. I sat down with a sigh of relief and looked again across the corrie. Yes, there he was just snoozing in the afternoon nap. What a head too—not very thick, but very long, well shaped, and fifteen good points. He had all the appearance of a young stag, though his head would be as good as the three best in Scotland that season, and I wondered how he could have grown it, the grass of this forest being poor.

"Well, I suppose we must try him," remarked D., "but I fear we'll no get in." It was a difficult stalk, and I expected to see the stag rise to his feet more than once and dash away. The wind was curling every way, though the mist, for once, helped us in showing possible mistakes.

D. made some really daring moves, so dangerous in fact that, did I not know him to have been an absolutely honest fellow, I might have suspected he was trying to put the stag away. Things were not conducted on such mean lines, however, in that forest, so when our closest shaves on the edge of the wind came off, I could only admire the man's perfect knowledge of his own ground. The last little slope was crept over, and we craned our necks round a great boulder to see the fifteen-pointer at one hundred yards, and there he was lying as still and quiet as we had first seen him. D., usually a quiet and excellent stalker, was now in a frenzy of agitation. His face was pouring with sweat and looking the picture of misery. "Well, I think I will kill him," I remarked confidently, to allay his alarms.

"It's no that," he replied, almost crying, "that's the staig a've bin saving for her leddieship these twa years syne, and noo a dinna ken what's to be din ava." The truth was out, and I paused to reflect. There is no doubt a very little persuasion would have been required to have allowed me to fire the shot, but when I looked at the stag at this short range I could plainly see that it was a young and "improving" beast. My host, too, was keen on getting up his forest, and would, I know, not have fired at such an animal, however tempting. He had always treated me so well that I could not do what I knew he would disapprove of. I confess it was a bitter disappointment, yet I had no option but to crawl away and look for another beast.

Two years afterwards her "leddieship" killed this same stag, and it then carried a head of thirty-seven inches and no fewer than seventeen points.

My second experience of a "great stag" was even more exasperating than the first. For some years prior to 1891 there had been rumours in the Beauly Valley of a marvellous stag which spent its summers about the banks of the river between Beaufort, Eskadale and Erchless. One day in late July, 1890, I was calling on my old friend, Miss Dove, at Aileen Aigas, and not finding her at home, I took a stroll round the little island so picturesquely situated in the midst of the rocky river, and famous for its romantic memories of the brothers Sobieski Stuart. The north side of the island was "beaten up" with the workings and beds of a very large stag, which was said to be the monarch himself. During the first week in August Mr Heath, then tenant of Eskadale, kindly allowed me to go to his ground and stalk a roebuck, and it was whilst creeping down through the big wood that I first set eyes on "the best head" in Scotland. Superlatives are at all times dangerous to use, but both before and since, with the possible exception of the Aberfeldy royal, whose measurements though not weight, are superior, I have yet to see a finer example of a purely wild Scottish stag. For strength the tops are more like those of an Austrian stag, whilst the pearling and roughness are quite unequalled in a modern Scottish stag. I saw something move in the wood below, and crept down towards it. The something evolved itself into three hinds standing in a small opening some eighty yards away. They moved forward, and their place was at once taken by the "big stag." He just stood sideways for half a minute, and I feel sure I could have killed him. On August 11, 1891, we again met almost in the same spot. This time I was in front of Donald Ross, and we were slowly creeping down hill in the dawn, when we saw a small birch violently agitated about forty yards away. We had hardly dropped to the earth when out walked the "Eskadale stag" looking bigger than ever. He was not more than forty yards away, standing broadside on, and I put the white foresight just behind his shoulder, where I wished to hit him-and then put it down again.

It was a fearful moment of temptation, but I knew Mr Heath was most anxious to kill this stag himself, so with a great effort, I resisted it. There is no doubt that if you wish to secure big heads you must have no conscience, and although my poaching instincts are more highly developed

than those of other people—for I loathe the very name of the word "march"—the fact remains that if a man treats one like a gentleman I cannot do otherwise than return the compliment.

The "great stag" moved into Beaufort as soon as his horns were quite clean and Mr Heath, whose last year of Eskadale it was, never obtained a shot. And now comes the "unkindest cut of all" to prove that virtue is not always rewarded. When Donald Ross told his master what a chance we had had to kill the stag on the second occasion, all he said was, "What a thousand pities Mr Millais did not shoot him." Further comment is unnecessary. It only remains to be said that in 1892 Mr Lawrence Hardy took Eskadale, and a young guest who went out to look for a roe, shot the great stag of Eskadale, whose portrait I have given on p. 131, "British Deer and their Horns."

The vagaries of chance are indeed strange, and chance pure and simple led me to the grand little forest of Dalness in 1897, and here it was that I met "great one" No. 3. It happened in this way. "In British Deer and their Horns" I had inserted a photograph of a very large stag which I was assured by one of the Black Mount stalkers who gave it to me that the picture was that of a wild deer in Glen Etive, part of which is owned by the Marquess of Breadalbane. Now it chanced that I discovered, after going to press, that the picture was taken on a small piece of ground in Glen Etive belonging to a Mr Greave, that the stag in question was a wild calf which had been retained in a semi-wild condition by being hand fed in winter. It could, however, roam at will, and was killed at the same place. This did not prevent the owner of Dalness, Mrs Stuart, who was a somewhat eccentric lady, from writing to tell me that I was more or less an idiot, that I knew nothing about deer, that she owned Glen Etive, and that if I cared to come and see the glen in the autumn she would be happy to convert me from the paths of future error. All this was very amusing.

In that year, 1897, I had a small shooting in the Hebrides, and finding myself in Oban in early October I thought it would be just as easy to get home to Perth by driving up Glen Etive, and so vià King's House to Dalmally—so I sent a note to Mrs Stuart asking if she would kindly allow me to spend a couple of nights at Dalness and see the Glen. It was, therefore, with no view to stalking that I made my way into the Argyllshire mountains vià Connel Ferry, where I met my friend Hugh Cholmeley, carrying a magnificent royal he had just shot in Dalness. "No stalking

for you," he remarked, most gratuitously I thought, "you are a vile Sassenach—and know nothing of stags; besides, there is one rifle at the house already," and with this unpleasing comment he drifted away.

In spite of my stultifying ignorance of all things appertaining to the Highlands, my hostess gave me a very kindly welcome, and at once made it clear to me that she would show me the Glen and its mountains. Before I came to Dalness I had made up my mind that I was to be contented, and to enjoy the scenery, and eschew all thoughts of the forest, but that stag shot by Hugh Cholmeley had upset me, and I was in no peaceful frame of mind. In fact, I was like the starving man who has delicious viands placed before him and is told not to eat on pain of death. This wretched state of things was even accentuated when the "rifle at the house," who proved to be my old friend C., turned up in the evening, and told us tales of "harts of grease" that could exist in no other forest but Dalness, and to which he added the painful rider, "You are not going to be given a shot, anyway, so it does not concern you."

Sunday passed miserably, and in the afternoon I wandered up the glen for a stroll. A figure loomed out of the mist, and when it came near I saw it was Lord Breadalbane.

"Hullo," he said, "what on earth are you doing here?"

"Don't you see," I replied, "I am walking about learning something about Glen Etive." He roared with laughter, and with swift intuition grasped my unhappy plight at once.

"Altahourn is free on Monday. You go and have a stalk on Ben McCaskie. The place is full of stags." It was just like him, and I thanked him sincerely—but feared that it would not be possible—as I was staying in the house of another.

My hostess, however, offered no objection beyond mild wonder that I should have been deemed worthy to set foot on a Highland deer forest, and so when Monday morn broke cold and clear, I walked to the lodge at Altahourn and met the stalker.

There is no finer sporting estate in Great Britain than the lands of Taymouth, Breadalbane and the forest of Black Mount. Very little of it is cultivated, and it has been said that the Campbell who acquired these estates stopped where he ought to have begun. Taymouth, the home of Lord Breadalbane, is in a sheltered spot near Aberfeldy, from which the property extends, without a break, to the west coast—a distance of fifty miles. It embraces the whole of Loch Tay and the land on either side,

Killin and Glen Dochart as far as Tyndrum, stretching away down Glenfalloch to Loch Lomond. It also follows Glenorchy to Dalmally west as far as the shores of Loch Awe. On the north-west it is bounded by the ancient royal forest of Dalness and the King's House, originally built as barracks for the troops of King George, after Culloden.

Every species of Highland game is to be found on the estate in abundance, from the ptarmigan of the tops, to the capercaillie of the river valleys.

In 1687, John, Earl of Breadalbane, issued the first Forester's commission of which there is any record:

"John Macintyre was commanded to be Forester of the south side of the forest of Corriechiba, to stop all passengers travelling through it with guns, to free himself, his family, and any who lodge with him of eating venison, except the umbles and entrails of such as shall be killed for the Earl's use; to kill in reasonable time of year-that is, from Midsummer to Hallowmas-the number of sixteen deer to be sent to the officer of Finlarig, the Chamberlain of Glenurchy detaining from him a boll of meal for every deer he is short of the number. He is also to receive all the deer and roes in the forest at the sight of the Chamberlain and honest men in the country, and the Chamberlain is to write on the back of the tack the number so received, that it may be known how the deer have increased under his care; for which the Earl allows the said John the shealing of Blaraven, the said John being bound to sheal himself upon the borders and extremities of the forest, where his predecessors did, in order to keep off broken men and destroyers of deer."

It was thought that, at the beginning of the last century, there were not more than one hundred deer on the forest of Black Mount; but about this date Corrie Ba was cleared of sheep, and the deer rapidly increased, though it was not until the year 1820 that the then Marquess of Breadalbane began to appreciate the fact that this great Highland property was a possession from which revenue could be obtained both for pastoral and sporting purposes. About this date a small farm house was built on the shores of Loch Tulla, and from this house Lord Breadalbane stalked Corrie Ba. On his return to Taymouth he consulted with a clever shepherd named Peter Robertson as to the improvement of deer as well as sheep. Under Robertson's guidance Lord Breadalbane gradually cleared one sheep farm after another, until the whole 90,000 acres, which now comprise

the Black Mount Forest, became devoted to deer. As we have said, a portrait of Colin MacColl is to be seen holding the dogs in "A Drive of Deer: Glen Orchay," by Sir Edwin Landseer. The other figure in the picture is that of Lord Breadalbane, who thus described a day's driving on the pass between Altchaoran, Larig Dochart and the Eagle Hill:

"I have never had a better pass, nor have I ever seen a finer drive than we had last week at Coire-na-Keima. The morning had been so dark, and the mists were so heavy and lay so low, that I was afraid that the men, who had a long way to go round, must come upon other deer without seeing them, and so perhaps disturb the corries; but happily the mists lifted, and the day cleared up just at the right time, and a grander sight I never saw. You know that ground well, and the peculiar look of those gigantic slabs of rock which are spread all over the side of the hill so as to give the scenery a character of wild vastness which I hardly ever saw elsewhere. I was at the pass (near the Deer's Ford) which you were at last year, and had Colin with me, with a brace of the best dogs in the kennel. Robertson had calculated the time so well that we had not long to wait after we had got to our passes; and, as the clouds cleared away and the bright sunshine broke through, the sight was glorious. A single hind with her calf came on first, and then two or three young stags, and soon afterwards the whole herd began to come over the skyline of the Eagle Hill. They moved on, but doubtingly at first, with an occasional halt; and as they stopped to look about them I could make out some splendid heads towering above the rest. At last they reached the big stone (at which, you may remember, I was placed last year) where — was lying. He let a good many small stags go past him, but it was not long before I saw the smoke of his rifle, and a magnificent hart fell just opposite the stone. Of course, they quickened their pace now, and came fair at me, and I could soon hear their tramp as they came up out of the hollow; and so did the dogs. Colin had hard work to keep them quiet by muffling them with his plaid; but I did not want them pushed, as the deer came to the pass so well, and were stringing past me so long, that I was able to get excellent chances, had plenty of time to load, and soon had three fine harts down."

Besides the main lodge on the shores of Loch Tulla there are three other stalking lodges in Black Mount. The second in size is Glen Kinglass, a stone building capable of accommodating two rifles, and provision for

stalkers' ponies and gillies. Another lodge is situated in Glen Etive, and a third on the slopes of Ben Starab.

Black Mount is now easy of access by Bridge of Orchy, but Lord Dudley, who leased the forest for many years, had to obtain supplies from Oban or Glasgow to Loch Etive head, whence carts brought them a distance of about twenty miles to the lodge of Loch Tulla.

The present Marquess of Breadalbane took the forest in hand in the year 1886, and under his able management it has greatly improved. For several years I had the privilege of spending a week or more there in the autumn, and much enjoyed stalking in its wild corries. The records of the forest extend back to 1863, but for the first twelve years only the numbers and the average weight of deer are recorded. The largest number killed was in 1864, when 157 stags were shot, averaging only 12 stone 12 lb. The average weight now for a good year is over 14 stone, and in a poor year 13 stone 8 lb. The finest stag killed in the forest was shot by the Marchioness of Breadalbane on Ben-au-eighan in 1897. This stag weighed, clean, 19 stone 2 lb., and carried a head of seventeen points.

The largest stag killed during the period of Lord Dudley's lease was shot by Sir Daniel Cooper, and weighed 19 stone.

By the kindness of Lord Breadalbane I have had many good stalks on the Black Mount, which, for all-round qualities, is about the best forest in Scotland, not necessarily for good heads, but for numbers of deer, grand scenery, and those difficult of approach, which alone make Scottish stalking a high-class pastime. It had not yet, however, been my privilege to stalk one of Altahourn beats, Lord Breadalbane's favourite ground, so it was with very pleasant anticipations that I ascended the steep hill above the lodge that led to the higher corries of Ben McCaskie.

We had risen several hundred feet above the valley when, on rounding a turn in the path, we came within view of a fine stag lying amongst a perfect jumble of great rocks some 300 yards above us, but well in to the wind. It only took a moment to fall out of sight, but in that moment I think he must have seen us, although he never moved. At any rate, our short stalk was a failure for, on trying to get round to one side, he suddenly sprang to his feet and vanished over the brow. We saw no more of him, but were duly grateful, when we ascended to higher ground, to find that he had not moved a large number of deer seen on the east flank of our ground.

Being now well on the hill in the middle of our beat, and high up, we 120

had a fine view of the whole of the south face of this part of Glen Etive. More perfect deer ground it would be impossible to find—all grass and rolling corries, with steep hill faces running up 3,000 feet, and now tenanted by more than a dozen adult stags, all roaring in full chorus. We did not, however, find a master stag with a herd of hinds till we looked into Corrie Corrour, and there was a fine nine-pointer with good black horns—a beast in his prime.

Having decided that this was to be the object of our pursuit for the day, we undertook a long climb and an advance to the east along a high ridge so as to be above our stag. This occupied more than an hour, and when we next viewed our quarry he was found to be very unsettled and moving westwards along the face of Ben McCaskie. From our elevated position we now looked into a large corrie flanked by a steep hill face, and there were no fewer than five other good stags-all shootable beastsone of them appearing to be a very fair royal. He was evidently an improving stag, and was not yet strong enough to gain a herd of his own; so, after admiring his ornaments and studying the heads of the others within view, we moved westward again and dropped a hundred feet or so to be above the line of our nine-pointer. From 1 to 3 p.m. he was coming slowly across a very open hill face which did not seem to contain a stone-slide or ridge higher than a man's body, so we could not attempt any final advance until 3.30, when the hinds at last moved on to pass round the shoulder of the hill. The stalker, with his intimate knowledge of the ground, knew that there was a small punch bowl just beyond the shoulder, where the deer would probably halt a little, and which was probably within shot of the edge of the ridge. As soon, therefore, as the nine-pointer passed out of sight we raced down the hill and made for the spot he had just vacated.

"You must be canny," he whispered, as I moved forward with rifle at the ready, "as he is sure to spring if he's near." I was canny, and on looking over heard the defiant roar of a stag some eighty yards away. Yes; there he was, glancing about uneasily, possibly warned by that sixth sense that deer seem to possess, that "something" was near, though, as yet, he could not quite tell what. The hinds did not look "kittle," a fact somewhat unusual, for they generally do all the watching at this season, and are, as a rule, the first to apprehend danger. I saw I must shoot at once, either at the top of the back or neck, for a bad shot was sure to haunch him, so aiming very carefully, I dropped him stone dead with

121

a bullet just at the right place—the base of the neck. He was a fine stag, 15 stone 9 lb., in the best of condition, with a strong black nine-point head.

After gralloching the stag we moved down the hill in the direction of the stalker's house, as it was not usual, on Black Mount, to kill a second stag owing to the difficulties of getting it home, even on the following day; Altahourn being nearly twenty miles away from the larder at the Forest Lodge. As we marched along in the dusk we suddenly came upon a great mob of deer, moving swiftly up the hill towards us, evidently scared from the low ground by the river or from Dalness on the other side. Our glasses showed us three or four fine stags amongst them, one being a very heavy beast with a wide head. As we surveyed them the whole glen echoed with a series of thunderous explosions from the far side of the river. Evidently C. was having trouble or sport of an unusual kind with his old black powder '500 express. We counted seven shots, at each of which the mass of deer below us surged and rushed upwards.

But one man's misfortunes are often the opportunity of another. The herd below collected under some steep rocks at our feet, and I had only to move a short distance to command them with ease. The only difficulty was to see one's sight and to get the big stag clear. At last he stood partly out from the rest, and I got a shot at his neck. He collapsed at once and rolled nearly a hundred yards down the hill whilst the rest of the herd stampeded in all directions. A heavy stag, over 16 stone, but with a somewhat poor head.

October 12, 1897. A great honour has come to me. I am deemed worthy to stalk the stag in the royal Forest of Dalness, whilst poor C. has left in something like disgrace. Our hostess seldom goes near the forest or knows what is going on there, but on this occasion she herself had heard the terrible bombardment of yesterday, and had ascertained its cause. C. had actually wounded a fine stag on Dalness—and, worse still—had chevied it down the hill and, amidst unprecedented uproar, had "shooed" it on to that inferior place, Black Mount, where rival stalkers would rejoice. Her "pet rifle" might indeed err—that was bad enough—but that those hateful people across the march should laugh was a thing too bitter for words. It is all very well to say that deer stalking at Dalness must only be conducted in the true old Highland style when "the rifle" has a twelve-mile walk in prospect before he gets to his beat, and is not allowed to start before 9.30 a.m., but it means a man must possess youth and a taste for the "strenuous life." Added to this he is expected to be home

at 7.30 p.m. Wherefore the meanest intelligence can grasp the fact that a man must needs hustle and be fit to slay the monarch of Dalness. I did not object to the long walk up Glen Etive and down Glencoe to reach my beat "in the good old Highland way," but I felt somewhat aggrieved that I was not allowed to rise at 4 a.m. and make my way to the far corries at leisure so as to have plenty of time to spy and find a good beast when I got there. The laws of the Medes, Persians and Stuarts were, however, unalterable, so the stalker is hustled along the river road up Glen Etive to get the wind right in the Glencoe Mountains in the next valley. It was a long way, and we accomplished it by 1.15. As we marched along X., the stalker, entertained me with stories of the forest, and impressed me with the fact that the stags of Dalness were always of colossal size, and quite unlike those inferior animals across the river. But the tales and the stags swelled to such vast proportions ere we at last reached the second stalker's hut in Glencoe, that I felt convinced that if they had any substantiation in fact, the great Megaceros and his kindred must again have come to life, and were even then domiciled in Dalness Forest.

Amongst all this pother of nonsense I gleaned the news that another "big stag," as good as that shot by Hugh Cholmeley, was still on the ground. Its abode was the high peaks on the Paps of Glencoe, from which it generally descended to the hinds on Larig Ashton in October, so that we had some chance of seeing it on that very day, since no one had been near the big corrie for a week, and the season for its appearance was now due.

The main valley and peaks of Glencoe, with all their past associations, have been too often described to need a repetition. It is enough to say that there is not a wilder glen in all the north, or one that lends itself more aptly to the sad tales that enwrap its history. The mountains themselves rise so abruptly from the main glen that in most places it is so steep that a stag must not be shot, or it will roll to destruction below. But what stag ground it is. Nowhere in the north have I ever seen such amazing grass—soft and sweet, like the best English park—and the whole rugged hill sides at the top and bottom are broken in dozens of beautiful little "pockets," such as deer love at all times, both for feeding and lying "at watch." I believe that the best of the deer have now left Dalness and passed away to the newly cleared grounds, but in 1897 Dalness may be said to have been at its best, and certainly contained, at this date, as fine a lot of deer as could be found anywhere in Scotland, Despite the stalker's

boasting, Dalness deer probably averaged a good stone heavier than those of Black Mount, or any adjacent forest, and this was easily accounted for when one saw the wonderful grazing. Moreover, the stalkers told me that all the big stags left the high corries in November, and went for shelter westwards in the big "woods" about Loch Awe, where they were free from molestation until they returned in the summer. Such conditions, therefore, were bound to produce a few stags of exceptional merit.

We found a stag almost at once up on the black face within full view. I had hardly seen it when a sharp snowstorm came down and roused us to immediate action, for under its cover we raced up the hill to get the protection of a low ridge, up whose reverse side we made good progress, and so eventually arrived well above our beast. X., the stalker, said the stag was of exceptional size and beauty, two things I failed to observe when the rifle was withdrawn from its case. The beast, however, moved on to a little plateau, where a shot was possible, so I took the chance at once, though somewhat annoyed at my companion's excitable "Shoot—shoot." The stricken animal stood still at once, and then stumbled forward, luckily falling on the lip of the hill just as I was again pressing the trigger. Our quarry was a very ordinary beast of 14 stone, with nine points.

Leaving the second stalker to drag the deer to the road, the head stalker and I descended the hill somewhat and then proceeded over the shoulder into the big corrie known as Larig Ashton. The snowstorm had spent itself, and we could see far up into the very heart of the forest. This is the best ground in all Dalness, and one that is always teeming with deer.

- "I've got him," said X., as soon as he was seated against a rock.
- " What?"
- "The big stag."
- "No. Yes. Heavens, what a beast." The "great one" was no myth.

There he stood above his hinds—quite 100—looking like "the monarch of the glen," and certainly bigger than any Scottish stag I had ever seen. His head was good too, eleven or twelve points, and seemed unusually wide. Just the ideal beast we are all looking for. Swiftly I grasped the possibilities of the stalk, and this seemed so easy too. Deer swarmed all down the glen below him; but he was the highest beast, and not one hundred yards above him rose a world of rocks jutting out of a tiny precipice—just the place which, if we could only reach it, would be easy to come to

for the shot. Would the stag remain where he was? That this was probable was apparent from the fact that many of his hinds were even at the moment lying down in little groups. There was nothing much against us but one thing.

"How about the wind at that hollow we have to cross to get to the rocks?"
"That's just the trouble," answered the stalker. "A'm feared."

The second stalker had now joined us and beamed encouragement when he saw at what we had been looking. "Aye—that's him a' richt. A'll stay here and sign ye wi' me hankie gin' they move," he remarked as we left him.

In the next half an hour we performed a wide parabolic curve so as to get well up the hill and close into the black shoulder in our preliminary advance. At times we made halts and had inspiriting views of the "great" stag as we crept ever nearer. So all went well until we reached the dip to the right of the small precipice. Here my heart sank when I saw the mist in front of us standing still and then slowly creeping down hill. We halted and watched the slow movement of the billowy clouds, and saw them sink down and down until within a short distance of the deer; after that their course was obscured.

There was no other way—we had to chance it—and did so by running swiftly across the dangerous area. Those were moments of fierce excitement. Before we could see the deer again we had to climb over some very steep rocks, and again down others. In two places the stalker let me down a distance of more than twelve feet, hanging full length by the rifle cover, whilst I seized his extended legs and placed him on my shoulders, so that he could drop in turn. In a few minutes we had a view, and there were all the hinds about 400 yards straight below us, as quiet and well ordered as a Free Kirk congregation. I breathed freely again, and already felt the "great one" must be mine.

X., the stalker, was one of those uncomfortable people who never can be still in the presence of deer. He was fidgeting, sweating and talking in a manner calculated to upset the nerves of the most blase. I could only wonder how many stags he had caused to be missed owing to his restless want of confidence, but I did not intend that he should upset me, so I lit a pipe and proceeded to discuss the situation. I suggested that as all the rest was easy, he should stay where he was, and leave me to complete the stalk. This he would not hear of at first, so we compromised by his coming for another 200 yards.

125

In deer-stalking, as in other things of life, it does not do to be too confident. When all seems clear the unexpected often happens, and then your plans are shattered. Before X. and I had gone ten yards down the hill we literally crawled on to the backs of a hind and a calf sleeping peacefully in a hollow of grass. They were not five yards away from us when we made the appalling discovery. We stopped as if shot, but it was too late. The old hind sprang to her feet with a loud "Bruagh," and dashed down the hill.

The game was up in an instant, and our hinds and "the big stag" were spreading out like a fan 300 yards away, and going their very best. Under true hunting conditions I might have dropped the stag even then, and if I had been in Norway or Canada I should have saluted him with five or six shots until he was 500 yards away, but we were in Scotland, which is quite another thing, so one had to restrain oneself and hope that the deer might only run a mile or two and settle down. Vain hope indeed—they joined a great mass of deer on the other side of the glen and then passed up in the mists of Glencoe and were lost to view.

X. was in no mood to follow them, but sat and solemnly cursed that old hind whose presence no power on earth could have foretold, and no glass could possibly have seen. It was bad luck indeed, and I was almost inclined to think that "great stags" had charmed lives, as this one was said to have.

"No bullet's ever gaun to kill yon," remarked X., indicating the vanished one with his pipe stem.

"In September last year 'twas clear on the tops for once, and I took Lord B. away to the Paps to look for 'the big stag,' and we found him. Aweel, you lord's said to be a great shot, and a' tuk him to within eighty yards. He was lying fine and canny, and he missed him wi' both barrels as clean as a whustle. Oh, the deil's his freen."

It was now nearly 4 o'clock and we had a long walk home right over the main range of the mountains. We climbed for an hour in somewhat melancholy mood, when in the dusk a stag and some twenty hinds was noticed in a hollow, but little out of our path. The deer were coming down hill, and seeing that the stag was a good one, we ran and cut him off. I could hardly see him against the dark hillside, but the ivory pyramid on the backsight stood me in good stead and I scored a somewhat lucky shot, getting him right through the heart. He proved to be a much finer stag than we had thought, and weighed 15 stone 9 lb., with a strong head of ten points.

Even this success, however, could not compensate for the loss of "the big one."

October 13. There comes a day sometimes when nothing can go right, and to-day we experienced the worst of luck. During the night a heavy snowstorm set in, and all the tops are white and frozen to-day. It was a grand day for walking, but the hills were very slippery, and the high ground at Dalness is an easy place on which to break your leg if you are not careful. The wind being right, we climbed to the top of the spurs, straight from the house, and at once found a grand stag on Buchaille Mhor. Though not nearly so heavy a stag as the "great one" of the day before, I think his head was heavier, being very large, with twelve good points. He was high up on the mountain, and, much to my chagrin, I could not induce the stalker to get above him. He would only go on to the same level, and then advance up wind. This policy I felt all the time was wrong, as the hinds kept moving in front of the stag and drawing him on. The inevitable, of course, happened. We followed on and on, and then "jumped" the stag, who surprised us by suddenly appearing on a high brow within eighty yards, and dashing out of sight before I could raise the rifle. It was an exasperating loss, as he was one of the four best I have ever seen, or am ever likely to see, in Scotland.

The deer had had a good fright and descended into Larig Ashton, and went away up the other peaks of Glencoe, right out of our ground, so there was nothing to be done but swallow disappointment and look for something else above Larig Ashton. The weather was so beautifully clear we reached the very tops of the mountain, and could see the serried ranks of hills away to the islands of the west coast. First we spied the Glen Etive face and found a good stag from the very top of Buchaille Mhor (3,000 feet), but owing to a sudden shift of wind, one of the hinds got us when we were still 300 yards away, and the deer went straight away down hill. We therefore ascended again and passed over the top of the steep rocks above Larig Ashton.

Whilst admiring the view I saw a golden eagle descend from the heavens on a mob of deer, hundreds of feet below. It was a beautiful sight to see the swoop of the great bird as it came like a small black thunderbolt from the pellucid sky.

In its descent it made quite a loud humming noise, and did not alter its course or move upwards again until within a few yards of the deer, which burst outwards in every direction, as if a bomb had been exploded

amongst them. I think it was just a bit of play on the part of the eagle, for it made no attempt to strike any of the deer, who, on their part, only went a short distance and reassembled again. The attitude of deer towards the golden eagle is somewhat curious at times. Possibly when they think he means business, they are much afraid of him, and at others they take no notice of his presence. I have seen an eagle fly slowly past a herd and alight on a rock beside them without their raising their heads from feed. On another occasion I have seen a whole herd rush away as if in panic when an eagle came into view. George Henderson, stalking at Braulen a few years ago, saw a herd rise to their feet and dash away in terror. pursued by an eagle for a considerable distance. There are many instances of hinds being killed by eagles, whilst calves in summer are a favourite prey, and a description of the efforts of an eagle to steal a calf from a herd and being successfully frustrated by a gallant hind are related in "British Deer and their Horns." I witnessed the scene in the Black Mount Forest in July, 1890. There are two well authenticated instances of a golden eagle attacking a full grown stag, though this must be very rare and somewhat foolish on the part of the bird. Eagles have now been so well preserved in deer forests owing to their beauty and usefulness in keeping down the blue hares, that they are now in danger of becoming a nuisance to the sheep farmer and lover of grouse and ptarmigan.

Some years ago I was stalking a stag at Black Mount when I came on an eagle sitting on a rock within ten yards of us. We passed him and then found a fox coiled up and fast asleep within thirty yards of the stag which I shot.

On this forest for many years one of a pair of golden eagles which had an eyrie on the Eagle Hill, Glenkinglass, was nearly pure white, the only instance of albinism in this species I have ever heard of, I saw it myself once at a great distance, but still within such view that I could distinguish the fact that it was of abnormal colour.

Above Larig Ashton we lingered for more than an hour in the hope that we might discover "the big stag," but though deer were there in plenty, he had not returned to his favourite resort and was doubtless hidden somewhere up in the western corries. We had, however, hardly left our point of vantage when we noticed five stags in a small dip above the steep faces below. They were in a place where a shot was possible, and on a close inspection we thought that the first, a good ten-pointer, was worthy of attention. But nothing could go right to-day; just as I pressed the





trigger the stag turned round, and my shot tinkled on the stones in front of his chest. He with the others started and ran along the face directly below us, and though the shot was an easy one, I dared not fire for, if successful, the beast must have fallen at least 600 feet. So I had to wait until he was fully 230 yards away, when he stood on a tiny plateau. I aimed very carefully with the 200 yard sight, and heard the bullet tell. The other four stags ran away, but my stag, evidently hit too high, stood still. X. was anxious that I should not fire again for fear of alarming the corrie, so I withheld, and soon had the mortification of seeing the stag rouse up and go straight down the hill for more than a mile and then ascend the opposite face, where he lay down.

The wind being wrong for that ground, X. said we had better leave him until the next day and go and look for another beast on the Glen Etive side. Much to my chagrin we did so, and soon found a good nine pointer.

This stag was exceedingly alert, and had all the appearance of being recently disturbed, probably he had heard my two shots in Larig Ashton and had perhaps been just over the hill when I had fired them. At any rate it was three hours before we could do anything with him, for he foiled our attempts to stalk him on three occasions by moving suddenly up and down the glen. At last he moved over a ridge on to a basin on the east side of Buchaille Mhor, and by running down on to the ridge he had just vacated, I got a long shot at 200 yards, and killed him dead. His head, a nice strong one of thirty-three inches, is now in Dalness House, but I look on this day as a black letter one, for the memory of that lost royal will always stay with me. Just a little more patience and a wider sweep above him, and he would have been mine, but when you are under orders from a stalker who is careless, you may be sure things will often go wrong. X. was certainly very careless to-day.

October 14. The last day of the season, and I am again granted the honour of looking for "the big stag." I was allowed to start at 8 a.m., so after consulting with X. we decided to walk right round Glen Etive and up Glencoe to Larig Ashton, on the chance of seeing him. If he is not there we can then advance up Corrie-na-Gabhail and look for the wounded ten pointer, and so home over the mountains. We arrived at the entrance of the glen at 12 noon and had not opened our glasses for one minute when X. remarked that he saw a very large stag in the same position as we had found "the great one." A short advance up the glen and we had a better view and another spy. Immediately my glass was on the

129

э

stag he rose to his feet and roared. It was the object of our desires, without doubt. Although it was most unlikely that we should meet with a second disaster amongst the rocks by finding unseen deer. It behoved us to be more than usually careful when we reached the little precipice if he ever should come there, for this was our most dangerous obstacle, in more ways than one. The wind, which had been excellent on the previous occasion, now failed completely when we came to the shaley open ridge which we had to cross before entering the hollow. Moreover, the herd of hinds split into two lots of about fifty each, were further out into the glen, and consequently in perfect view of our advance to the rocks beneath which they lay. After its first easy preliminaries I look upon this stalk as one of the most "kittle" I have ever undertaken. With so many eyes on the watch and so many keen noses ready to accept the slightest taint of man, the chances of our getting to the rocks was anything but rosy. "No wind" in Highland corries always means danger to the stalker, because there is seldom such a thing in reality. Small invisible vapours are always drifting hither and thither in such places, as they are in very large woods. You may think there is no wind, but in the final approach the hinds nearly always prove to you that you are mistaken. During our long crawl across the open we twice saw the lower body of hinds make a short rush as if they wished to go and then return and settle again. It was only the presence of the upper lot, many of whom were lying peacefully, that kept them in their present position. The stalking air was full of that electrical unrest we sometimes feel when both man and beast are at high tension. Anything might happen at any moment, and as things had a habit of going wrong when "the big stag" was the quarry, the success of the stalk still seemed afar off.

Somehow we got across that long shaley ridge and then down and over the hollow and on to the first climb over the high boulders. Having struck the rocks a little higher up than on the previous occasion we now found ourselves confronted by a new obstacle in the shape of a little gorge, too wide to jump over and somewhat difficult to get down and up. By slow degrees, and by helping each other, the stalker and I surmounted this obstacle, and after crawling round every rock in our final descent to the place from which we hoped to view the deer and be within shot. At last it was done just as a snowstorm, coming swooping up the glen, struck us on the right flank. I peered cautiously round a beetling rock and looked down below.

The fifty upper hinds had moved up for shelter and were all crowded at "gaze" only thirty or forty yards away. The "big stag" was standing broadside on about 200 yards down the hill, whilst his other wives, some fifty yards below him, stood about in straggling groups. The wind, which came with the snow, was swirling, and at any moment those hinds so close to us might get a puff, so I decided to shoot at once, despite the fact that it was a long shot and the light bad. As I gingerly withdrew the rifle from the cover I saw the stag turn up hill, roar twice, and walk towards us. He advanced for fifty yards and then quite suddenly lay down in long grass. This was most disconcerting and unfortunate, just as I had counted on an easy shot. I got the rifle trained upon him and ready to fire immediately he rose to his feet in case the hinds should move in alarm. But not a hind stirred, and for half an hour the snow fell and we got colder and colder.

Then my teeth began to chatter, and my body to shake; so the moment of action had arrived. It had to be now or never.

"I'll tell you what I am going to do, X.," I said, "I have a nice rest here, and I believe I can hit the neck. If I miss him he is sure to spring to his feet and stand. He is too far off to bolt with these hinds above him."

X. was entirely opposed to my plan, and counselled patience. Patience was not the least exhausted, but the possibility of keeping still for the shot was nearly gone; so I took my own way. It was a small and dim target I was firing at, but I knew my old Mannlicher, and had confidence in my ability to hit the object, so taking a full sight with the one hundred yards I pressed the trigger as if my life depended on the shot. The explosion echoed through the valley; "the big stag" sprang to his feet, hesitated a moment, and then ran up hill straight towards us. Hastily I ejected the exploded cartridge and fired straight at his chest. This time there was the loud crack of lead meeting meat, and over went the stag with his feet in the air: "the big stag" was mine. My first shot had cut the windpipe.

He was the best Scotch stag I have shot, weighing just over 20 stone, clean, with a head measurement of thirty-four and a half and thirty-four inches span, and eleven points. I confess the head, though good, somewhat disappointed me, for I had conjured up somewhat romantic measurements on my first view on a bright day, and errors of dimension are easy to make in Scottish forests where anything over thirty-two inches is a rarity nowadays. In Mr Macleay's shop, where I afterwards saw the

head in other good company, it would be about the sixth best of the season, and that is as good a trophy as a mere guest can expect to gain in the north.

We spent the rest of the morning looking for the wounded ten pointer, without success, and then made our way home, taking the Glencoe and Glen Etive roads. On the way we met the Glencoe forest ponies, bearing two small stags of about twelve and thirteen stone, and it was amusing to note the "superior air" of the Dalness stalker when our pony man produced the twenty stoner.

So the end of the week and the season had come when I had expected no stalking and had enjoyed some of the best of the fun. More fully than ever did I realize that in this sport it is not "stags" that spell success, but "The Stag." Numbers killed in stalking mean nothing—they are soon forgotten, but not so the anticipation, deferred hope, and eventual triumph over the worthy quarry whose antlers live on our walls to remind us of thrilling moments enjoyed in pursuit of the "Big Stag."

A FEW HINTS ON DEER-STALKING

Every modern writer on the subject of deer-stalking finds himself faced with the same difficulty with regard to this sport: he may say either too little or too much. Too little, in the sense that he may possibly be instructing beginners, and too much in the case of those who merely buy a book for its records of sport and pictures, and stand in no need of instruction. Like all the rest, I fear to be didactic, so that in this chapter I must beg the indulgence of the experienced stalker, whilst offering a few words of advice to those who have much to learn and all the mistakes yet to make. These remarks may, it is true, be superfluous, because every boy has to learn his practical stalking at the heels of some Gamaliel, but they will at least let him know what to look for, and what he must not do.

First and foremost, he must be "all eyes" and watch and observe everything from the moment he leaves the house until he returns. To some this faculty of observation is an inherent instinct, whilst in others it must be cultivated. But that it can be acquired and enormously improved is shown by the success of young Englishmen in foreign lands, where, for the sake of their daily bread, they are forced to use observation and intelligence.

Just look at any man who has been successful in life and you will see

he generally has an overlapping flap of skin on the skull at the outside edge of the eyes. Such a man generally listens a great deal more than he talks, but when he does talk he is worth listening to. Observation, too, is a mental training as well as an indispensable adjunct in that it creates a sense of humility and that is a commodity not too plentiful amongst the young men of the present day. In comparing the vast scheme of Nature and its beneficial workings with our lives—often petty and artificial—a man of intelligence must see how much greater and better the simplicity and truth of outdoor things are than the ways of courts and camps. Even the archaic prejudice and ignorance of those who direct public schools is slowly breaking down, and this may be regarded as a hopeful sign. At Marlborough they now give prizes and commendations to the boy for the very things I used to be swished for. Times are changed indeed when my own son, a public schoolboy, goes catapulting with his housemaster and shows him how to set traps for small mammals.

Schoolmasters, who formerly treated all boys alike and regarded any boy who did not fit in the ordinary scheme of things as a pariah and an outcast, now give lectures on "Nature Study." They see that a boy does not necessarily absent himself from his fellow creatures to do mischief but simply because he may have a mind that loves the beauties of Nature better than the more commonplace pleasures of games. It is good for a man to spend the greater part of the year with the best and cleverest of his fellow creatures, but it is equally good that he should spend a portion of it alone with Nature. After play in the open a man is ready to attack the serious battle of life with vigour, and in this age of rush and fierce competition he requires all the strength he can get.

It will be found, therefore, that big-game hunting, or, if you cannot have that, deer-stalking, is not entirely a selfish pleasure, but is also one if not the best of all physical and mental trainings for the healthy man.

In the first place, it is necessary that the beginner should attend rigidly, and follow all that the stalker tells him to do, for his advice is usually quite reliable; and though he may make mistakes, as all of us are apt to do, yet faith in one's mentor is one of the first principles of learning. "Your stalker," as the late Lochiel said, "is often more amusing than a professional dining-out wit," and, if he finds you are in real earnest, will take the deepest interest in teaching you the game. He will show you, first of all, after finding your deer, the sort of places where you may expect to find them. He will make you use your glass so as to note the

133

various features of the ground which you have to traverse. The sort of spots that outlying beasts may be concealed in, which, if undetected, will spoil your stalk, and the depressions on the hillside along which you can crawl, and which to you at this distance seem to be no depressions at all.

One of the most essential things in going to your particular stag or herd is to spy every bit of ground in the vicinity before attempting the stalk—as disaster nearly always comes not from the object of your pursuit, but from some wretched hind or knobber that has escaped your eye. It is seldom, too, when looking from below, from which position deer are generally first found, that you can see behind the knolls, hags, and rocks and into little basins that lie above your deer, and so, when going uphill in your preliminary advance, your steps must be taken slowly, and the eyes and glass kept in constant use, to avoid any mishaps. This is a bit of a strain, but it is one of the points which makes the game interesting. A really good stalker never misses anything that should be seen, and is rarely taken by surprise, unless fresh deer move in from above or on the flanks.

The question of greatest importance is the direction of the wind and its steadiness. At first the clouds will give you the general direction, and if your beat is an open hill face or flats, there is not much to be feared from eddying currents; but in the high broken corries of the best forests you never know what the wind is until you get to your ground and the neighbourhood of the deer, and even then, unless you have perfect local knowledge, appearances are apt to be deceitful. I have known the wind on the west side of Ben Starab blowing due north along the top and half way down, then, for a space of several hundred yards it was due south, below that it was due north again, and in the corrie at the bottom it was whirling round and round! Old Macleish, the stalker, knew it exactly, but what chance would anyone else have had, if they had gone for a stag either on the hillside or at the bottom? Few places are as bad as this, though I know of one corrie on Fannich when, if you look into it with a certain wind, your scent travels right away round the whole amphitheatre, and the deer come galloping by on the green slope a hundred yards away, on the opposite side of this bottle-neck.

But wind, and all its vagaries, is a thing you will have to leave to the stalker. On your part it is only necessary to take into consideration the conformation of the hills and the lines and depressions of the landscape which produce wind movements.

There are a good many places in Highland forests where deer are, and always have been, unstalkable, no matter what the airt of wind. These spots the deer know well and invariably choose as their resting ground.

As Mr Grimble says, the only way is to go through the form of making the stalk and chance deer moving to some better place where a shot may be possible after they have settled down. It is seldom the case that a big herd remains long in such a position, for the simple reason that it is unlikely that it contains good and sufficient feeding for all. Consequently in this case it is well to subdue the soul in patience and spend the hours in practising with the glass, studying heads, and talking to the stalker. With the evening a big herd is sure to move, and then by some swift manœuvre from the top it may be possible to cut off and get a shot at a good beast as he comes up into the wind.

I remember once when I was young lying on a very wet hilltop from 10 a.m. till 4 p.m., watching some 300 stags that were below—the finest herd of adult stags I have ever seen in Scotland—and being at last rewarded by a shot at the best of the lot, a good eleven-pointer, which I killed. I know that if I had been by myself I should have tried to get in more than once during the day, but the stalker, Grant, knew his ground, and how the wind curled "all ways" half way down the slope, and counselled patience. Of course he was right, as events proved.

The usual position in which the largest stags are found, except early in the season, when they often lie just under the tops in fine weather, is somewhat low down on the sheltered side of a valley, with hinds and small beasts scattered or outlying up above. This means that the wind is coming over the top of the hill and probably "lapping" in on both flanks. If the wind is strong it is sometimes possible to get in on one or other of the flanks, but a stalk either from above or below is impossible. Nevertheless stalking a first-class stag in such circumstances—often hopeless as it is—is far more amusing than any number of easy stalks against a fair wind with nothing in the way. After all, the triumph of mind over matter is what is interesting, so let us always try the difficult problem in preference to the easy victory.

The next important thing is not to move deer. One bad error or oversight in the morning will often spoil the beat on the whole forest for the day. That little party which has seen you and crossed the skyline at a gentle trot, will probably not settle down in the next corrie; but will go

on and perhaps move herd after herd, and create a commotion over the whole forest. Some stalkers, who ought to know better, are wonderfully careless about this; and take all sorts of risks in this respect; but it never pays in the long run for, sooner or later, the best ever seen in the forest may be put away by just chancing it. It really matters little if you have been successful with such a man and killed a stag, or stags, with fuller knowledge you will see that the ground has not only been cleared for that day, but there will be no stalking on it for at least two or three days afterwards. A first-rate stalker kills his stag on his beat, and leaves one for the next day, and the next, if necessary.

There are, of course, many occasions on which the wind is in the wrong airt, and it is always best to be cautious; but the difficulties of dealing with this are often sadly overdone; and the wind often blamed when, in reality, the owner or his head stalker fear to send deer to the neighbouring ground. Prejudice and local jealousy are, unfortunately, common in Highland forests, and are mainly due to the cramped conditions under which these forests exist.

On the other hand, the wind may be quite wrong, and the young stalker should not try to induce his guide to try a stalk which, if it fails, as it probably will, will spoil the beat for a week.

Another thing which the young stalker should remember is that he must not be greedy to kill too many deer. Having shot his stag it is well to be content for that day, unless the deer falls within such a distance of the lodge that it can be easily carried there, for a dead stag ought never, in any circumstances, to be left out for the night, especially in wet weather. Of course, there is no reason why a young sportsman should not enjoy the pleasures of the chase on equal terms with his elders; in fact, it is desirable, in the true interests of sport, that he should do so; but the stalker must see a reasonable chance of getting the second stag home that night before consenting to a second shot. It is not very common to approach deer uphill, and though it is easy on the part of the stalkers to see ahead, it is also much easier for the deer to see them. In consequence, ninety-five per cent of stalks are taken downhill, when the young stalker does not see what is going on in front of him. The beginner must then notice how his leader takes advantage of every depression, never crawls over flat ridges which may suddenly become skylines from below, and, if he is on hands and knees, never raises that portion of his person which should naturally take an inferior position.

THE RED DEER

After a while there is a pause, and the rifle is drawn from the cover. It is now that the stalker should show what he is made of, and not tremble or hesitate; for such signs of indecision are sure to have a bad effect on the beginner. Some of the oldest and most experienced stalkers, men who know all sides of the game thoroughly well, are fearful muddlers when they get within shot of a stag. A good stalker quietly hands the rifle to the shooter and says something of this sort: "Don't put your head up, but crawl to the side of that rock, and lean against it, as you look round. You will see the stag about eighty yards off. If the deer do not see you, take plenty of time, to get a good broadside shot. Mind and cock your rifle."

Of course many different things may happen when the tyro has once looked round that rock; and only experience can teach him what to do to make a successful shot; but we must presume that a youth has had some practice with the rifle, before he goes to the hill at all, and so he ought to be prepared to take the stag in some vulnerable part, even if it is not standing exactly broadside, or not even quite still. I have always thought that far too much is made of the difficulty of shooting moving deer, and quite agree with the late Lochiel, who said that it is a much harder thing to hit from a cramped position a deer lying down in an uncertain light, than to kill a trotting or a galloping stag going broadside on. If the beginner will only practise with his Mannlicher or .280, or whatever rifle he has chosen, at rabbits in an open warren, at rooks in a field, or shoot a few gulls sitting on the sea, he will begin to know his weapon far better than by blazing off endless rounds at bottles or targets. Of course, in a narrow English landscape it is not always safe to do this, but in Scotland there are nearly always wide stretches to be found, where it is possible to indulge in a little practice of this kind. Another point to remember, and one which the young shooter of wealth nowadays may miss, is, never in any circumstances to change your rifle; if you have once managed to shoot well and quickly with it—that is to say, a weapon which you can put to the shoulder and place a bullet within a square of a foot and a half, at 80 yards.

A stag is often missed by a young shooter through jerking off the trigger instead of pressing it, and it is very necessary that the foresight should be held on to the spot which it is desired to hit, right on, and after the moment of explosion. This, of course, is not easy to do at first, but if a man can do it when firing at a rabbit, he can do it with a stag. Another

137

point which the young stalker can only learn from experience and observation is the degree of timidity on the part of the deer when he is about to take his shot. If the deer have not seen him, all is easy; but, if on poking his rifle into a shooting position, the deer have seen him, and made a short start, he has to choose between taking a running shot, or allowing the deer to go a short distance on the chance of their "standing at gaze." Now, if there is a shoulder below the deer over which they can dip and disappear, he would do well to take the running shot, but if there is a small flat, or any obstacle of landscape which may cause them to halt or hesitate within shot, it is well to let them run a little, and the chance of a stationary shot is good; though it will never be quite so good as that at an unalarmed animal. In such a case the chief difficulty is that the stag may be surrounded or covered by hinds, in which case there is probably only his neck to fire at. Such a shot, however, must be taken, as none other will offer.

Immediately after firing a shot, the rifle should be reloaded, and if the stag is not obviously killed, it should be fired at again. If the stag falls to the shot and struggles to regain its feet the young stalker should run up, so as to give it another shot in case it recovers. There is hardly a stalker living who at some time in his youth has not undergone the miserable experience, after seeing his stag fall to what he thought was a good shot, of seeing it suddenly rise and gallop away apparently untouched. A graze on the back of the neck, withers or backbone will cause the sudden collapse, and the stag will completely recover from it.

"Stag fever" is a disease which is, as a rule, cured only by practice; but intermittent attacks are liable to occur at any time in a man's life. It is a trouble which, after all, we need not be ashamed of, for it arises from an excess of keenness and imagination, and is due to the effect of seeing horns—and horns alone! The bigger the horns the worse the fever. Wherefore it behoves a man who is subject to it not to look at horns until they are lying on the heather, but to treat his quarry as if it were a hummel. It is extraordinary what good shots we make at hummels and bad headed stags. We seem to be able to kill them at almost impossible distances, simply because we do not care whether we hit them or not. Some of the keenest and most experienced stalkers are subject to stag fever, and are naturally very bad shots; but they get an intense amount of pleasure out of their sport. Yet I think their lot is to be preferred to that of the callow youth who is a good shot and never feels a stirring of the blood. To have "no nerves" may be an advantage, but it shows a cold and

THE RED DEER

unimaginative nature, which is not necessarily a thing to be envied. On the other hand, to be an atrocious shot, as even Landseer admitted himself to be, means that the stalker has to suffer fearful mental degradation every time he sees a big stag and misses it; but perhaps if Landseer had possessed a '280 cordite rifle, he might have been accounted a good shot in these days. No amount of practice will make a man a good shot with a gun if that man has not the necessary attributes of quick judgment of pace and distance, good eyesight and, most of all, a sense of touch; but constant practice at odd seasons with big and small rifles will do wonders to improve shooting with the bullet, provided he shoots at natural objects and not at targets.

In taking a shot you must show your head, otherwise it is not possible to see the object of your aim, and try and remember the following "don'ts":

Do not fire through long grass or heather in your desire to be hidden.

Do not rest your rifle on a rock or hard substance.

Do not fire at a deer end-on, and only at a facing one when you have had experience.

In uphill shots try and lie against a rock or mound of earth, but always keep your left hand between the rifle and the rest.

In downhill shots, sit up by degrees, plant the heels firmly, and rest the elbows on the inside of the thighs.

With high velocity rifles it is not necessary to allow anything when a stag is walking. If it is trotting, the front of the shoulder should be aimed at, and if galloping it is necessary to borrow about six inches in front.

Lord Lovat's method of roughly calculating distance is a good one: "Up to eighty yards," he says, "the deer's eye is to be seen distinctly; at one hundred yards the shape of the eye is no longer discernible, but only the dark line is visible. Up to one hundred and fifty the ears are plainly to be seen, but at two hundred they are well-nigh invisible; so, unless the ears are distinct, it is better not to fire."

When a stag is wounded, but recovers, the stalker must remain hidden and keep his glass fixed upon the animal, to see where it is wounded. If given time, the stag will soon lie down if badly wounded. At any rate, it is sure to make for some covert in the shape of gullies, bracken, peat hags or water itself, and by marking its line and finding its retreat, it is generally easy to make a stalk and finish it. If, on the other hand, the wounded animal sees its enemies, it is sure to get a fright and run until

it drops, disturbing the whole ground and perhaps crossing the march into the next forest. A slightly wounded beast, once scared, is generally lost for ever. In rough ground a wounded stag is often very difficult to find and to see, as it lies deep in some hole amongst the bracken or heather. In any circumstances it is always best to allow a certain time to elapse before following a wounded beast. Keep it in sight if you can, but if it goes into a wood, or vanishes in a glen, it is always best to give it two hours to lie and get stiff. In 1910, after many days of failing to get a shot, I got the veriest snapshot at the haunch of a big fourteen-pointer in a heavilywooded forest of the Carpathians. The tracks showed I had hit but not broken his hind leg. As I was using a 375 cordite rifle, throwing a heavy bullet, I knew the wound, although only a flesh one, must be severe, so after following the trail a couple of hundred yards I sat down to consider the problem. Either I must send a runner to the lodge thirty miles away to fetch a dog, or I must wait two hours and track the beast myself. After allowing two hours to elapse I started. The line of the retreat of the deer was through beech and spruce forest and the ground covered with wet leaves on which spooring was fairly easy, so I decided to try and find the wounded one myself. It was a more difficult task than I had anticipated, for many open spaces, which the sun had reached and dried the leaves and rocks, intervened, but by going slowly and making circular "casts" ahead when the spoor failed the local hunter and I made out the track until we "sprung" the deer out of a small thicket. After that the wounded animal luckily passed over very "open" forest and our progress was more rapid. At last I saw him going along with his head down, and got a shot as he appeared crossing an opening. He was hit again and stumbled off, but fell within a hundred yards, to rise no more. From the moment when we started the pursuit, the time occupied was over two hours, and no more interesting piece of hunting has ever fallen to my lot. My experience of dogs is that if you take one out it is never used, and when none is within miles you are apt to make a bad or an unlucky shot at the "hart of grease." The novice will find it nearly impossible to keep his eye on a slightly wounded stag in a herd of others, but the stalker ought to know the injured one at once by some peculiarity. It is his business to recognize individuals, as it is a shepherd's to know his sheep. As a matter of fact every stag is different from another, and if you know deer well yourself or ask a stalker for points of difference, he will always reply that so-and-so is the black, the yellow, the red, the mousy stag, or one with such and

THE RED DEER

such a number of points. Almost any stag wounded in the back or hindquarters will, when brought to bay, strike out at a man or dog with forelegs, but the red deer is not a dangerous animal. I have never seen a stag charge, as a wounded moose will sometimes do, but it is well to shoot one in the neck as quickly as possible to put it out of pain.

It must be confessed, however, that in Scotland, where the shot is generally taken in the open, there is scant excuse for wounding deer nowadays, owing to the power and excellence of modern rifles, but such a contretemps is bound to happen one of these days if you continue the sport long enough. I often think of one awful day on Ceannacroc, when I was stalking with the present Lord Tweedmouth. We found two splendid stags on the north slope of the "Long Glen," and after a somewhat difficult stalk, got down to within 120 yards of them. As the guest, I was given the first shot at the best stag, whilst it was decided that Mr Marjoribanks, as he then was, should fire at the other when it ran. I fired and hit my stag about four inches too far back behind the heart. The second stag dashed off down the hill, giving a difficult chance, which my companion missed. The animal I had wounded now stood still, evidently badly wounded, and after a few moments walked slowly down the hill for a hundred yards and lay down. All would be well, I thought, for we had only to wait an hour and then I could get down and finish him.

After pausing a few minutes the stalker turned round and signalled to the gillie lying concealed behind a rock to bring up the dog, a young and untrained "Guisachan" retriever. By all that was unfortunate, the boy misunderstood the sign, and judged it to mean that he was to loose the hound. In a moment, to our horror, we saw a tearing yellow body flash down the hill at breakneck speed, dash past the wounded stag, which it "lifted" and scared to death, and rush headlong across the corrie towards a big herd of deer, which it proceeded to chase for miles into the heart of the sanctuary. This was indeed dreadful, but worst of all the wounded one itself, seeing its fleeing comrades, took up their line and hobbled at a walking pace into the sanctuary, where no one was ever allowed to go. That evening I felt like Emerson, who said he always felt that he was part of a funeral procession, in which he was the corpse and all the rest of the mourners when things had gone wrong. It was a bitter experience, and shows what mischief may be done by letting a young dog loose.

It is a sign that a deer is very badly wounded if he goes down wind.

One with a broken foreleg generally keeps going uphill, just as one with a broken hind leg goes downhill, in which case it is best to get below him.

One of the first considerations in stalking of any kind is to make the first shot as easy as possible, and long shots should never be taken unless absolutely necessary. There are, in fact, very few occasions when one need fire at a deer at over a hundred yards, for, with a little patience, this range can nearly always be obtained. With regard to all other kinds of shots which will present themselves to the young stalker, and when and how he ought to take them, no treatise on earth is of any use. Only practice, experience, and a thorough knowledge of his weapon is of any avail.

The practice of stalking deer in Scotland will teach a man how to get near almost any animal, whilst even the bombardment of antelopes on the plains of East and South Africa will teach him something about the rifle and its ranges; but a combination of the two ought in time to turn a young man into a hunter; when he has got over all the mistakes of impetuous youth.

Flat crawling and accustoming the body to fall naturally into all the depressions of the ground, is also a thing that can only be acquired by experience and observation. Beginners nearly always elevate some portion of their person they wish to keep dry and comfortable. If it is their knees, they are apt to raise the part on which they usually sit, and this fact is the basis of many amusing stories. For instance, there is a charming simplicity about Donald who called a sudden halt in a stalk which he was conducting for a lady, who was a great sinner in this respect. Gently patting the offending part he remarked, "For guid's sake, mem, keep it doon; keep it doon!"

Some years ago an Indian Maharajah took a northern forest. Unlike most Oriental princes he was rather a poor shot and an awful crawler; in fact, it was difficult to make him understand that the deer would not wait for him to walk up to them. Whenever he and his stalker approached deer, something always happened. At last the stalker completely lost his temper on looking round and finding his master surveying the scene from the top of the rock instead of the back of it. "Put doon yer heid, ye dirrty black deevil!" he hissed in no uncertain manner. Such a remark, though no doubt rude to the ruler of millions, must have had some effect, and it is nicely illustrative of the fact that all men are equal on the hill.

THE RED DEER

Whilst on the subject of the dry remarks of stalkers, the following, which was told me by the lady herself, is not only charming in its naïveté, but also shows the wretched class of beast which constitutes a "shootable stag" in certain forests. Having beaten about in the forest for several days without seeing anything, her ladyship went with the stalker into some woods near the house, where there was known to be a beast or two. After creeping about for some time Duncan whispered to her that he saw a stag which he thought would do. The lady in question, on seeing the animal, raised her rifle and was about to fire, when she put it down again.

"Duncan," she said, "I think you are making a mistake; I cannot see any horns."

"Hoots! Wait till he flaps his ears," was the consoling reply. The muckle hart did not die that day.

It is not an easy thing to quiet an excitable horse and get a stag up on its back by oneself, which reminds me of a story of two friends of mine, for the truth of which I can vouch.

A. and D. both belonged to the same Highland Militia regiment in 1893. One night after mess A., who was rather a talker, was discussing the subject of poaching deer, and concluded with the remark:

"At any rate, no man living could poach a stag in my forest of I., as it is too well watched."

"Do you think so," quietly said D. "I will bet you £10 I can do so."

In the presence of the company A. at once accepted the challenge, and it was agreed that D. should make his raid that autumn.

D., who is a "hard" man and a big-game hunter, laid his plans carefully. He slept under a rock in the forest of H. one October night, and entered the forest of I. early the next morning, just as dawn was breaking. It was not long before he found and killed a good stag high up near the march. It was no part of his, D.'s, bet to do more than kill the stag and inform A. where it lay, but as there was neither sign of stalker or watcher, D. conceived the daring notion of fetching a pony from the park in the glen and transporting the carcass of the deer to the castle itself. All this was safely accomplished without a soul being the wiser, and D. arrived at the door, rang the bell, and called to A. to come and welcome his visitors. D. now has the cheque he received from A. framed in his sitting-room. He told me that the only difficulty he

143

experienced was loading the stag on to the pony, as the brute would not stand, even with a coat over its head.

THE MANAGEMENT OF DEER FORESTS.

If the ground is not naturally good grazing, and a large stock of deer is kept, it is very important that spring and winter feeding should be abundant. Artificial feeding is not to be recommended, but once it is resorted to it must be continued, and there are many instances of forests, especially on cold and exposed ground, which have simply been kept together by means of artificial feeding. Provender can be carried to suitable spots near roads where the deer soon find it. In some Highland forests they follow the cart, and pick up every bean and grain of Indian corn that falls from a sack.

A deer forest should never be fenced in all round, as it is sure to deteriorate the stock, from having no change of blood; it also lowers the interest in the sport. It is often found necessary, however, to place a high deer fence round large woods and the grounds of the home policies.

The forests should be divided into beats of suitable size, with the sanctuary as near the centre as possible.

A tenant who has the reputation of keeping his deer without fencing, perhaps better than any other in Scotland, tells me that he has always gone on the principle of working the outsides and keeping the centre quiet. The deer, when shot at, always move *inwards*, no matter what the wind is. The sanctuary should be of such a size that it can hold a large number of deer, have shelter from all winds, and contain good feeding ground. Once formed, it should not be disturbed, unless in very exceptional circumstances, and even then only in a wind which will not take deer right off the ground. Deer, of course, learn to know the sanctuary as their home, and abide by it in an exasperating manner in backward seasons, so much so that we are inclined to hate it, but in saner moments we can see that it is the goose which lays the golden eggs and gives us our sport. If there were no sanctuaries there would be no chance for any growing deer of promise, for they would certainly be killed early in the season, on whatever beat they made their appearance.

It should be the business of the head stalker and his assistants to find out what is in the sanctuary, without disturbing it, so that when the "break-out" comes they may know what ought to be shot or spared.

BEYOND THE MARCH

PLATE IX.





THE RED DEER

In the forest previously referred to, nine-tenths of the stags shot are old beasts going back, hummels, or bad-headed young ones. The owner and his sons and guests are allowed only about one good stag each per season, but that one is generally a 35-incher, or something of the kind, and there are plenty more always coming on.

In Scotland deer are generally brought down from the hill on ponies or "girns" as they are called. Most of these are heavy black beasts, though Welsh ponies are sometimes employed. At Blair the Duke of Atholl has a special breed of "girns," dappled grey in colour, which are certainly very handsome animals. At Glen Carron, in Ross-shire, they employ a curious little carriage on low wheels shaped like a sledge, and capable of being dragged over very rough ground. In hind stalking a light sledge, easily dragged over the snow, is sometimes used, but this method is more commonly seen in the Austrian Tyrol for carrying deer, whilst a small bushy tree is favoured by some continental stalkers, on which they lay the dead animal and drag it home with a horse. This method is in general use in South Africa by the Dutch Boers, who drag, with a span of oxen, dead elands, koodoos and giraffes to camp by such improvised sledges and a very excellent one it is. Owing to the boggy nature of the ground, men, and even women, accompany the stalkers to the hill in the Hebrides and bear the dismembered stags to the stalker's lodge or road, from whence a cart takes the remains to the house. Hill ponies are, however, the most common method of transport, and without their help, and the instinct of the man or boy who leads them, many deer would be left on the hill.

Twenty years ago it was not possible to keep dry on the hill on a very wet day; now many firms cater for the comfort of the sportsman, so that he need never be wet unless forced to take a long crawl down a burn or over a marsh. Therefore remember before setting out for the hill to take:

- 1. A Burberry slip-on for any sort of weather, no matter if the day is fine at the commencement.
- 2. If it shows signs of a pouring wet day there is nothing better than the light Pegamoid waterproof made by the Commercial Stores, 87, Jamaica Street, Glasgow. It is better and lighter than any thin Sou'-wester, and absolutely waterproof. It is also of a good colour, and the cost is very moderate.
- 3. A soft woollen scarf is as good as an overcoat, and for long waits is indispensable, as it prevents the wind and rain going down the neck.

145

It also weighs next to nothing. Carry this in one of the inside pockets, and if you feel cold easily, a soft Jaeger knitted belt, which can be easily wound round the body, can be carried in the other.

- 4. Tobacco, matches, a good knife and lunch.
- 5. Carry the clips or cartridges flat in the outside waistcoat pocket on the chest, where they will not jingle or move about. It is a good thing to have a flap, with button, for this pocket, to prevent the cartridges rolling out when the stalker is crawling downhill. Do not carry money, unless in a secure place where it cannot move or fall out.
 - 6. A good stalking stick with no ferrule.

J. G. MILLAIS.

THE FALLOW DEER

CERVUS DAMA

ITS NATURAL HISTORY

T the present day Fallow deer are found in the Mediterranean littoral, Spain, Portugal, the British Islands, France, Germany, Asia Minor, and North Palestine. They have also been successfully introduced into New Zealand, Tasmania, and one island in the West Indies. That the species has long been known in Wales is proved by the fact that there are old Welsh names for it, Hydd and Ewig, whilst an old Gaelic name Dadhas is in existence. It is doubtful when the species became extinct in North Africa, but it does not now survive there, although Loche writes of having seen them in the forest of Calle (Algeria) as recently as 1867.

In former times the Fallow deer was more generally distributed than it is to-day. It was indigenous to North Africa, Western Asia, South Russia, Denmark, Italy, and the South of France. A few frequented the Grecian woods, and one or two survivors may still exist there, for I have seen the head of one killed there as recently as 1870, by my friend the late Col. L'Estrange.

In the Middle Ages Fallow deer inhabited the woods of Switzerland. That this deer existed in Mesopotamia in the earliest days of civilization is proved by the representations to be found on Assyrian monuments. It must have been found in Egypt too, for there are pictures of it on the tombs of Beni-Hassan. The hieroglyphical name of the species was (according to Zeitteles) "hanen." In 1774 it was very abundant in Sardinia, at which time no fewer than three thousand head were killed annually (Sassari), and it is still fairly numerous there. In Spain and Portugal it is now scarce, and seems never to have been very plentiful. Probably it is most abundant, in a purely wild state, in the Taurus Mountains of Southern Asia Minor and the woods of North Palestine, where it is seldom hunted.

There is no doubt that the Fallow deer was an inhabitant of England in Pleistocene and even more recent times for *Cervus browni* (Dawkins) is identical with *Cervus dama*. For some reason, which one can scarcely understand, the Fallow deer seems to have become extinct in England

before the Peat Age, nor is it known to whom we owe its reintroduction, but it was probably brought over either by the Romans, or the early Phænicians who traded with Great Britain.

There is some difference of opinion amongst naturalists as to whether the Fallow deer was an inhabitant of Northern Europe during later Pleistocene and recent times; but all doubts were set at rest by the discovery of its remains in the superficial deposits of Denmark. These I have recently seen in the museum at Copenhagen. Dr Winge, in his paper on the subject, says that the antlers and bones were found in beds of Interglacial Age, that is, in strata deposited during a warm interlude in the second glacial epoch.

There are many theories regarding the origin of Fallow deer in our country, but the fact that no remains of it have been found in the recent peat formations is a powerful argument that the species did not survive the second glacial epoch in Britain and live until historic times. It is just possible that the Epping, New Forest, and other wild races may be the descendants of the primitive stock, but if this were the case some of the missing links would probably have been discovered. It is curious, too, that an animal so hardy and cunning as the Fallow deer, should have died out, whilst the Roe and the Red deer survived. Man destroyed neither of the two last named, nor did the climatic conditions of the later Pleistocene Age have any effect upon them. This makes the absence of the Fallow deer, during many centuries, all the more puzzling.

Mr Lydekker calls the deteriorated Fallow deer of Epping "a specialized breed," and compares them with the single specimen (a very inferior one) from Asia Minor, now in the British Museum. He thinks these unpalmated horns are typical. This is an argument, however, which will not hold good, for typical wild specimens from the Taurus Range are fine animals, with well developed antiers similar to our best park deer, whilst even the small type from Sardinia and Greece have palmated horns quite different from those of the little Epping deer.

The general colour of the upper parts in summer is a rich fawn, with large white spots, the neck is greyish brown, and is sometimes spotted. Along each flank passes a white line and down the back and tail (which is long) there is a line of black hair. The buttocks are white, nearly surrounded by a black line, and the whole of the under parts and inner surfaces are white. In winter the body spots disappear, and the upper parts are

THE FALLOW DEER

a uniform greyish-brown; the back being very dark and lightening in colour towards the white parts. The foregoing are the typical summer and winter pelages of the English park fallow deer, which is in every way identical with the wild ones of North Palestine and Asia Minor, but after years of isolation and inter-breeding, our race has produced numerous aberrant forms as a result of whole or partial domestication. In some cases the colouring matter in the epidermis is lost, whilst in others it is excessive, thus we get white, erythristic and melanistic varieties, and it is not uncommon to see all these varieties in a large park, as well as the pure spotted form.

In some parks the owners prefer to keep to one type. At Welbeck and Sledmere are white herds, in Epping Forest and many parks only the black-brown form exists. Other varieties are known as the baldheaded Fallow, strawberry-menil (dappled roan), silver grey, dark-dun, yellow-dun, and cream-yellow.

The fawns of all these varieties are spotted as a rule, even the black-brown ones have pale brown spots, but I have seen them in Epping Forest without spots.

The black variety has been repeatedly stated to have been introduced by James I, but, as Mr Harting has shown ("Essays," 1883, p. 13), there were black, white, and spotted fallow deer in Windsor Park in 1465, and probably long before this.

The horns of the Fallow buck begin to make their appearance in the summer of the second year and, when developed, are in the form of a single snag from two to five inches long. In the third year the brow and tray points are developed, and the top of the beam shows an inclination to palmate. In succeeding years this palmation increases and points are thrown out on the posterior margin. These increase with the breadth of the palm until the sixth year, when the horns are more or less fully developed. At the extreme lower end of the posterior margin of the palmation, Fallow bucks throw out a back point, sometimes to the length of eight or nine inches. The buck casts his horns generally from a fortnight to a month later than Red deer, consequently the horns are a fortnight to a month later in being completed. A pair of dropped horns usually weigh from 3 to 4 lb., but two very large pairs picked up at Petworth in the spring of 1900 I found weighed 6 lb. 8 oz., and 6 lb. 6 oz.

The following are the measurements, which have all been taken by myself, of the largest British Fallow deer heads.

BRITISH FALLOW DEER

Length.	Circ. of Beam.	Tip to Tip.	Widest Span.	Width of Palm.	Points.	Locality.	Owner.	Remarks.
31 30 30 30 30 30 29 28 28 28 28 28 28 28 28 27	5 180 14 15 18 18 4 15 14 15 14 15 15 15 15 15 15 15 15 15 15 15 15 15	18 23½ 22 19¼ 17 15¼ 18 14½ 14½	29 26½ 37 37¾ 28½ 23 24¾ 23 24¾ 26 34 31½	7 11 12 7 1	30 22 10×9 16×10 11×11 14×13 14×11 9×8 8×6 10×11 19 15×20	England Woburn Drummond Castle Haddon Hall, Yorks Petworth, Sussex Woburn Essex New Forest Woburn Colebrooke Petworth, Sussex	Earl of Ancaster	(J. G. M.) (J. G. M.) (J. G. M.) (J. G. M.) (Capt. Walker.) (Capt. Walker.) (R. W.) Weight of skull, 8 lb. 1 oz. (R. W.) (R. W.) (R. W.) (J. G. M.) Unusually large number of points.

The Petworth Fallow deer are the finest I have seen in England. Those which are wild in the New Forest carry heads of twelve to twenty points, with very bifurcated palms, some, indeed, almost resembling Red deers' heads. The small black race of Epping are much deteriorated, the palms seldom exceeding two and a half inches. The Fallow deer of Drummond Castle, in Scotland, are a fine race, bearing good heads, often with a remarkable spread. The wild race of the Dunkeld district have short heads, which are often very rugged and massive. I have seen two heads in which "bay" tines were developed just above the brows, but such heads must be considered extremely rare.

The height of a Fallow deer at the withers is about thirty-seven inches; the length from the nose to the end of the tail sixty-eight inches.

The following, sent me by the owners, are the weights of the heaviest British bucks (clean), of which I have any record:

Colebrooke, Ireland, 15 st. 3 lb.; Drummond Castle, Scotland, 15 st.; Dalkeith Park, Scotland, 17 st.; Drumlaurig, Scotland, 18 st.; Petworth, Sussex, 16 st.; Surrenden, Kent, 218 lb. and 222 lb. (W. Winans).

FALLOW DEER SHOOTING

With the help of modern weapons, sport with Fallow deer in a park is not of a very high order; but in the old days with horse, hound, and crossbow, it must have been most attractive. During the sixteenth century in a measure it replaced stag hunting in the open forests. Thus we learn

THE FALLOW DEER

that in 1559 Lord Barclay arrived with his wife and family at Callowden, near Coventry, and hunted bucks in the parks of Berkswell, Groby, Leicester Forest, Tiley and Bradgate. Then, after a short rest he hunted in the parks of Kenilworth, Astley, and Wedgknock, on the other side of his house. This sporting pilgrimage he repeated annually for thirty years. Buck hunting in those days was a summer diversion, practised in the late afternoon after the usual two o'clock dinner; the season for bucks being from June 24 to September 14, and for does, from November 1 to February 2. At this period Fallow deer were often coursed and held by greyhounds trained for the purpose, a practise which is still maintained with rough deerhounds at Eastwell Park, in Kent, an enclosure which was emparked by Sir Thomas Finch in the reign of Queen Elizabeth. These hounds, which belong to Lord Winchilsea, are trained to run down and hold the Fallow buck by the ears, and it is then taken without injury. At the present day, too, "buck taking" is also practised with success at Woburn, where about a hundred are captured every winter by dogs.

James the First used to shoot deer with bow and arrow, and the crossbow was used in parks so late as the middle of the eighteenth century. During a visit to Cowdray, Elizabeth, with the crossbow, shot three or four deer, which had previously been driven into a small paddock. The Virgin Queen sat in a "stand" specially built for the purpose, overlooking the enclosure, and "potted" the unfortunate animals at very close range.

In the seventeenth century the number of Fallow deer in England must have been enormous. Moryson, in his "Itinerary" (1617), suggests that there were at that time more Fallow deer in a single English county than in all Europe besides. "Every gentleman," he says, "of £500 or £1,000 rent by the year, hath a park for them, enclosed with pales of wood for two or three miles compass."

Hyde Park was already fenced for deer when Henry VIII acquired the Manor of Hyde from the monks of Westminster. Edward VI hunted there with the French ambassadors, and subsequently all the English monarchs. Under James I some deer stealers were taken, and executed at the park gates. After the Restoration the park was re-stocked, and surrounded by a brick wall, which lasted until 1726, when a new wall was built, six and a half feet high inside, and eight feet high outside. It was this wall which Mr Bingham's famous horse twice jumped in 1792 in the presence of distinguished spectators. Iron railings replaced the wall about 1825. The Fallow deer remained there until the year of Queen Victoria's Coronation,

when a great fair was held in the park and the deer were removed to Bushey Park. There were also many Fallow deer in St James's Park, which was walled in by Henry VIII; and they remained there until nearly the end of the eighteenth century.

In England there are about 390 parks in which Fallow deer are kept, and nearly every year one or more small enclosures are added. Blenheim usually contains as many as from 900 to 1,000 fallow deer; whilst Woburn and Petworth carry from 600 to 700 head.

Scotland has but few parks containing Fallow deer. Those from Drummond Castle and Kinnaird Castle holding the best; whilst in Ireland the Fallow deer of Kenmare and Hazelhatch are exceptionally fine. Those of the New Forest, in Hampshire, are probably the oldest wild herd in this country, and date from a period prior to the Conquest; perhaps from the time of Canute. They have always been quite unrestricted, and there is no record of any cross except by certain individuals which were introduced by James I from Norway. It is curious to note that they are quite uniform in their summer and winter coats; but this is also the case with the rufous form found in parks.

Epping, like the New Forest, from the time of the Conquest, has always been regarded as "a place for the shelter and preservation of the King's deer."

In Saxon times, one Tovi, a standard-bearer to King Canute, "induced by the abundance of deer," built a number of houses at Waltham in the forest, and created Epping as a royal hunting ground. Henry I granted the citizens of London a day's hunting in the forest, and thus originated what is known as the "Epping Hunt." Henry III granted the same rights in 1226, and the privilege survived until recently. Henry VIII, Queen Elizabeth, and James I constantly hunted there; and the forest was preserved more or less intact until 1851, when a great part of it (Hainault) was disafforested by Act of Parliament.

The Epping Forest Fallow deer were known as "the old forest breed," and in 1887 numbered from eighty to one hundred; but of late years have much increased. They roam about in small parties, keeping to the thickest and most unfrequented parts of the forest. Numbers of wild Fallow existed in the Forest of Dean and in the wastes of Flavant until the middle of the last century and, until recently, some of the old breed existed in Sherwood Forest, where Robin Hood hunted with his Merry Men. A few are said to exist still in Rockingham Forest.

THE FALLOW DEER

There are many wild Fallow deer in the woods of Surrey, Sussex, and Hampshire, but these are all the descendants of recent escapes from parks.

In Scotland wild Fallow deer exist in the woods of Rosehall and Dornoch, in Sutherland, Kinlochluichart, Loch Rosque, in Ross-shire, and a few places in central Argyll. At Drumlanrig, in Dumfriesshire, they were introduced some time ago from the Duke of Buccleuch's park of Boughton, and on his estate they grow to a larger size than in any other place. A buck killed by Lord Charles Scott at Drumlanrig weighed twenty-four stone as he fell, and eighteen stone clean.

Fallow deer were introduced into the Dunkeld Forests by the late Duke of Atholl early in the nineteenth century. They are still numerous between Dunkeld and Cardney, but a few are found all down the Tay Valley, especially in the Murthly and Rohallion woods. They also occur in the island of Scarba, on the West Coast, where they are said to afford excellent stalking. Fallow deer were introduced to Ireland in the Middle Ages, and, according to Fynes-Moryson (1599-1603), they were scattered through the woods of Wexford and Munster. To-day a few roam in a wild state in many parts of Tipperary, Clare, Galway, Waterford, Cork and Kerry.

In parks, Fallow deer are forced to become very gregarious, which is not their natural habit; in a wild state they prefer to roam in small parties, hiding in thickets by day, and only coming out into the more open glades and wood edges to feed, at dawn and sunset. The two sexes generally keep apart during the greater part of the year.

These deer live principally on grass, but browse on many deciduous trees such as horse and Spanish chestnut, rowan and ash. They are very fond of chestnuts, thorn and ash bark, and, when food is scarce, will eat quantities of holly and ivy. They are far more restless than other deer, and feed and lie down at frequent intervals. In summer they rest during the greater part of the warm hours of the day, but in winter keep moving the whole time, and scatter very much when food is scarce.

The horns are cast in May; the oldest bucks shedding first, and so on to the prickets, which drop theirs about the end of June. First the horn-growth is very slow, but during July and August it is more rapid. As a rule in English parks they are clean from August 10 to September 10. The rut does not take place, as stated in many books, in September, but in October, and lasts a very short time, though the large bucks begin pushing one another about and testing their horns as soon as they are clean.

Their fighting powers are not of great account, and consist chiefly of

x

153

charging and pushing one another about. About the first week in October the necks of the big bucks swell, though it is not until the 25th of that month that we hear their unmelodious grunting cry. It can be heard at a distance of two miles on a still day. When the buck produces the sound the head is held slightly below the normal angle and jerked up slightly as the call is emitted. When savage, and in command of a harem, they trot round the does and utter a succession of defiant grunts. Having once gained possession of a certain number of them, the master buck experiences serious trouble in keeping them together. He is constantly challenged by wandering bachelors. These, if they mean to fight, do not feed, but keep moving nearer and nearer to the object of their affections and their guardian. Generally love and courage evaporate when the lord of the harem charges; but if he does not, one of these truant knights will stand sometimes for a whole day watching the prospect before him: but I have seen a new-comer run from a distance and dash straight at a master buck and eventually oust him. These fights last sometimes for quite a long time; in fact, till both combatants become so exhausted that they can only push one another about quite gently. It is extremely rare for a buck to be killed by another. If one of them is defeated he will sulk for days without food.

In the rutting season the Fallow deer never exhibits any animosity towards human beings; and this fact makes him an interesting and safe ornament to our English parks. My friend, the late Sir Philip Brocklehurst, tamed a buck so that it would come and lie by the breakfast table in the house at any season of the year. One fatal accident is, however, on record. This was the case of a hairdresser who, a few years ago was feeding the very tame Fallow deer in Greenwich Park, when one Fallow buck, to whom he had offered nothing, rushed at him and struck him in the groin. He died next day in the local hospital. This did not take place in the rutting season, and it may be regarded as purely accidental, and the result of complete lack of fear of man.

The doe drops her fawn in the second or third week of June. She rarely has more than one, sometimes two and, very rarely, three. Abnormal fawns are occasionally dropped in the succeeding months, even as late as November. It is a pretty sight to see does and fawns playing games of romps in spring and summer. They indulge in games of "follow my leader" for hours.

The early lives of these deer are much the same as those of the larger 154

THE FALLOW DEER

species. In movement, Fallow deer are very quick to make up their minds as to their line of retreat. Led by some old doe, they trot or gallop in a long string, the big bucks coming last. They are sensitive about crossing roads or human tracks, even in a park, and will spring as if to avoid some snare: a wild trait that centuries of confinement has not eradicated. When alarmed they bunch close together, but keep jostling and pushing one another all the time, whilst the constant shaking of ears and tails give a herd a flickering appearance. In travelling long distances they gallop much more frequently than Red deer, and can maintain this pace for several hours. Their trot is rather shuffling, and without the grace and dignity of their larger relatives.

In wet seasons they suffer much from liver-fluke, but this disease seldom appears in well-drained parks, or in forests where they are wild.

They are captured by being driven into an improvised net enclosure of thirty or forty yards square; and then again forced into a net which falls as they strike it. When once caught, unlike Red deer and Roe, Fallow deer hardly fight at all, and it is easy to put them, living, on a man's back and carry them to a cart.

When turned out, Fallow deer at once revert to wild conditions. They keep very closely to the woods, especially the single old bucks, which often follow a solitary existence. When disturbed they are far more cunning in breaking back and heading out of woods at unexpected corners, than any other deer. Even on the open hills Fallow bucks are, as a rule, harder to stalk than Red deer. Although not so long-sighted, a quiet shot is often difficult to obtain, owing to the quickness of their sight, and they generally move off at once without "standing at gaze," as Red stags do. Also if a good buck is with a party of does, or smaller deer, he has an exasperating habit of moving a few steps at a time in their midst, with his own body covered by those of his companions. They are, as a rule, easy to kill, and I have shot many in parks with the Savage .22 (long cases); but this is not to be recommended at long ranges, and is only useful in restricted areas where Fallow deer must be shot, and there is danger to people on roads, footpaths, etc. There is some danger in using the larger rifle in an English park, for I was once out with a friend who is generally a most careful man, when he took a running shot at a buck which had annoyed him by its frequent escapes. He missed the buck, but put the bullet through the window of the keeper's house within a foot of where an old woman sat sewing.

There are a few places in the British Islands where it is possible to stalk the Fallow buck, but, as a rule, this animal, when allowed its full liberty, is essentially a woodland creature, and does not give many chances for the sportsman, that is to say, the sportsman of a certain type who likes to have his game fully in the open in the middle of the day. But to the man who likes quiet prowling at dawn and sunset on the edges of woods and in little glades, Fallow buck stalking offers certain attractions that cannot be denied. I have heard stalkers familiar with these animals say that a wild Fallow buck requires a far greater exercise of skill and care to shoot with the rifle than any stag or Roe, for he becomes more cunning and less ready to trust himself in open spaces if once he is regularly hunted. I have had no experience of shooting these animals with the rifle except in parks, but for years I hunted them in the Dunkeld district with the shot gun, and here found them the sharpest sighted and more shy and sly of British deer to hunt.

When persistently hunted in woods, the big bucks almost invariably crouched in fern banks, and broke back if a drive was attempted, and their skill and courage in overcoming obstacles was amazing. I have seen an adult Fallow buck jump on to a seven foot stone wall and force its way under a wire strand at the top, and so escape. Some years ago Mr Lucas asked me to kill all the fallow deer in Warnham Park, which I didexcept one old white buck—which, as soon as the shooting began, jumped the seven foot iron park palings and escaped into the woods of Northlands where he remained until the end of November. The next year he did the same thing, but I saw him standing by a pond the day he returned, so getting inside a wood I stalked him from there, and shot him. I believe there is not a park in England that could hold Fallow deer if they really meant to get out. Some years ago a Fallow buck, hunted from Parham (Sussex), jumped into Denne Park, Horsham. The hounds followed its line right through the deer in the park and out through the other side. I saw the place where this buck, a young one, jumped out, and it measured nearly eight feet high from where the deer took off.

J. G. MILLAIS.

THE ROE DEER

CAPREOLUS CAPRÆA

ITS NATURAL HISTORY

HE common Roe is distributed in suitable localities over the greater part of temperate Europe, being found in Spain, France, the British Islands (recently introduced to Ireland), South Sweden, Germany, Austria, the Balkan States, Albania, Tuscany, Greece, Turkey, North Palestine, Asia Minor and the Southern and Central Caucasus. In the Northern Caucasus the ranges of the European form, and another, which seems to be more or less similar to the Siberian Roe, overlaps; for both species have recently been found there, and it is quite possible that the two interbreed there, as they will do so in confinement. Further east the common Roe is found as far as Turkestan; the larger form taking its place when the mountain barrier between Russia and China is reached. In the mountains of Manchuria, and in China itself, another race (Capreolus manchuricus) is found. It is practically identical with our Roe, except that it is said to possess a red winter coat.*

In England the Roe was formerly distributed over a wide area, and locally must have been extremely abundant in Pleistocene Times. Nearly a hundred heads have been found in one spot, in the brick-earths of the Thames Valley. It is interesting to note that whilst the British Red deer has deteriorated until it is scarcely the same animal in our islands, the Roe has undergone no change after centuries of isolation. On the other hand, there is a slight tendency to improvement, for no British Pleistocene horns of this animal have been discovered that are equal in size and weight to recent Scottish examples.

Roe are said to have lingered in Wales until the time of Queen Elizabeth. Their remains have been found from the sands of Caithness, to the caverns of Devonshire. They are especially numerous in the Norfolk Forest bed, the Thames Valley, and the Cambridge Fens; in fact, if proper search were made, every large peat deposit would yield traces of this animal. In the early English chronicles we find references to the roebuck as a beast of the chase. The Saxon hunter, speaking in the "Colloquy of Alfric," describes his methods of taking "harts, boars, deer and roes."

^{*}This is incorrect. I have a head from W. Kansu in winter coat which is similar to our Roe.

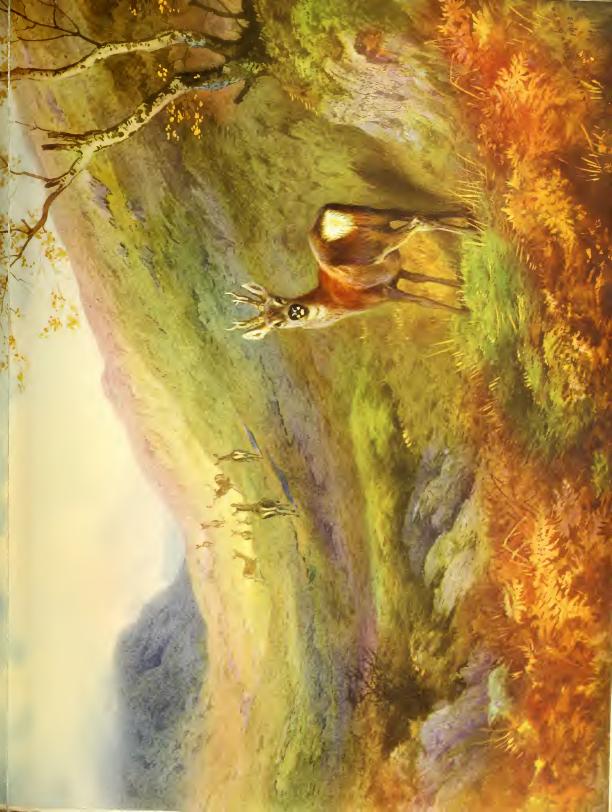
"I braid nets," he says, "and set them in a convenient place, and set on my hounds that they may pursue the beasts of chase until they come unexpectedly to the nets, and so become entangled in them, and I slay them in the nets."

This mode of taking Roe deer in nets is mentioned in Domesday Book, as practised in Lancashire at the time of the Conquest. "Rogerius de Laci ten Cortune. Ibi est haia capreolis capiend." In the Welsh laws of "Howel Dha 940 A.D.," we learn that the skin of a roebuck was worth a penny. The early Bishops of Durham—A.D. 1123—used to hold annual meetings of villeins and farmers for the purpose of constructing "hays," and assisting at great Roe hunts.

Mr Harting, in his account of ancient British mammals, has given several instances of the plentifulness of Roe during the thirteenth and fourteenth centuries; but at the date of "Hollinshed's Chronicle" (1586-87) Roe seem to have become somewhat scarce, for that writer speaks of there being then "an indifferent store of Roe." Yet there were still many Roe in the north of England at that date, especially in Northumberland, where Leland in 1538 testified to their being common.

Dr Muffett, "Health's Improvement," 1655, states that Roe were still existent in Wales in the time of Elizabeth; but George Owen says that they were extinct in Pembrokeshire in 1595. They never became quite extinct in Cumberland or Northumberland.

The first successful reintroduction of Roe to England took place in 1800, when Lord Dorchester turned out a few from Perthshire into the woods of Milton Abbas, Dorsetshire. Since that time they have extended all over the Blackmore Vale country from Moreton to Warmwell in the Frome Valley and from Hyde to Houghton in the Vale of the Puddle. In 1879 Mr Mansell Pleydell estimated that in the Milton, Whatcombe and Houghton woods there were 120 head, their numbers being merely a question of preservation. Now there are probably three or four hundred in Dorsetshire alone, and I have hunted them at Melbury with the late Lord Ilchester, who kept several couples of hounds for this purpose. Here they generally run up on to the downs, after being moved out of the hanging combes, and give a fast run of a couple of miles or so before taking covert in another wood, where the hounds generally brought them to bay. These deer were seldom killed, the hounds being whipped off, as the stock was not considered to be sufficiently large.





THE ROE DEER

Now these Dorsetshire Roe have moved far to the west into south Somersetshire, and are scattered through all the coverts on the south side of the vale of Taunton, and it will probably not be long before they invade the Quantock Hills. They have also moved eastward into the New Forest, in Hampshire, and a few are found south of the Ringwood line in the coverts about Set Thorns, Holmsley, Wootton and Bradley.

In February, 1884, at the request of the Verderers of Epping Forest, and with the concurrence of the late Mr J. C. Mansel Pleydell, of Whatcombe, Mr J. E. Harting superintended the capture and transport of several Roe deer from Dorsetshire to Epping Forest, travelling all night with them, as described in "The Field" of April 5, 1884, and in the following year Mr E. N. Buxton added some others from the same source.

Roe are now found in West Sussex, Somerset, Surrey, Hampshire, Dorset, and there are a few in Cumberland and Northumberland. In Ireland they are only found at Lissadell, Co. Sligo. In Scotland they are in nearly every county where there are big woods. All the best Roe in Scotland are found within a radius of twenty miles of Perth, Forres and Beauly. Within these areas are situated the largest woods in Scotland, most of them having either arable land below, or good grazing above. To quote from my former writings on this subject: "From Perth itself there is a chain of low-ground woods bordering on cultivation both west and north. One almost continuous forest passes up the valley of the Earn, comprising the woods of Dupplin, Trinity Gask, Strathallan, Balgowan, Methyen, Foulis Wester, and so on to Crieff. Another forest holding many Roe extends practically from Perth to Blair Atholl. There is a marked superiority amongst bucks killed in the Stanley, Scone, and Black Park woods, to those of Murthly, Rohallion, Dunkeld, Craig Vinian and Blair Atholl woods, which are all wilder, and contain less good feeding. About Forres there are the great woods of Darnaway, Brodie, Cawdor, Burgie, Westerton, and Altyre, which are all full of Roe, and at the present day there are probably more of these little deer in the woods round Cawdor Castle than in any one place in the north. In the Beauly district Beaufort, with its large woods of Farley, Boblainey and Altnacliach is famous for the number of Roe it contains, and other good estates are Brahan, the Strathconon and Dingwall woods, Moniach, Clunes, Belladrum, Eskadale, and the forests of Upper Strath Glass and Guisachan." There are now

Roe in most of the southern counties of Scotland, and they are plentiful in Peeblesshire, Dumfriesshire, and Wigtownshire.

Roe will frequent the same ground for years, driving off their own sons when they have reached an age of two years. To enjoy studying the Roe you must get up before dawn and watch the woods and hill-sides they frequent, for it is then they cast aside their caution and emerge into the little open spaces. Your first intimation of his presence may be the shaking of a bramble bush-something is moving in the small branches, and your glass tells you it is a roebuck nibbling the tender shoots and leaves. How gracefully he stretches his lithe body across the bush tangle and comes into view as the sun plays upon his brilliant coat and glistening horns. He often stamps and makes quick movements to lick his legs or brush off the flies; then, tired of feeding, he arches his back and drops suddenly in his bed half hidden in some hole or peat hag. For an hour or two he sits dozing and ruminating in peaceful content. Perhaps the sharp bark of a rival may make him cock his ears, but he hardly ever moves in his bed until hunger again prompts him to rise and feed again. So he will pass the greater part of day and evening lying or feeding, according to conditions of the weather, and roaming over a very small area of ground. Sometimes he dozes all day in a cornfield or amongst rushes, but as night approaches he becomes bolder, and gallops out to open glades to chase his wife or spar with some young buck in friendly rivalry. Only rarely do they fight seriously, and sometimes one of the combatants is killed. Some years ago Col. McInroy sent me the head of a roebuck which had been killed in a fight with another. The victor had driven a brow point clean through the skull of the vanquished, where it was broken off and remained embedded.

In July they often lie hidden the whole day, chiefly owing to their dread of the flies, which make life a misery to them in this month. I have seen Roe dash out of their covert at this season and rush madly about to escape their tormentors and then plunge into the midst of the bushes, looking wildly round for some means of escape. The roe-fly no doubt gives them considerable pain as well as irritation. In August and September they often ascend the forests, but not so high as Red deer, and do not seem to like wind-swept situations. As winter approaches they draw in from the hills to the home coverts, braes and lower pastures, and have a distinct preference for young and growing plantations of larch and fir. This makes them extremely unpopular with foresters. They scrape beds with their

THE ROE DEER

feet, often laying bare the earth, which Red deer do not do. Nor do they wallow in pools like Red deer. The brothers Sobieski Stuart, who were such good sportsmen and observers of all that pertains to northern animals, say that, to rid themselves of flies, Roe "stand by a bush and run round it so continually that they soon beat a circle like the lunging ring of a horse. In July and August these circuits are often found in woods, and as they occur in the weaning season, when the kids are seen pursuing their dams for milk, by those ignorant of their habits, their circuitous runs have been thought an exercise to wean the young."

Having seen many of these rings, and the Roe of both sexes using them, I am convinced they are not made as escapes from flies, but are made by Roe for two purposes—namely, for rutting and playing. Many of these rings, particularly those made in the rutting seasons, are produced by the male chasing the female in a circle. This love chase I have myself seen to last for a quarter of an hour. It is not until the female is exhausted that she gives in. On examining such a "ring" as I saw created one morning in July, 1891, the ground was beaten into fine peat, and would remain so for the rest of the season. In other cases these rings are sometimes old established and regularly used as playing grounds at various seasons of the year. I am not aware that they are used in winter, but from spring until October those on the lower woods at Cawdor are resorted to by Roe for sportive chase and play. I once saw six bucks, as previously stated, all chasing one another round and round. Unfortunately the keeper and I disturbed another Roe in approaching, so we did not witness the fun for long, but it was a pretty sight.

About June 20 the roebuck begins to bark. The cry, which is loud and short, is not unlike the rough bark of an old dog. It is repeated at intervals and answered by the female with a somewhat gentle bleating-call like the word "Pe—ip." In Germany and Austria they sell a call which gives an exact imitation of the doe's cry, and with it sportsmen can bring any buck within shot. About the beginning of July the male has selected a mate, and may often be seen chasing her in the evening. The rut, however, does not take place until July 27 or 28, and lasts until August 10. As a rule the buck seems satisfied with one mate, but there is little doubt that he will pair with any unattached does which live in the same area and call for his attentions. I knew of three adult does frequenting one wood at Murthly, where there was only one adult buck, and all of these produced kids, whilst the fact that the buck will come at once to the

161

imitated call of an amorous doe proves that he is not strictly monogamous any more than other ruminants.

On being called by the doe, the buck puts his neck out and gallops at full speed to her. Even at such a time, however, he shows considerable caution, and will pass straight on if he does not see her.

Austrian sportsmen take much pleasure in shooting the Roe, by means of the artificial call. They say it requires great skill and experience to give the cry at the right moment and of just the right strength. I have not myself seen this particular form of sport, but hope to do so at no very distant date. When wounded, brought to bay, or fighting, the roebuck uses both horns and legs in its defence. With its legs it has but little striking power, nevertheless it attempts to push its adversary away rather than strike a blow. A retriever can easily throw and kill a wounded roebuck; even a spaniel can do so.

In the first week in June the Roe doe brings forth her two young ones. Only very rarely are kids seen in Scotland during the last week of May, the time at which they appear in Dorsetshire and Sussex. The doe goes forty weeks in young, the gestation undergoing a somewhat abnormal course. For many years it was supposed that the rutting season of the Roe was similar to that of the other Cervidæ, an error first disproved by Dr Ziegler. Afterwards Dr Bischoff, from an examination of a number of does, shot at intervals between August and May, stated that, although the rut took place in July or August, the germ or ovum remained dormant and of minute size for about four and a half months, until the month of December, when it began to develop at the normal rate, the whole period of gestation lasting for forty weeks. Such an extraordinary circumstance, contrary to all laws governing other quadrupeds, was accepted, and remained unchallenged until quite recently, when, after careful experiments, it was discovered by Herr Franz Keibel that during the four and a half months when the germ was supposed to be dormant, it was in reality slowly developing.

The Roe doe is a good mother, and forces her young to squat at the least appearance of danger. I have often stumbled on the kids in a wood in June, and been attracted by their protesting "ooh!" The doe rushes away, but soon comes dashing back with strained neck and wild eyes. She stamps and licks her upper lip in anger. If the kid is put up, the mother rushes with great leaps parallel to her offspring, who careers with giddy, crab-like haste through the woodland.

THE ROE DEER

As in the case of other deer, the first antlers of the Roe are in the form of a single spike, which is complete at fifteen months; the second pair are forked into two prongs, the hinder one being the longest, and the beam measuring from four to seven inches. The third pair shows the complete form being three-tined on each side, and they are from five to seven inches long. In well-horned bucks the third antlers are often longer than this, but are seldom of any substance, being thin, with small coronets. A roebuck gives his best horns from the fifth to the ninth year, and these are from eight to eleven inches long in Great Britain, after which horn deterioration sets in, although the physical condition of the body seems to be in no way affected till many years have passed. I have known Roe to be kept in confinement for twenty years, which seems to be about the limit of their existence. Old bucks shed their horns in the first or second week of November. The new horns begin to grow at once, although much more slowly than is the case with other deer. This slowness of horn growth, with the consequent effect that it is no strain on the constitution of the animal, will account for the fact that Roe are often in their best condition in December and January. At this season fat is found overlying the buttocks.

In old bucks the horns are half completed by the middle of January. They are generally complete in velvet by April 1, and are usually "clean" in the second week of that month. There is, however, the usual variation of a fortnight earlier or later according to age and season. Few roebucks weigh more than 40 lb., before being cleaned, but I have weighed one of 60 lb., a Perthshire buck of unusual size.

In very old males the horns deteriorate to a single long snag. Owing to their habit of dashing through wire fences at full speed Roe bucks often injure the horn-growth whilst it is still soft, and, in consequence, heads with malformed growths are very common.

Specimens with three horns are not very rare, and I have seen two with four horns, one of which is in my possession. I have a model of a Siberian roebuck (C. pygargus) which has no fewer than six distinct horns. This is considered in Germany, where such monstrosities are much admired, to be the most remarkable instance of malformation on record.

When injury has resulted to the testes, the horns which are on the head of the roebuck do not form, but the soft fresh growth issues from the sides of the pedicles and covers the whole horn with a spongy looking mass.

This, in some cases, sets hard and sheds its velvet. I have seen four British Roe heads of this description, and when well developed they are certainly very handsome.

Good collections of British Roe heads are in the possession of Sir H. Gore-Booth (Lissadell), Sir J. Macpherson Grant (Ballindalloch), Mr C. M. Burn, Mr Sydney Steel, Sir Arthur Grant (Monymusk), the Duke of Richmond and Gordon (Gordon Castle), Lord Lovat (Beaufort, and Aileen Aigas), Sir Wm Gordon-Cumming (Altyre), the Earl of Mansfield (Scone), Mr Mansell Pleydell (Whatcombe), Mr H. M. Warrand, Mr Cameron (Moniach), and myself.

The best roebucks of Dorset carry very good heads, and those introduced from Dorset to Vaynol by the late Mr Assheton Smith also produced fine horns. A good example is in the Bangor Museum. Horns with more than seven points are rare. I have one with ten points, found dead at Kiltarlty, Beaufort; two with eight points from Perthshire, and there is one with a similar number in the Gordon Castle collection. Mr C. Dyson Perrins has a head, from near Ardross, with no fewer than twelve small points, the same number as the Lissadell "royal." Female Roe with small horns are by no means uncommon, and I have seen over twenty examples: such abnormalities as females with more or less complete horns are however very rare.

In "The Zoologist" for 1884 (pp. 351-366) is an article on Roe deer heads by Mr J. E. Harting, illustrated with figures of a dozen very remarkable ones. These were drawn and engraved by G. E. Lodge from specimens selected from a large collection forwarded to London for sale by Dr Leo von Klipstein, of Giessen, in October, 1883. Amongst other singular abnormalities Fig. 10 shows two pairs of horns springing from the same skull, one pair directly above the other, and both fairly symmetrical. Fig. 11 shows a coalescence of the burrs of what should have been two independent horns, and a union of the two beams into one in the centre of the forehead, with a subsequent bifurcation and development of a single tine on each prong of the fork.

The heaviest Scottish horns are usually from nine to nine and a half inches long. The average weight of skull and horns without the lower jaw is 11 oz.; but an exceptionally massive head of a Roe shot by my father at Trinity Gask (Perthshire) weighs 21 oz., whilst the Lissadell twelve-pointer must be several ounces heavier, and is as massive as any head I saw in the Vienna Exhibition of 1910.

THE ROE DEER

The following is a list of the largest Roe heads I have measured. The best Scottish heads are quite as good as the best German average, but they are not so fine as those which were obtained in East Prussia prior to the nineteenth century, or in South Sweden at the present day.

BRITISH ROE HEADS

Length of Outside Curve.	ference	Tip to Tip.	Points.	Locality.	Owner.	Remarks.
121	4	-	6	Foulis Wester,	Mrs Moncrieff	Very thin. Of remarkable length.
115	4	-	6	Monymusk, Aberdeen	Sir Arthur Grant	
11½	5½	_	6	Orton, Speyside	Sir G. Macpherson Grant	The top point broken off, a new one
111	6	6	6	Dunkeld, Perth	J. G. Millais	The best British of normal type
111	-	_	6	Whatcombe, Dorset	J. Mansell Pleydell	that I have seem
111	=	71/2 68/8 71/2 6	6 3 6	Kirkeudbright	Duke of Bedford	Single horn,
11	_	7월	6	Ross-shire	H. M. Warrand	•
11	7½ 7	67		Sligo	Sir H. Gore-Booth	A perfect head.
103	7,	7½	6	Beaufort, Ross	J. G. Millais	
10½	61/2		6	Ballindalloch	Sir G. Macpherson Grant	
10½	6	53	6	Inverness	Sir G. Macpherson Grant	
101	4	2 1 6	6	New Mill, Perth	J. G. Millais	Very fine brows. Length 42 in.
101 91	5½	6	6	Cawdor, Nairn	J. G. Millias	·
93	51 81 85 -	_	6 12 12	Lissadell, Sligo	Sir H. Gore-Booth	The heaviest British roe head.
	_	5	12	Ardross, Ross	C.W. Dyson Perrins	
9 ⁷ / ₈ 9 ¹ / ₂	5	5	6 7	Dorset	J. E. Harting	
	_	-	7	Trinity Gask, Perth	J. G. Millais	Shot by my father. Weight of horns and skull, 21 oz.
9½ 9½	-	73	6	New Forest	Hon. G. Lascelles	
9‡	4	4	6	Beaufort, Ross	J. G. Millais	

ROE-BUCK SHOOTING

Whilst the Fallow buck may scarcely be classed as an important animal from the stalker's point of view, this is not the case with the Roe, which in some respects is, in our islands, next in importance to the Stag. Unfortunately we have few young men who pursue the roebuck with the rifle, but those who do are enthusiasts of the right kind. There is nothing so hard to break as custom, and the habit of butchering with shot-guns these beautiful little animals after their horns have fallen, has become so much an institution that it is difficult to check it. Yet it is hardly likely that two hundred thousand Roe in Germany, and ninety-seven thousand in Austria, would be killed with the rifle unless there was both good sport

as well as profit in it. The sport, too, takes place at a time of the year (from June 20 to August 20) when there is no other form of rifle shooting to be had, and, in itself, it is one of the best to be found in Europe. In England, Ireland, and Scotland there are to-day tens of thousands of acres where little game of any kind is to be found, and which would support a considerable head of Roe. Roe will flourish even in southern English coverts, as is proved by their existence in West Sussex, where they are now spreading beyond Petworth. In moderate numbers they do little damage.

I consider there is more sport in hunting for a week one good roebuck than several half-tame Stags in the height of the rut, for in the first case you must work hard and employ woodcraft to achieve your end, whilst in the other no skill whatever is required either in stalking or the use of your rifle. A first-class Roe head, too, is a rare, as well as a desirable, trophy, and the man who possesses three or four of these, shot with the rifle, must have worked long at dawn and eve to obtain them.

The best places to stalk Roe are the edges of those long glades in Ross and Inverness-shire, that join the deer forests in the higher altitudes. Here it is delightful to spend a few days at the stalker's house, live on simple Highland fare, and go to the wood edges at dawn and sunset. Roe have a habit of feeding out in little glades or on the wood edge itself in July and August, and often repair to the same spot day after day, but to approach them successfully is often a somewhat difficult matter. In woods sounds are always exaggerated, and winds shifty, and Roe can hear every bit as well as a Stag. Their sight, too, without being very long, is marvellously sharp. If you tread on a stick or move suddenly in the open, they will detect you, and their noses are also keen. It is only the fact that they do not look about so much as Red deer, nor are there so many prying eyes to avoid, that makes their chase easier in one respect, otherwise the stalker has to use his wits to their utmost to obtain a shot. Roe, too, rely on the fact that they are not easily seen, and will stand at gaze, watching a man as he passes along a road or well-known foot-path, and so offer a fair chance. What delightful hunts I used to have at dawn in the lovely woods of Boblainey and Cawdor in the early summer mornings of 1888-1892. Dear old Lord Cawdor, most charming of men, and a keen naturalist, used to wonder at my love for Roe stalking, but after a while he ceased to think it strange, and used to give me a morning at

THE ROE DEER

the bucks whenever I wished. The lower woods and Drinahan at Cawdor were wonderful Roe grounds at this date, and I have seen as many as six big bucks playing in the "rings" at one time. I killed a beauty with horns of ten inches here one May morning, and saw an even better one, but I got too close to him, and he dashed off and got round a bush before I could fire. I think this was the same buck, the best head now at Cawdor, with horns nearly eleven inches long, which the late Lord Emlyn killed in the following year.

There are many men who own deer forests, where Roe are plentiful in the lower woods, who, if they only knew the pleasure of a fortnight's stalking in July, would go north for that express purpose. The northern woods are often at their best in the full flush of summer, and the charm of those velvety mornings when the rising sun lights up the glorious colours of the landscape, is often more real than in the biting winds of mid October. If there are deer forests above the woods, most of the Roe go there in late August, and remain on the hills until the end of September. Recently (1911) I saw twelve Roe, including four adult bucks, in one day in the small forest of Castle Leod, but none of the bucks had a head worth shooting, so we did not stalk them. On the open hill they are easier to kill than a Stag, provided you see them first. This is not always simple, and many a stalk at a noble royal has been spoilt by overlooking the little red Roe that lay in some peat hag near the more desirable quarry. I always recall with particular pleasure a hunt I had at Beaufort after a very fine roebuck. In 1890 his usual dwelling place was a low birch wood below and to the west of Johnny Ross's house at Kiltarlty.

At this time all the edge of the moorland to the west of the great Boblainey wood was broken up into small woods of young fir and birch, just of the height and age that Roe like, for they always have a preference for young woods that are somewhat dense and of such a height as will hide them by day. The hill-sides outside these coverts were clothed with patches of heather, juniper bushes and bracken, intersected with glades of sweet grass; in fact, the whole area was at that time as perfect a bit of ground on which to stalk Roe in the open as any in Scotland. Now, alas, it is all grown up, and I am told that it has become too old for the little deer, so that there is not one Roe for every ten there were in 1890-1893.

I had been given a week's Roe hunting by Lord Wimborne, the tenant of Beaufort, and went to spend it in the little cottage at Kiltarlty, where

lived Johnny Ross, perhaps the most knowledgeable stalker of Roe in the north. He had tales to tell me of one wonderful buck with exceptionally fine horns, and we started to search for this animal one lovely July morning in 1890. The bucks had just commenced to bark, for the rutting season was at hand, and their hoarse cries welled up from more than one hollow as we ascended the hill above the cottage just as dawn was breaking. In the course of the morning we saw no fewer than seven adult bucks, but I did not fire at, or seriously stalk, one of them, for all our efforts were concentrated on finding the big fellow.

Four or five times we circled and returned to the birch wood to the west of the house, and although we distinctly heard the collie-like cry of a large buck in the wood, the animal itself refused to come into the open. In the course of the next three days I saw many roebucks, and going out one morning we gave the wind to a fine buck, which galloped along the hill-side opposite to me at about eighty yards. Whilst the Stag is not a very difficult object to hit when moving at this pace, the reverse is the case with the Roe, for he is a small target at the best of times, and when galloping seldom moves in a straight line. As he plunged along over the broken ground I fired three shots, and evidently hit him with the last one, for he plunged to one side as if about to fall, and then recovered, and went over a small hill out of sight.

"I think we will go back to the hoose for Roy," remarked Johnny, who possessed a fine old dog, half collie, half setter, of tried capability.

Having brought out the dog the stalker laid him on to the trail, and we followed at leisure. Roy went off at a slow canter and soon passed beyond our sight. Presently we ascended a small hill and saw him assiduously following out the line. At length the dog showed by his stiffening attitude that he was drawing something, and we saw him come to a dead point opposite a large juniper bush. In rigid attitude he waited there for us to come up, and I felt the buck was mine. But it was not to be. When we were still 200 yards distant the roe suddenly emerged from the bush and galloped away slowly for a large covert on the hill, and we had the mortification of seeing the dog return to heel. The only thing now to be done was to approach the wood from above and work up wind downhill towards the point where the Roe had disappeared. This we did, making frequent "casts" across and across the wood, and though this occupied the best part of the morning, we never set eyes on the wounded buck again.

THE ROE DEER

The next evening, coming home, we were quite close to Ross's house when we suddenly came on a good buck feeding within ten yards. As we had walked along somewhat carelessly—not expecting to see any game—I was somewhat astonished to find this buck unaware of our presence at so short a range.

The fact, however, was at once explained when I had killed him, for I think he was deaf—as often happens to wounded animals. On skinning him we found at least two charges of No. 6 shot embedded in his side, and it was a marvel how he could have survived at all. In the previous autumn some careless sportsman had probably fired a couple of long shots at this animal, and he was—poor creature—just dying by degrees. I do not think this living skeleton could have weighed more than 15 lb., yet somehow he had managed to grow quite a good head of nine and a half inches.

The next day I killed a large buck, with a somewhat poor head, after an easy stalk, but we spent most of our time looking for the big buck, who seemed only to come out of his retreat at night. We saw his wife morning and evening, and kept a sharp watch on her, but he was too cunning to come into the open as long as daylight lasted. The last day came at length, and Ross more than once threatened to "drive" the little wood to me, but I was adverse to this manœuvre, as I feared that so cunning a buck would only break back and leave the wood altogether, when all chance of seeing him, for that year at least, would be ended. So we just spent the day in waiting.

The sun was setting as we went to have our last wait above the birch wood, and there was the doe feeding quietly about one hundred yards outside the covert. She kept looking back towards the wood, as if expecting something, and the omen seemed good. Gradually the greens of the landscape died to red, and from red to deep purple. It was eight o'clock, and then in ten minutes would be too dark to see to shoot. Suddenly Johnny pointed with his long finger, and there was the big buck slowly stealing out of the wood with cocked ears. He was a cunning old fellow indeed, and never once looked at his mate, nor put down his head for a mouthful of food. He just crept forward, looking intently up and down the hill. As soon as his head was turned from us we crept down the hill, and I got to a nice position, about ninety yards from him. At that time I used to shoot Roe with a single '300, with black foresight—a mistake I was soon forced to correct—so that when I raised the rifle I could hardly see either the Roe or the sight

169

in the waning light. This may seem a poor excuse, but when the shot went off I knew at once I had missed the best head I had ever seen, or was ever likely to see.

Johnny did his best to console me, but for a whole year visions of that buck kept returning, and my peace of mind was only partially restored when I received another invitation to go to Kiltarlty in 1891. That season I got only one buck, a curious malformed head, that I killed the last day as it galloped up the hill. It was a very "fluky" shot, and I thought I had missed it, but Ross found the animal dead, by chance, some time afterwards, and sent me the head. The big fellow was still on the beat, but he had moved into Boblainey, and although we hunted there, the chances of seeing him in so large a wood were somewhat remote.

In 1892 I again went to Beaufort to stalk Roe, at the invitation of Mr Van Andre, and had four delightful days. I killed one fair buck on the second day, and again searched assiduously for the big buck, which still frequented the birch wood at intervals. Coming home on the fourth evening we saw a doe on the sky line, towards the Eskadale march, and stalked to within 150 yards of her. As the season was late July we made sure there would be a buck close at hand, and dallied for a long time in the hope that this would be the case. Just as we were about to leave her, Johnny's sharp eyes found something lying in the bracken, and further investigation proved it to be the head of a roebuck. The animal lay half hidden, and I did not feel any enthusiasm about its size until it suddenly stood up and revealed its proportions. It was the big buck, without doubt, and standing, as it did on the skyline, looked remarkable. This time I had a good rifle and a good light to shoot in, so when we had crawled forward sixty yards or so, and I found the beast quietly feeding, I pressed the trigger as if my life depended on a sure aim. At the sound of the shot the big buck gave just one step forward and fell dead. His horns were thick, rough, and very long, ten and three-quarter inches, and the animal himself evidently slightly over his prime. I cannot help thinking that in 1890 his horns were even longer, but I was well contented at killing such a beautiful trophy, that seldom falls to the lot of any sportsman-in Scotland at least. In the same month I got another very good head of nine and a half inches at Cawdor. The keeper, Sutherland, and I were walking quietly along a forest road, and the buck simply stood and looked at us at about twenty-five yards, evidently hoping we would pass by. I had an exciting chase after a fine buck at Eskadale once through hitting

THE ROE DEER

the beast too low. Curiously enough he headed right through the big wood, over the road in the glen, and out across the open fields towards the River Beauly. Hugh Ross and I had him in view all the time, and reached the river as he crossed the torrent. I made a lucky shot at the first attempt, although somewhat blown with the run, and killed the beast dead with a bullet in the back of the head. Then the fun began. We had to launch an old and leaky boat which we found some distance below, and only got to the buck just as he entered the rapids above Aileen Aigus Island. It was a stiff pull to get our boat ashore again without being drawn into the falls, and I felt afterwards we had done something rather foolish. But the buck was a very good one, the best I had killed in several seasons at Eskadale.

Roe will adhere for a lifetime to certain woods if the shelter and feeding amenities are suitable. During twelve years I hunted three generations of bucks at a certain wood above the castle at Murthly, in Perthshire, I killed the first buck, a very large one, but with poor horns, in the first year of our tenancy of Murthly; his son I shot six years later, and the grandson I hunted unsuccessfully for several years. This was a grand buck, the best I ever saw at Murthly, where the heads were small as a rule. At last he came out to me, rather a long shot, at the same pass near the arch where I had killed both of his predecessors. Perhaps I ought not to have fired, but waited for a better opportunity, but as I was using a very hard hitting full-choke duck gun and No. 1 shot, I thought the chances of a kill were favourable. The buck plunged forward to the shot, and I at once laid on my old dog "Jet," a remarkably fine Roe tracker. There was a good sprinkling of blood on the bushes, so I made sure Jet would soon run the buck to bay. I ran on expecting to hear her barking at any minute, and then found her standing beside the main road to Perth nosing a large mark of blood on the turf beside the road. The dog would not leave this, and when urged on she rigidly ran the back-spoor, and returned to this spot. Evidently the Roe had fallen here, and had never crossed the road, nor had it circled back into the wood.

About a month afterwards I was telling my old friend, Mr Malloch, in Perth, about the incident, when he began to laugh, and retired to the back of the shop, from which he brought a fine Roe head.

"Is this anything like it," he said, "I got it from X., a well-known Perth poacher, on the day after you lost your Roe." On being shown the head both the Murthly keepers, Keay and Haggart, swore to its being the

"Castle" roebuck, and I have not the least doubt that they were correct. The poacher in question died the same autumn, or I should have gained the story from him. He was doubtless passing along the road at the time the roe fell, and thought it a good opportunity to take it with him—a sort of gift of the gods. Some years ago when I was in Inverness, a well-known poacher who used to hunt the Dochfour Woods regularly was crossing the Ness with a roe on his back, and his loaded gun, in two pieces, in his long game bag. The weight of the buck caused him to stumble, the gun went off, and he was killed dead on the spot. Most of the best roebucks' heads that find their way into the hands of the Scottish taxidermists are got by poachers. As the buck has a habit of returning morning and night to the same spot, his presence is marked, and a shot at dawn or in the gloaming is not easily detected. Even if heard, the keepers or stalkers think it is only some farmer shooting a rabbit, and no attention is paid to the circumstance.

It is very seldom that the sportsman obtains a shot at an old buck in the course of a day's covert shooting in Scotland. He may do so if he is walking in line with the beaters, and even then must be prepared for a snap-shot. By far the best way to kill a good one in places where the rifle cannot be used, is to go out alone with three or four drivers and to choose some hiding place commanding a pass used by the animals. In the big day of covert shooting the forward guns never think of concealing themselves, as they are generally more intent on watching for pheasants, capercaillie, or woodcock, so their presence is sure to be detected by Roe even when at a considerable distance. I have often seen Roe stop in their first onward rush, halt, and then break back or out at the flanks, having seen the guns ahead, which they fear more than the noise in the rear.

To allow Roe to come forward, the heading gun must be absolutely still, as well as concealed, and the little deer will generally come on if the drivers keep up a gentle tapping. Roe, on being moved, generally advance a hundred yards or so, and then stop and listen. If all seems clear ahead they come on another hundred yards or so, and again stop and watch. If they are then satisfied that there is no danger ahead they will travel forward for a long way at a slow bounding gallop.

Good sport may also be obtained by driving Roe to certain passes, by means of a slow-moving hound, such as a beagle or basset.

In large organized shoots where Roe are forced forward, it is seldom that any but the does and young come to the guns. The old bucks take

THE ROE DEER

good care to hide themselves in thickets, either lying there till danger is past, or breaking back through the line. No amount of shouting will divert a Roe that means to break back through a line of beaters. Some years ago a stalker at Blair was nearly killed by a charging roebuck, which, in forcing a passage, struck the unfortunate man in the groin with its horns.

In 1891, whilst a Roe drive was in progress at Cawdor, a buck broke back, and in its endeavours to break through the line, charged straight at the village bell-man. This resourceful individual, who was carrying his coat as the day was warm, placed that article of apparel on the buck's head in true bull-fighter fashion. This the frightened animal bore away on its horns, to the amusement of the beaters. It was found later about half a mile away in another part of the wood. In January, 1913, President Fallières gave his last shooting party at Rambouillet, the guests of honour being the Bar and Parquet of Paris. General Boulanger, who is one of the military suite, was in a shelter waiting for the beaters to drive out the game, when a roebuck dashed forward. To avoid Colonel Guise, another member of the President's household, who was standing in full sight, the frightened animal made a sudden spring to one side and collided with the concealed general, who was thrown to the ground, where he remained unconscious from the shock, which seems to have been principally received in the face and chest. He quickly recovered, however, and beyond being somewhat bruised and shaken, was none the worse.

Roe shooting is not always safe. I have heard it said that there is more danger to life and limb when one Perthshire roebuck gets on the move than forty Surrey woodcocks at a syndicate shoot. I remember, about fifteen years ago when Colonel Richardson, of Ballathie, whose extremities were clothed in some brown material, was mistaken for a Roe, and one of the guns fired straight at his legs at a distance of fifteen yards. He was laid up for more than a year, and has not yet, I believe, quite recovered from the accident.

Where Roe shooting is skilfully managed—and there are few such places—this habit of breaking back on the part of the deer is so well recognized that the guns are often placed behind the lines of beaters.

J. G. MILLAIS.

LEPUS TIMIDUS

ROM the earliest times, as attested by ancient and modern writers, the hare has been regarded as one of the most notable animals of the chase. Figures of it are to be found in the paintings and sculptures of the ancient Egyptians and Assyrians, Greek authors like Xenophon and Arrian wrote famous treatises on hunting and coursing it, and the Saxon hunter of the ninth century, as we learn from the "Colloquy of Archbishop Ælfric," enumerated hares amongst the wild animals that were sometimes taken in his nets.

The Anglo-Norman Kings set a high value on the hare as affording good sport when hunted with fast hounds, and early writers on the chase, both French and English, have devoted much space in their manuscripts to the nature of the animal and the mode of hunting it. Guillaume Twici, huntsman to Edward the Second, in his "L'Art de Venerie," written about 1327, places the hare at the head of his game-list as "the most marvellous beast which is on this earth"-"Pur coe qe ele est la plus merveilouse beste ke est en ceste terre." * Gaston de Foix, in his famous "Livre de Chasse," 1387, subsequently translated, with additions, by Edward, second Duke of York (between 1406 and 1413), in "The Master of the Game," the oldest English work on hunting, expressed the opinion that the hare showed more sport in hunting than any other beast for its size. The compiler of the treatise on hunting in "The Book of St Albans" (1486) evidently had in mind the words of Gaston de Foix, or his translator, when writing of the hare, "That beest kynge shall be callyd of all venery, for he is the mervuevlloust beest that is in ony londe."

Just as Edward, Duke of York, when translating the work of Gaston de Foix, made sundry additions to the original French text, so in Queen Elizabeth's time did George Turbervile, in his "Noble Arte of Venerie or Hunting" (1575), copy from and augment the celebrated French treatise of Jacques du Fouilloux, the first edition of which was printed in 1561. This famous work, written from the personal experience of the author, a gentleman of Poitou, became extremely popular, and passed through

^{*}The English version of Twici, or Twety, as the name is sometimes written, is given by Halliwell and Wright in Reliquiæ Antiquæ, 1841, vol. i, p. 149, and by Sir Henry Dryden who, in 1843, printed an edition of the French text together with a translation and notes.





at least five and twenty editions. But the point is that in regard to the merits of the hare the praise bestowed on it by the famous French sportsman evoked no dissent from subsequent editors and translators. Du Fouilloux wrote: "Je commenceray aux vertus et proprietez du Lièvre lesquelles sont grandes selon la stature de la beste," thus echoing the opinion of Gaston de Foix uttered nearly two centuries before.

Sir Thomas Cockaine,* knight, of Ashbourne, Derbyshire, in his "Short Treatise of Hunting: compyled for the delight of noblemen and gentlemen, 1591," tells us that for fifty-two years (with two intervals, when serving in the wars in Scotland†) he hunted the buck in summer and the hare in winter. His remarks on the latter after so long an experience are naturally of much interest, and it is worth noting that, although there was no close-time for hares in his day, his humanity caused him to write thus: "When you have hunted the hare all winter and made your hounds very perfect, you may at the beginning of March give over the hunting thereof."

During the century which followed the death of Sir Thomas Cockaine, in the year after the appearance of his treatise of hunting, many works issued from the press dealing with various branches of field sports after the fashion of "The Book of St Albans" and containing sections on hunting, hawking, fowling, and fishing, with more or less information on the natural history of the species dealt with.

Gervase Markham, Blome, Nicholas Cox, and others in this way contributed to the bibliography of the hare, but apparently it was not until the middle of the eighteenth century that any work was printed relating exclusively to that animal.

In 1750 appeared an octavo pamphlet, entitled "The Art and Pleasures of Hare Hunting, in six letters to a person of quality," by John Smallman Gardiner, of Romford. It extends to fifty-six pages only, and was published at the price of one shilling. Some idea of its rarity may be formed from the fact that in a modern bookseller's catalogue not long since a copy was priced at five guineas. I therefore count myself fortunate in possessing an uncut copy bound in vellum. It is not merely a literary curiosity, but is of practical value as being "founded chiefly on observations made in a long course of years and experience." It deserves mention, therefore, as an important item not to be omitted from any bibliography of the hare.

† He was knighted at the taking of Edinburgh in 1544, and died in November 1592.

^{*}The name is so spelled on the title page and dedication of his book, although historians and genealogists who have had occasion to refer to the family, have adopted the spelling "Cockayne."

In 1788 appeared Blane's "Cynegetica or Essays on Sporting consisting of observations on Hare hunting, etc.," published by John Stockdale, Piccadilly. It is an interesting volume, for, besides an abridgment of Xenophon's treatise on hunting and Arrian's treatise on coursing, it contains a reprint of Gardiner's six letters upon hare hunting, and concludes with Somerville's poem "The Chace."

Twenty-five years later, namely in 1813, John Beard published his "Diary of fifteen years' Hunting from 1796 to 1811," a smaller volume (12mo) and of equal rarity with that of Gardiner.

And so through the ages we might continue to trace the publication at intervals of various works relating to the hare, although, of course, the nearer we get to the present day the less need is there to quote their titles, since to those who are interested in the subject they are likely to be well known. Nevertheless it will not be amiss to mention amongst books not to be neglected Mr H. A. Bryden's "Hare-hunting and Harriers" (1903), Mr Millais's "Mammals of Great Britain and Ireland" (vol. III, 1906), the volumes relating to the hare in the "Badminton Library," the "Fur and Feather" series, and the "Country Life Library" (1903).

With this preliminary glance at the literature of the subject we may proceed to deal with the natural history of such members of the hare family as are to be found in the British islands.

In endeavouring to give an outline of the habits, haunts and general mode of life of the Common Hare and its allies we are confronted at the outset with two difficulties. We have first the question, How many kinds of hare are to be found in the British islands? and secondly, By what technical names are they to be designated? It seems almost superfluous at the present day to raise the first question, because for the last forty years, that is, since the publication of the second edition of Bell's "British Quadrupeds," it has been the generally received opinion that there are but two species, namely, the Common Brown Hare and the Scottish or Mountain Hare, which is found also in Ireland. The recent revival, however, of an ancient contention that the Irish hare is specifically distinct makes it desirable to review the situation.

Previous to 1833 English naturalists were content to believe that the Irish and Scottish hares were identical, but in that year Yarrell, following the lead of Lord Stanley, afterwards Earl of Derby, disputed that view at a meeting of the Zoological Society, and gave reasons for regarding them

as distinct. Bell, who published the first edition of his "British Quadrupeds" in 1837, adopted this opinion, and accorded specific rank to the Irish Hare under the name Lepus hibernicus. One of the arguments in support of its separation from the Scottish hare was that it did not, like the latter, turn white in winter. Unfortunately for the case, this proved to be untrue, and while it was admitted that the Irish hare differs from its English relative in having a more rounded head, shorter ears, shorter hind limbs, and softer or more woolly fur, it had to be conceded that in these particulars it sufficiently resembles the Scottish hare, and differed only in such details, e.g. change of colour in winter, as might be due to the milder climate of Ireland, and the somewhat different conditions under which it had to live. Accordingly, when Bell in 1874 brought out the second edition of his "Quadrupeds," in which he was assisted by two very good naturalists, R. F. Tomes and E. R. Alston, the joint conclusion was reached that his Lepus hibernicus was not a good species, and it was accordingly deprived of specific rank in the new edition. At page 340 we read: "The Irish hare was described by our late friend Mr. Yarrell in the 'Proceedings of the Zoological Society' for 1833, under the name of L. hibernicus, and was treated of under that name in our first edition; our original illustration of the head of this form is repeated beneath. Its identity with Lepus variabilis (the Scottish hare), which was first pointed out by Blasius in 1841, is now fully established, and the comparative uniformity of its summer and winter tints must be attributed solely to the mildness of the Irish climate." This conclusion is strengthened by the fact, not then realized by Bell, that the Irish hare does turn white in winter, although (for the reason stated) not so fully or completely as does the mountain hare. This view having been shared by continental readers of Blasius's work since 1841, and adopted by English readers of Bell's second edition since the date of its publication in 1874, it is difficult to understand what advantage is to be gained after such a lapse of time by reviving the controversy, restoring the discarded name hibernicus, transferring the name timidus from the brown hare to the mountain hare, and placing the two species in different groups (Eulagos and Lepus). Yet this is what we are expected to agree to if we accept the views of Major Barrett Hamilton as set forth in his new work on British mammals. Briefly speaking, he would have us recognize our common brown hare as Lepus europæus instead of timidus, the Scottish or mountain hare as Lepus timidus instead of variabilis and the Irish hare as Lepus hibernicus. Indeed, he would have us go further than this, for he

177

writes approvingly of "sub species," and would have the English form recognized as Lepus europæus occidentalis, and its Scottish relative as Lepus timidus scoticus.

It may be asked why these changes of names are considered desirable. The answer seems to be that in the opinion of a few controversialists the hare on which Linnæus bestowed the appropriate name *timidus* was not the brown, but the mountain hare.

The case is thus put by Major Barrett Hamilton at page 251 of his work: "The hare to which Linnæus applied the name timidus is not the common hare of Europe; but this fact was not at first understood, so that this name was widely applied to the brown hare as being much the better known species. After the discovery of the identity of the true timidus, some naturalists retained that name for the brown and adopted Pallas's name variabilis for the blue hare. This course is still followed by a few zoologists, especially biologists and those working on extinct forms; but the majority [?] of authoritative systematic writers have now, although not without protest, agreed to adopt the next available name, viz., Pallas's europæus for the brown hare, leaving the blue hare to be Lepus timidus as originally intended by Linnæus."

To say "as originally intended by Linnæus" is begging the question. It is inconceivable that Linnæus did not know the animal upon which he bestowed so appropriate a name as timidus. If there is one characteristic trait in the writings of Linnæus, it is the felicity with which he selected specific names for the species which he described, bestowing in so many cases names indicative of some peculiarity whether of voice, colour or habit. Thus we have musicus for the song thrush, pre-eminently distinguished for its song; torquatus for the ring ouzel, with its white gorget; cyaneus for the blue hen-harrier, to distinguish it from the brown one æruginosus; arvensis for the skylark, pre-eminently a bird of the fields, as arborea is of the woodlands; frugilegus for the rook, a persistent pickerup of grain; and others. So with the hare, Linnæus noticed a difference in habit of the brown hare and the mountain hare, the former "timid" and ever ready to seek safety in flight, the latter suffering a much nearer approach and sometimes squatting until nearly trodden upon. Linnæus was far too close an observer to give to a species a descriptive name indicative of a habit which it did not possess. When he wrote in his diagnosis of the species, hyeme in frigidis niveus, he indicated that, like the mountain hare, it turned white, or partially white, in winter; it certainly

turns much greyer at that season of the year, and partially white varieties of the brown hare have been frequently met with both on the Continent and in England, to say nothing of pure white ones.

Writing of a grey variety of both sexes which has often attracted attention, and which appears, at least in all thoroughly authenticated instances, to have been observed only in autumn and winter (between September 6 and January 22), Major Barrett Hamilton remarks: "It is strongly reminiscent and suggestive of winter whitening, a process which occurs regularly in some of the continental sub-species of L. europæus [i.e. timidus]. This fact, together with its prevalence in those parts of England which are coldest in winter, and its restriction to that season, suggest that it may be interpreted as a sporadic assumption of a white winter coat." So that, after all, Linnæus was not far wrong when he wrote of Lepus timidus, "hyeme in frigidis niveus." For these reasons, therefore, to say nothing of the great confusion which must arise if the name timidus is transferred to the mountain hare, I remain, as I have always been, of the number of those who maintain that the Common Brown Hare should bear the Linnean name timidus, and that the Scottish or Mountain Hare should be distinguished as variabilis of Pallas, who thus named it in 1778.

Although it may appear to some readers that a disquisition on nomenclature is somewhat out of place in a work like the present, it seems necessary to make the above remarks in order to explain why the latest scientific names proposed for our British hares are not adopted by the present writer, nor, as he is well aware, by many other naturalists besides himself. With this explanation, we may proceed to give some account of the species, and first of the Common or Brown Hare.

Descriptive.—The genus Lepus includes about twenty species, which are restricted chiefly to the Palæarctic and Nearctic regions, although one (Lepus brasiliensis) is found in South America. The Common Brown Hare of Europe may be regarded as typical of the genus, and is characterized chiefly by the great length of the ears and hind limbs. It occurs throughout Europe except in the north of Russia.

Colour.—Its fur is usually of a sandy colour, greyer in winter, interspersed with long black hairs, which, being set close along the dorsal surface, cause it to look darker on the back than elsewhere, the upper surface of the short tail and the tops of the ears being also black. The

under parts are pure white. The colour of the fur differs, however, in different latitudes, and at different seasons of the year, showing a tendency to become white in winter in northern latitudes, as observed by Linnæus, while assuming a reddish yellow hue in the more genial climate of South Europe, where in winter its prevailing tint is grey. A great many geographical varieties have been described, with separate names for each, such as *Pyrenaicus*, transylvanicus, mediterraneus, etc., but these distinctions are based merely on variation of size and colour, and it would be just as reasonable to classify human beings of whatever nationality by their stature and the prevailing colour of their hair. In animal life all the world over allowance must be made for the variation in size and colour effected by climate, soil (affecting the vegetation on which they subsist) and altered conditions of life.*

Varieties.—Beyond the change which takes place in summer and winter it may be said that the Common Hare is not subject to much variation in colour, although at irregular intervals grey, sandy (or yellow without any black hairs), parti-coloured, white, and even black varieties have been seen and procured. At Tillyfour, in Aberdeenshire, and in the Isle of Mull a large yellow variety, with hazel eyes, and weighing about 10 lb., has been noticed. A grey variety of the Common Hare has been occasionally noticed in Norfolk, examples of which have been shot at Burnham, Sutton near Wells, near Cromer, and near Scole. Mr J. H. Gurney has reported a variety of the ordinary colour, but with a white face,†

In January, 1865, a parti-coloured hare was killed near Salisbury. It was unusually white all over the face, and the hindquarters were of a silvery grey. Its pale colour could not be attributed to old age, for it was a young animal, weighing about $5\frac{1}{2}$ lb. On March 5, 1886, a hare killed at Stalham, Norfolk, was curiously marked by a large patch of white on the forehead, extending from the tip of the nose to the base of the ears, the remainder of the fur being of the usual colour. In October, 1882, Mr J. Whitaker, of Rainworth, near Mansfield, shot a hare which had three of her legs white as far up as the first joint, the fourth (a hind one) being white up to the body.

Daniel, in his "Rural Sports" (vol. I, p. 446, and Suppl., p. 694), mentions several instances of white hares, and Scott, in his "British Field

^{*}The small southern race of hare found in Spain, Lepus Mediterraneus, according to Mr Abel Chapman, "weighs only five or six pounds, and is more brindled in colour and with warmer shades on shoulders and flanks than ours."—Wild Spain, p. 353.

[†] Transactions of the Norfolk Naturalists Society, vol. i, p. 26.

Sports " (p. 361), gives an account of a coursed hare which was said to have become white from fright.

In December, 1854, an albino Common Hare was shot at Trebarrow, near Dolsdown, Cornwall, by Mr Southby, who had it preserved as a curiosity. Another albino was shot by Mr H. M. Spurling in North Devon. At Kintore, in Aberdeenshire, a white variety was obtained in January, 1875, but this animal had a light brown tinge on the back. The Earl of Burford, in October, 1888, shot a full-grown white hare, with eyes of a pale blue, and in the same neighbourhood, Bestwood Park, Notts, a white leveret was caught in the previous month of April. In December of the same year another white hare was shot at Rufford, and it is curious that these should have occurred in one year in a district where hares then were by no means plentiful. Near Kington, Herefordshire, in September, 1890, Mr Alfred Turner shot a pure white hare, with pink eyes.

Black hares are apparently of much rarer occurrence, though several have been reported at intervals in different years. So long ago as 1828, Dr Fleming, in his "History of British Animals" (p. 21), noticed a black hare which was "lately killed at Netley, in Shropshire, by my respected friend, the Rev. F. W. Hope," and some years ago one was shot at Blake Hall, Essex. In November, 1853, a black hare was coursed and killed at Enville, the seat of Lord Stamford. A perfectly black hare is preserved in the possession of Sir Edward Kerrison, Bart. Another full-grown one was shot at Firle by General Gage. In 1885 a black hare was shot near Lutterworth by Mr Joshua Harrison, of Parlton Field, and another about the same time by Mr J. Cross, of Althorp Towers, near Rugby. On September 12, 1893, Mr A. E. Gover shot a pure black hare near Newmarket, as reported by him in "The Field," September 23 of that year. The last, or one of the last, which we have noted was shot by one of the Duke of Portland's keepers at Langwell, in Caithness, as recorded in "The Field" of February 22, 1902.

Weight.—The average weight of a full-grown Brown Hare may be put down at about 8 lb., but occasionally this weight has been considerably exceeded, particularly in Lincolnshire, where the hares are unusually fine and heavy. One of 10 lb. 5 oz. and another of 11 lb. 6 oz. were reported in "The Field" of October 17, 1896. In October, 1877, a hare was shot on the farm of Mr Tupholme, of Eastville, near Boston, which weighed 11 lb. 3 oz., and in "The Field" of November 10, 1877, others were reported to have been killed in Lincolnshire weighing respectively 11 lb. 3 oz. and 11 lb. 12 oz.

Perhaps the heaviest on record is one which was shot in October, 1876, by Mr Robert Henderson on the Longwitten estate, near Morpeth, and is asserted to have weighed 13½ lb.

Habits.—The mischievous operation of the Ground Game Act during the past thirty years and the neglect of the Legislature to provide a reasonable close time for hares have caused a woeful diminution of this most useful animal. It is no exaggeration to say that in some counties, more particularly in the south of England, the number of hares now to be met with is about one-fifth of what it was before the Ground Game Act was passed in 1880. The so-called Hares Preservation Act of 1892 imposes no penalty for killing hares out of season in England. It merely provides that they are not to be sold or exposed for sale during the months of March, April, May, June and July. In Ireland, however, no one may kill or take a hare between April 20 and August 12 under a penalty of 20s. In nearly all the Irish counties, however, at the present time the Grand Juries have altered and extended the close time by periods varying from fifteen to twenty days. In County Dublin it extends from March 31 instead of April 20 as heretofore.

Hares have suffered reduction more than rabbits for several reasons. Their larger size renders it more difficult for them to escape observation; they do not as a rule go to ground, unless hard pressed by a dog; they breed less often in the year, and have fewer young at a birth. Added to this they are inconsiderately coursed and hunted so late in the spring that many does in young are killed, and are then unfit for food. Under this disastrous process of reduction it is no wonder that English hares are getting scarcer every year. The champions of sport and the advocates of humanity and common sense have alike failed to convince their unreasonable opponents of the wisdom of enforcing a close time. One would have supposed that the vested interests of masters of harriers, owners of greyhounds, game preservers, and game shooters, to say nothing of game dealers and game consumers, would have long since operated to secure the passing of such a Bill as is needed.

Hares breed when twelve months old, and the doe, after thirty days' gestation, brings off from two to five young. The number will depend on the age and well-being of the doe. In her first litter she may not have more than one or two, but growing older and stronger may produce three or four, exceptionally five. On this point, in June, 1888, my old friend, the late Mr Mansel Pleydell, of Whatcombe, Dorset, wrote me a letter which

with his permission, I published in "The Zoologist," which I was then editing. His remarks are worth reproducing here. He wrote:

"My keeper, J. Shave, found a hare's form last week containing five leverets, not more than a day old; they were evidently one litter, for they were all of one size. Shave, who has had a long and wide experience, tells me he has never found more than three in any hare out of the many hundreds he has paunched, and that one is the usual number in the case of a young hare, and two in the case of an old one."

Unlike rabbits, which are born underground, naked, and blind, young hares at birth are deposited in a "form," are clothed with fur, and have the eyes open. They are thus sooner enabled to shift for themselves, and escape their enemies. In time of danger they are often transported from their place of birth by the parent, which carries them one by one in her mouth as a cat carries her kittens, to be concealed in a place of greater safety. Moreover, they are not deposited in one spot, but at a little distance apart, which serves still further to protect them from enemies such as stoats, weasels and foxes.

Voice.—The doe hare visits her young in turn to suckle them, and gives them notice of her approach by a faint cry, which may be heard by an attentive listener on a still day at the proper season. It is not a little curious that Gilbert White, when penning the truly descriptive line in his "Naturalist's Summer Evening Walk,"

What time the timorous hare limps forth to feed,

had not something to say of the cry of the parent hare to its young. In his thirty-fourth letter to Dames Barrington he gives an account of a leveret that was suckled by a cat which called it "with little short inward notes of complacency such as they use towards their kittens," when the leveret came "gamboling after"; but we are not told that the latter made any cry in response, as happens when a leveret is called by its natural parent. Jesse, in his "Scenes and Occupations of a Country Life" (1853, p. 310), writes: "When hares are seeking their young at night in order to suckle them they utter a faint cry something like the feeble bleat of a fawn, and the leverets answer it, but in a still more feeble tone." This observation has since been confirmed by the late H. A. Macpherson in the volume on the Hare in Longmans' "Fur and Feather" series. An observant gamekeeper in the north of England informed Mr Millais that he could hear this cry of

the doe hare at a distance of 300 or 400 yards. He remarked that she runs the scent of her young just like a dog and utters this curious cry as she goes along, and that she also uses it to call them to her.

Poaching.—Poachers were long ago acquainted with the fact that hares call to each other in the breeding time, and could be attracted by an imitation of their cry. This is attested by some of the old writers on sport, who give figures of the pipe used for the purpose, and one such figure I have reproduced in "The Field" of March 25, 1905, from a plate by Gaston Legrand in "La Chasse Moderne." French poachers at the present day call the buck hares in the month of March by imitating with an ivy leaf the cry of the doe.

The following extracts from Dr Chandler's "Travels in Asia Minor and Greece" (1817), a highly interesting work by a classical antiquary and traveller, not only shows that at the time it was written the country of Xenophon was still famous for hare-hunting, but describes a mode of killing hares formerly practised by poachers in England, which will explain the meaning of the hare-pipe: "Hares are exceedingly numerous. Calling is practised in still weather from the latter end of May to about the middle of August. Three or four men in a company stand silent and concealed in a thicket, with guns pointed in different directions. When all are ready, the caller applies two of his fingers to his lips, and sucking them at first slowly and then faster, produces a squeaking sound, when the hares within hearing come to the spot. In this manner manyare slaughtered in a day. One of my companions, with Lombardi, a Turk and Greek or two, who were adepts, killed eleven."

Another form of hare-pipe would be more correctly described as a snare. It is formed of a hollow piece of wood about six inches long, through which a cord passes, ending in a noose, the other end of the cord being firmly pegged down, and the noose end of the pipe being sharply pointed, penetrates the neck of the hare when the noose tightens and causes immediate strangulation.

Then there is the hare-pipe which was prohibited by the Game Laws so long ago as the time of Richard II (13 Rich. II, c. 13). This statute prohibited the use by unauthorized persons of dogs for hunting, ferrets, nets, hare-pipes, or other engines to take or destroy hares, etc., and in James the First's time the statute 1 Jac. I, c. 27 enacted that every person who should at any time take or destroy any hares with hare-pipes, cords or any such instruments or other instruments

or other engines should forfeit for every hare so taken or destroyed 20s. This prohibition of the use of hare-pipes was continued by 22 and 23 Car. II, c. 25, as well as by 4 and 5 Will. and Mary, c. 23, and only dropped out of the statute book in 1831, when these and other game laws were repealed on the passing of what is now known as the principal Game Act, 1 and 2 Will. IV, c. 32. As in none of these statutes is the hare-pipe described, it is a matter of conjecture whether the instrument in question was a mouth-pipe, as figured by Gaston Legrand for imitating the cry of the hare, or the combination of pipe and snare which strangled the animal by its operation. From the words of the Act of James I, "hare-pipes, cords, or any such instrument," it might be inferred to be a snare; while as "nets" are referred to in the earlier statute, the contrivance may have been a pipe net; for the tunnel nets used for taking partridges, as well as wildfowl in decoys (introduced in the time of James I) are referred to by old writers as "pipes."

The natural history of the hare if followed out in detail would be very voluminous, and would extend far beyond the limits of the present article. It has been necessary, therefore, to confine attention to a few only of the many interesting points which suggest themselves. Hares swim well, not only when pressed by hounds, but also when in search of a mate, or seeking fresh feeding grounds across a river. This is especially the case on saltings near the sea or tidal rivers, when, to escape the incoming tide, a hare which has been surrounded by the water is compelled to swim to reach dry land. They like the saline flavour imparted to the pasture by the salt or brackish water from a tidal harbour.

Preservation.—Those who preserve hares would do well to bear in mind that food without shelter is not sufficient to ensure the maintenance of a proper stock. In times of much rain and heavy snow, hares leave the open country and betake themselves to thick hedgerows and coverts. Hence the more accommodation there is of this kind the better for the interests of sportsmen, since the fewer plantations there are upon a sporting estate the fewer will be the number of hares. They will undoubtedly seek shelter elsewhere.

J. E. HARTING.

THE MOUNTAIN HARE

LEPUS VARIABILIS

HE Scottish, blue, white, and mountain hare are all names for the same animal, which is not confined to the British Islands. Various specific names have been proposed for it in Europe, such as alpinus, borealis, and variabilis. The last-named was bestowed by Pallas in 1778, and has ever since been generally adopted. It is appropriate enough, having reference to the seasonal change of colour which in this animal is conspicuous.

It has of late been suggested that Linnæus described this species under the name Lepus timidus, but for the reasons stated in the foregoing article, I am unable to share that opinion. Moreover, the confusion which would arise in the literature of zoology by transferring the name timidus to the variable hare is too serious to be contemplated, and it seems wiser to follow the example of the majority of authors-auctorum plurimorum-who have employed the names here adopted (timidus and variabilis) for the last 140 years. It is unnecessary in a work like the present to discuss the various "sub-species" which have been proposed for both the common brown hare and the mountain hare, based either upon individual variation or geographical distribution. Some idea may be formed of the lengths to which modern systematists now go in changing names and creating "sub-species" when we find it seriously proposed to distinguish the common brown hare of England from the continental form by calling it Lepus europæus occidentalis, the description being taken from a specimen killed in Herefordshire.

We are told that the "British form" is, on the average, not so heavy as its continental representative; but I have never seen any hares in France, Holland, Belgium, Italy or Greece that at all approached in size and weight the fine big hares that we get in our own eastern counties. Again, we are told that the "British form" is of a richer and darker colour, but I have met with too many individual variations of colour even within the limits of a single English county to attach any importance to what may be called such "hair-splitting" views. I remember on one occasion, after a day's shooting in Norfolk, when 153 hares were laid out, seeing a number of them weighed. The difference in size, shape, colour and weight was so marked that a specialist in "hair splitting," if so disposed, might easily





THE MOUNTAIN HARE

have made half a dozen "sub-species" out of them. And yet they were all "British forms."

But to return to Lepus variabilis, which I have seen and shot in Scotland and Ireland, as well as in North Wales, where it has been introduced. Even in its summer coat, when its colour is darkest, its appearance and movements are so unlike those of the brown hare as to distinguish it at once from the latter at any distance.

Whether the Scottish and Irish hares are distinct is a question upon which there used to be a difference of opinion. That difference was expressed eighty years ago when, chiefly on account of the erroneous belief that the Irish hare did not turn white in winter, it was proposed to call the latter Lepus hibernicus. Bell thereupon separated them in the first edition of his "British Quadrupeds," 1837; but on reconsideration, subsequently decided that they were identical. Tomes and Alston shared this view, as expressed in the second edition of the "British Quadrupeds," 1874, in the preparation of which they both co-operated, and their opinion has since been generally accepted by both English and continental naturalists. Yet, after the lapse of forty years, the question has been once more revived, and in the latest publication on British mammals we are invited to share the author's opinion that the Scottish and Irish hares are specifically distinct.* In this view I am unable to concur, believing that the slight differences which are relied upon for differentiation of the latter may be attributed to the influence of the milder Irish climate, and the modified conditions of life under which Irish hares have had to exist.

Perhaps the most noticeable difference to be observed between the Brown and the Mountain Hare (irrespective of colour) is the superior weight of the former, and its longer ears and hind limbs. It goes without saying that hares on well farmed land, subsisting on spring corn, rich grass, clover, and roots, are likely to be in better condition and weight than those to be found in the Highland deer forests and on comparatively bare mountain sides. The average weight of a mountain hare in Scotland may be set down as between 5 lb. and 6 lb.; the heaviest I have noted, shot in Caithness, weighed $7\frac{1}{2}$ lb., and the biggest in Ireland 9 lb., but this was exceptional. Very good ones will weigh 8 lb., but there are a great many probably little over half that weight, and those obtained upon the heather in Ireland are not nearly so heavy.†

^{*} Barrett Hamilton, British Mammals, p. 328.

[†] See Harvie Brown, Fauna of Argyll, p. 43, footnote.

As might be supposed from the nature of its haunts, the Mountain Hare differs in its habits from the Brown Hare of the Lowlands. It is given to skulking amongst boulders on the hillsides, and when pursued, seldom goes far before retreating into some hole or cranny, in this respect seeking safety in hiding like a rabbit rather than by swift flight, like a brown hare. On this account it affords but poor sport for the gun, and were it not for the fact that it makes excellent soup, it would probably not often be shot by those who, in pursuit of grouse, or ptarmigan, have an object in reducing the weight they have to carry when climbing a steep hillside. Moreover, when a "hare drive" is resorted to, the Scottish animal affords but poor sport by comparison with "grouse driving," for, on account of its conspicuous colour and slow rate of speed, it is very easy to shoot. Grouse shooters, however, if they happen to be naturalists, will regard white hares with some favour, since they afford food for the eagles and hill foxes which, were it not for their existence, would take heavier toll of the grouse.

Whether the Common Hare and the Mountain Hare inter-breed is a question that is sometimes asked, and is generally answered in the negative. That might have been true years ago before any evidence on the subject was available, but it is no longer the case. More than twenty years ago ("The Field," August 29, 1891), I called attention to the fact of the occasional inter-breeding of the two species, and cited several authorities; and although some readers at the time professed to be sceptical on the point, they were subsequently converted, and it is now regarded as an accepted fact.

In "The Field" of February 18, 1911, Mr J. G. Millais wrote as follows:

"There has been always some doubt among naturalists as to the inter-breeding of the Common Hare and the Mountain Hare, and a statement which I made some years ago that such a cross was not only a fact, but a fairly common one, was received with incredulity.

"After the severe winters of 1881, 1885, and 1894 large numbers of blue or mountain hares descended from the mountains above the Tay, in Perthshire, and when spring came a certain number remained in the roughs and woods at river level for two and even three seasons afterwards. In fact, it is not uncommon to find mountain hares in the low Perthshire woods in any winter. However, after the cold winters of 1885 and 1894 the mountain hares remained low down all the summer, and in the autumn, both at Murthley and principally at Cowpark, in the Earn Valley, I saw killed in a day's shooting no fewer than eight 188

THE MOUNTAIN HARE

or ten undoubted hybrids between common and mountain hares. Thinking at the time that such hybrids were frequent, and of no special zoological interest, I did not preserve one, but on finding that my observations were doubted, and that the British Museum contained no specimens of the cross, I used every effort to obtain a Scottish specimen, but without success. However, last autumn I saw in the Vienna Exhibition two of these hybrids exactly similar to the specimens I saw at Cowpark in 1895, and, thanks to the kindness of the Swedish Government, I have been able to obtain them. These two specimens bear every characteristic that such a hybrid should possess, both skulls and pelage being intermediate between the two species. In one the common hare predominates, and in the other the mountain hare. Both were killed in Southern Sweden in December, 1909."

To this communication the following editorial note was appended:

"More than twenty years ago attention was directed in these columns to the fact that the brown and mountain hares occasionally inter-breed, and in 'The Field' of August 29, 1891, in an article on 'English and Scotch Hares' several cases were mentioned in which hybrids of this nature had been reported. Although a few of our readers expressed incredulity on the subject, evidence in support of the statement has been gradually accumulating. On December 17, 1896, at a meeting of the Linnean Society, a hybrid of this description was exhibited, which had been forwarded by Mr Assheton Smith, of Vaynol, Carnaryonshire, where the Scottish hare had been introduced, and where both species were at that time numerous. In 1897 it was stated in the 'Encyclopædia of Sport' (p. 505) that Mr Millais had come across several such hybrids in Perthshire, and was convinced that on the ground to which the blue hares descend from the hills and meet the lowland brown hares, such inter-breeding is not so uncommon as is usually supposed. It was reported by Professor Lönnberg ('Proc. Zool. Soc.,' 1905, i, p. 278) that such hybrids were well known in South Sweden, and attention was directed to his paper on the subject in 'The Field' of May 6, 1905. In the autumn of the same year Mr J. S. Gibbons, of Whitebridge, Inverness, reported ('The Field,' September 30) that he had a few days previously shot a hare which appeared to him to be a cross between a brown and blue hare, and that in the opinion of Messrs Macleay, the experienced taxidermists of Inverness, to whom it was forwarded, it was undoubtedly a hybrid

between the two. The additional facts now adduced by Mr Millais are of much interest, and confirm the opinion so long ago expressed in these columns,"

It is only natural that in parts of the country where the ranges of the two species overlap, they would come together and occasionally interbreed, but as the hybrids naturally resemble one or other of the parents, they must often pass unrecognized, and on this account are perhaps of more frequent occurrence than is generally supposed.

The Swiss naturalist Victor Fatio found that the brown hares which live in Alpine valleys often come across the blue hares of higher altitudes and inter-breed with them. He had seen several such hybrids obtained in the Bernese Oberland and the Valais.

The question whether hares and rabbits ever inter-breed is one that is sometimes asked, and apparently many persons believe in its possibility. They point to the so-called "Belgian hare" or "Leporine," which they assert is a well-known hybrid between these two species. That the animal is well known there is no doubt; it appears at every rabbit and poultry show of importance, and special prizes are offered for the most typical specimens. Its appearance, too, is that of a hybrid hare; but the resemblance is merely superficial. Sixty odd years ago a breed of rabbits originated in Belgium which somewhat distantly resembled the ordinary brown hare, and some enterprising breeder pretended that he had succeeded in crossing the hare with a rabbit, and that these were the progeny. Since this introduction the so-called "Leporines" have been bred repeatedly with a twofold object—to increase size and ostensibly to develop a rabbit of the form, colour, and fur of the wild hare. It is unfortunate that the public have been encouraged to believe in the existence of a hybrid hare and rabbit by the views expressed by such authoritative writers as George Henry Lewes, and the late John Simpson at one time consulting forester to the Earl of Wharncliffe.

G. H. Lewes, referring to this subject in his "Studies in Animal Life," remarks (p. 162):

"Between species so distinct as these a new hybrid race has been reared by M. Roux, of Angoulême, who every year sends to market upwards of a thousand of his 'Leporides,' as he calls them. His object was primarily commercial, not scientific. His experiments, extending from 1847 to the present time (1862),* have not only been of great

^{*} An account of his experiments will be found in The Zoologist for 1862.

THE MOUNTAIN HARE

commercial value—introducing a new and valuable breed—but have excited the attention of scientific men who are now availing themselves of his scientific skill and experience to help them in the solution of minor problems. It is enough to note here that these hybrids of the hare and rabbit are fertile, not only with either hares or rabbits, but with each other."

Again, Simpson in his little book, "The Wild Rabbit in a New Aspect," a second edition of which was published in 1908, states definitely (p. 82):

"The Belgian hare is a hybrid between the hare and the rabbit, and, as such, has been a puzzle to naturalists, because it is almost the only hybrid that is fertile and can perpetuate its kind."

Unfortunately these views are quite erroneous, and could only be true in the event of both parents having been rabbits. After what has been stated in our article on the Common Hare as to the very different conditions of the rabbit and hare at birth—the young of the former being naked and blind, while those of the latter are clothed with fur and have their eyes open—it needs not much reflection to conclude that a cross between these two species is a physiological impossibility. Darwin, writing on domestic rabbits and their variation,* observed:

"From what we hear of the late marvellous success in rearing hybrids between the hare and rabbit, it is possible, though not probable, from the great difficulty in making the first cross, that some of the larger races which are coloured like the hare, may have been modified by crosses with this animal. Nevertheless, the chief differences in the skeletons of the several domestic breeds cannot have been derived from a cross with the hare."

In conclusion, it may be said emphatically, in the words of Major Barrett Hamilton,† that no proof has yet been advanced that two such naturally antipathetic animals having such diverse structure, habits, glandular secretions, and odours, and such entirely different young, have ever united and produced offspring.

A great deal of legendary lore is interwoven with the natural history of the hare, to detail which would be out of place in a work like the present; but as the writer has been frequently asked two curious questions, namely, (1) whether hares chew the cud, and (2) whether a hare always sleeps

^{*} The Variation of Animals and Plants under Domestication, 1868, vol. i, p. 105.

[†] British Mammals, p. 238.

with the eyes open, it may be of interest perhaps to our readers to give brief replies to these inquiries. (1) We know that to the Israelites of old the flesh of the hare was forbidden as food, for the scriptural reason given in Leviticus xi. 6, namely, "the hare, because he cheweth the cud, but divideth not the hoof [like a ruminating animal], is unclean to you." The notion that "he cheweth the cud" was, of course, founded upon imperfect observation, for the hare, not being a ruminating animal, has neither the teeth nor the digestive organs which are requisite for such a process. How then came it to be supposed that a hare chews the cud? Because when reposing at ease it continually moves its jaws from side to side as if eating something, an action which may readily be mistaken for true rumination. Even the poet Cowper, who kept some tame hares for several years, and had constant opportunities for observing them, was deceived by this curious movement of the jaws. Referring to one of them, he says:

"Finding him exceedingly tractable, I made it my custom to carry him always after breakfast into the garden, where he hid himself generally under the leaves of a cucumber vine, sleeping, or chewing the cud, till evening."

But the explanation of this grinding motion is simple. The chisel-like incisor teeth of hares, rabbits, and other rodents, or gnawing animals, require to be rubbed against each other in order to preserve their edge, shape and position, and if this be not done, the teeth get out of order, become greatly elongated, and sometimes grow to such a length as to prevent the animal from feeding. (2) To the second question, whether a hare sleeps with the eyes open, the answer is no, and no better evidence can be adduced on this point than the observations made by Mr Robert Drane, of Cardiff, who, like the poet Cowper, has kept hares in captivity, and succeeded in making them completely tame. In the course of an article on "The Hare in Captivity," published in the "Transactions of the Cardiff Naturalists' Society" (vol. xxvii, 1894–95), he writes:

"One of my first errors was a belief that a hare sleeps with its eyes open, for by no artifice or arrangement could I catch my hare with closed eyes. That was because we had not grown sufficiently intimate to lay aside our society manners; but now my hare will sleep, and sleeping dream, with closed eyes not only in the room where I am, but also on my lap."

THE MOUNTAIN HARE

Subsequently, in the course of a letter ("The Field," March 25, 1905), he added:

"One very curious fact is that the pupil of the hare's eye contracts during sleep. Several of my hares have been tame enough to sleep soundly in my arms, and I have repeatedly opened the sleeping lids and found the pupil no larger than this O, and I take the degree of contraction to indicate the profoundness of the sleep, as a thermometer does temperature. This contraction in darkness seems contrary to the ordinary law of Nature. What, then, will be said when I state that the hare's iris conforms to that law under the influence of strong light? For I have several times reflected the strongest light into my hare's eyes by means of a hand mirror, and found that the pupil of the exposed eye—not the opposite one—contracts under the influence of the light fully as much (not visibly more) as it does during sleep in darkness more complete than the creature would experience in the field."

J. E. HARTING.

HARE SHOOTING

HERE are possibly not a few at the present day who would echo the sentiment of the old writers on field sports that the hare was not intended to be shot, but to be fairly coursed with greyhounds or hunted with hounds. This was the opinion of all who wrote in praise of hunting from the days of Xenophon and Arrian, and all through the ages to the time of Gaston de Foix, Jacques du Fouilloux, and our own Turbervile. Not that weapons were wanting in those days for a manifestation of the shooter's skill, for since very early times both the long-bow and the cross-bow were in use for such a purpose; but from the representation given of them in illuminated MSS. it would appear that they were employed chiefly for killing hares for food, by taking "sitting shots," so that little or no skill was required on the part of the shooter, and the practice, like that of netting or snaring, had nothing to recommend it as a legitimate form of sport. Indeed, a time came when these methods of taking hares were prohibited by statute, and penalties were imposed upon any persons making use of hare-nets, hare-pipes, and other engines for their destruction. For poachers and other habitual disregarders of the law such legislation probably was of little avail, but eventually a complete change in the mode of killing hares was brought about by the introduction of sporting guns and the use of small shot.

"As a sporting weapon," says Mr W. Greener,* "the gun dates from the invention of the wheel-lock, invented at Nuremberg in 1515. Before that period the long-bow in England and the cross-bow on the continent were the usual weapons of the chase. In the fifteenth century [qu. sixteenth], fire-arms were used for sporting purposes in Italy, Spain, Germany, and, to a lesser extent, in France. In Great Britain little use appears to have been made of them for game shooting until the latter half of the seventeenth century [sic], and at that time the arms used for the purpose were entirely of foreign make."

In the opinion of the writer this places the date of the use of shot-guns for killing game and wild-fowl in England a century too late. For the latter half of the seventeenth we should read sixteenth century, there being ample evidence to support this correction.

HARE SHOOTING

In the first quarter of the sixteenth century several kinds of sporting guns were known in France, and in 1515 the use of them, whether by gentlemen or other persons, was interdicted within two leagues of any forest belonging to the Crown. A little later, namely, in 1546, there was a general prohibition in France against carrying fire-arms and shooting indiscriminately, more particularly with arquebuses.* After 1554, however, the use of this weapon became more general, and it was apparently about this time that it began to be used for killing game in England.

The following letter from Sir Edmund Bedingfeld to Lord Bath, written in 1548, about the time of the passing of an Act for regulating the shooting with "hand-guns" and "hail shot," shows pretty plainly that it did not find favour with at least one class of sportsmen, namely, the falconers:

"My good Lorde, I beseech you to take knowledge to move as you shall think good for a redresse to be had for such persons as dayly do shoote in hande-gonnes, and beat out the fowles in ryvers and pittes, so as ther is no fowle that do remayne in the countrye. A man disposed to have a flight w' hawks may seeke tenn myles ere he fynde one coople of fowle to fly at, wheare in all yeres past there shulde have been founde in the same places ve coople of fowle. I have spoken to the clarke of the peace within Norfolk, who asserteyned me by his booke not to be above the number of iij persons entered into his book for to shoote w' gonnes, but surelie I think ther be in this shyre that daylie doth exercyse and practyse shooting at fowl w' there gonnes not so fewe as three score, of which number I cannot heare of any that may spend of lands being their owne above iiij score lb by yere. If this be not reamyded you w' all the rest of the nobilitie may put foorth your hawkes to breede, and keep no more. And thus I beseeche God to have yor Lordshippe and my good Lady your wyffe in moche honor. Yours to comaunde

EDMUNDE BEDINGFELD.

To the Right Honourable and my singular good Lorde, my Lord Bathe.

From this account we may well imagine the commotion that would be caused at this period by the general use of "hande-gonnes" throughout the country, and doubtless sitting hares were as likely as not to suffer by their introduction. Fortunately those early guns were more or less of clumsy construction, slow ignition, and uncertain effect; so that unless

discharged at close quarters at a sitting hare—or at a partridge on the ground, or wildfowl on the water, as the case might be—the result in most cases would probably be "a miss."

The art of "shooting flying" was then unknown, and apparently was not acquired until something like a century and a half later. At all events the birding-piece, the caliver, and the stalking-horse were all sufficiently popular at the end of the sixteenth century to suggest many allusions to their use in the works of Shakespeare and other Elizabethan dramatists.* In 1574 the price of a caliver, with flask and touch-box, was 14s., and in 1576, due perhaps to the latest improvement of the period, 24s.

But to return to the hare. During the period which intervened between the custom of taking hares by poaching methods, and shooting them with improved firearms, it was the fashion for noblemen, lords of manors, and large landowners to maintain "hare-warrens" on their properties, and these were sometimes of considerable extent. From the descriptions which have come down to us it would seem that the hares in these warrens were preserved for coursing, especially in or near downland. Aubrey, in his "Natural History of Wiltshire" (1690), describing "the grandeur of the Herberts, Earls of Pembroke," at Wilton House, Wiltshire, and referring, inter alia, to the kennels of hounds and other sporting dogs maintained there, particularly mentions the setting dogs used for hunting, and "the grayhounds for his hare warren." He tells us also that "at Everley is a great warren for hares, and also in Bishopstone parish, near Wilton, is another, and anno 1682 the Rt Hon. James Earl of Abingdon made another at West Lavington." † The hares of the Wiltshire downs were as famous then as now, and the fact that they are still sufficiently plentiful there is no doubt due to their continued preservation for coursing, notwithstanding the disadvantage at which they have been placed since the passing of the Ground Game Act, 1880, to which we shall have occasion to refer later on.

When considering the precise meaning of the word "warren" at the present day, we have to distinguish between what is indicated by the legal expression "free warren," and what is popularly known as "a warren." The latter is merely an enclosed field or piece of down land in which coneys and hares are reared. Anyone may have such a place, and it would

^{*}See Harting, The Ornithology of Shakespeare, pp. 241-244.

[†]The Natural History of Wiltshire, by John Aubrey, F.R.S., written between 1656 and 1691; edited by John Britton, F.S.A., and published by the Wiltshire Topographical Society, 4to, 1847.

HARE SHOOTING

be protected under the Larceny Act (24 and 25 Vict. c. 96, s. 17); but its possession gives none of the rights of free warren which can be derived only by a grant from the Crown—a privilege no longer extended—or by prescription or long use which presupposes or implies a grant.

The late Mr John Simpson, author of "Game and Game Coverts" (1907), and a useful little book, "The Wild Rabbit," now in a third edition, writing in 1908, observed:

"My occupation in connexion with woods and game preserves in many parts of Great Britain has often afforded opportunities for discussing this subject; but I have never seen or heard of a real hare warren conducted on practical lines."*

About halfway in point of time between the late Lord Pembroke's hare warren at Wilton and the present day we find an interesting bit of evidence concerning the abundance of hares in Wiltshire in that entertaining work by William Cobbett, "Rural Rides." Writing from Uphusband in October, 1822, after referring to the fine coursing he had witnessed at Tedworth, over the land of Thomas Assheton Smith, the famous M.F.H., he remarks:

"Not far above Amesbury is a little village called Netheravon, where I once saw an acre of hares. We were coursing at Everley, a few miles off, and one of the party happening to say that he had seen an acre of hares at Mr Hicks Beach's, at Netheravon, we, who wanted to see the same, or to detect our informant, sent a messenger to beg a day's coursing, which being granted, we went over the next day. Mr Beach received us very politely. He took us into a wheat stubble close by his paddock; his son took a gallop round, cracking his whip at the same time. The hares, which were very thickly in sight before, started all over the field, ran into a flock like sheep, and we all agreed that the flock did cover an acre of ground. Mr Beach had an old greyhound that I saw lying down in the shrubbery close by the house, while several hares were skipping about, with as much confidence as cats sit by a dog in a kitchen or parlour. Was this instinct in either dog or hares? Then mind, this same greyhound went amongst the rest to course with us out upon the distant hills and lands; and then he ran as eagerly as the rest, and killed the hares with as little remorse."

^{*}In my volume on the Rabbit in the Fur and Feather series (1898) I have devoted a chapter of thirty pages to the subject of warrens, and to this the reader may be referred who may desire information on the history and signification of the term "free warren," and the legal rights conferred by a grant of the same.

[†]Rural Rides in the Counties of Surrey, Kent, Sussex, Hants, Wilts, etc." by William Cobbett, M.P. for Oldham, edited by Pitt Cobbett, Vicar of Crofton, Hants, 2 vols, 8vo, 1893.

At the present day there is no excessive destruction of hares by coursing, and possibly never has been. Mr Gerald Lascelles estimates that nineteentwentieths of those annually killed in this country are shot. At the great Waterloo Coursing Meeting, he says, hardly a hundred are killed by the greyhounds, and the total number accounted for at all the coursing meetings of the kingdom would not reach the total destroyed by shooting on some of our great game-preserving manors. He refers particularly to the "sixties" and "seventies," that is, before the passing of the Ground Game Act, when hares were more numerous, and mentions the following bags in support of his views:

"On December 22, 1865, Lord Londesborough, with three other guns, shooting at Scoreby, in Yorkshire, killed 585 hares, besides a similar number of pheasants. In 1864 five guns on the Selby estate of the same ardent sportsman, killed 531 on November 11. On the Gedling estate of the late Lord Chesterfield, in Nottinghamshire, six guns on November 30, 1869, bagged 781, and on December 3 of the same year no fewer than 823 fell to the same number of guns. While in 1878, by six guns, at Londesborough, 1,217 were killed in three consecutive days in the month of December."

Since these statistics were penned, in 1896, it is probable that these totals may have been exceeded both in England and in Scotland, as they certainly have been in Austria, where it is the fashion to organize great "hare drives," and with a large party of guns to slay more than 1,000 in a day. An eye-witness of one of these Austrian drives informed the writer that he had in this way seen 1,300 hares killed in a day.*

The following letter on the subject of hares on the Wilton estate, from the Earl of Pembroke, addressed to the editor of "The Field," and dated from Wilton House, Salisbury, November 30, 1896, speaks for itself:

"My attention has been called to a paragraph in your last issue the wording of which might convey to your readers the impression that a bag of 1,700 hares was recently made by me and my party at Wilton either on one day, or during the week. As a matter of fact the total number of hares killed during that week was 369. I do not know from what source your correspondent derived his information, but he may have heard that some 1,800 hares have been killed on this estate during the present season, and have thought that the number was

^{*}A party of six guns on Lord Mansfield's Perthshire shooting on one occasion at least approached 1,300 hares killed in one day. "Country Life Library of Sport," Shooting, vol. ii, p. 189.

HARE SHOOTING

obtained during the week referred to. Owing to the dry spring and summer hares have done exceptionally well this year (1896), and the number killed will probably exceed considerably the average of the last fifteen years. I may add that the largest number of hares ever killed in one season here was 3,078, in 1869-70."

As a form of sport such drives as those above mentioned have little to recommend them. The unfortunate hares are driven towards the guns from long distances, and gradually drawing together like a flock of sheep, as the beaters advance, they present the easiest of shots as soon as they come within range of the guns. This is especially the case when driven up hill, as in Scotland. The facilities for rapid firing afforded by the use of modern "hammerless ejectors" render it well nigh impossible for any hare to escape, unless the drivers on the flanks are remiss. A more admirable form of hare shooting is that which presents itself during the partridge season, when a hare jumps up unexpectedly, and after a few hops, as if on three legs, lays back her ears and goes away at racing speed; offering a far better test of skill on the part of the shooter than is the case with a driven hare, especially if it happens to be a crossing shot. Or again, in the pheasant season, when a hare steals out of covert, pauses on the outside for a second or two, and then races away at full speed across a bare stubble where there is nothing to impede her course, as in a field of roots, and she can go at her best pace. Then a well timed shot taking her in the head results in a somersault (or, as the French say, culbute) on the part of the hare, and a smile of satisfaction on the part of the shooter, which usually becomes more expansive if any one else happens to be looking on.

And here it may not be amiss if the holder of a game licence for more than forty years ventures to give a little advice to such youthful sportsmen as may happen to peruse these pages. A hare, from its size, may appear a very easy animal to hit, and so it is; but it must be hit in the right place, namely, the head.

It is lamentable to see the result of a hasty or careless shot and witness the struggles of a wounded and perhaps screaming animal in its frantic efforts to get away. With an inexperienced shooter this may happen from one of two causes: either from shooting in too great a hurry and at too close quarters, or from risking a long shot, which should never be taken beyond five-and-thirty or forty yards. If a hare jumps up at your feet, let her go twenty-five yards before raising the gun, and then aligning quickly,

and swinging the gun well in front of her nose, the shot will be instantly fatal. When standing outside a covert on a shooting day one may often see a hare leap on to the bank and pause to look forward before jumping the ditch. A juvenile sportsman will instantly throw up his gun preparatory to taking aim, when the hare, seeing the movement, will slip back into covert, and try some other exit. What the shooter should do is to remain perfectly still until the hare has made up her mind what she will do. Let her come out and shape her course, which will generally be at right angles to the wood she is leaving; but should she run alongside it, that is, parallel with the ditch, beware of shooting while she is between you and the next gun on the side to which she is moving. This will apply also if the shooter is standing in a grass ride in a wood. Nothing is more dangerous than to shoot at a hare (or rabbit, as the case may be) running straight down a ride either towards or from the next gun. The risk of a pellet glancing from a stone may mean the loss of a friend's eye. And yet accidents of this kind are constantly happening through youthful impetuosity, or reckless shooting.

J. E. HARTING.

THE RABBIT

LEPUS CUNICULUS

a denizen of our woods and pastures, furzy commons and sandy warrens, no wild animal in this country is better known than the rabbit. Being widely distributed, and very prolific when allowed to obtain a foothold, it has come to be regarded with opposite feelings of approval and detestation according to the opinion of the various classes whose interests in regard to it have to be considered. From the utilitarian standpoint, as providing cheap and good food for the masses, the rabbit is undoubtedly a valuable animal, and although on that score something may be said for the hare, the higher market price set upon the latter causes it to be far less in demand with the majority of consumers. As affording sport with the gun to a large number of shooters whose purses are not long enough to enable them to rent pheasant or grouse shooting-or perhaps even partridge shooting at the enhanced rent asked at the present day—the rabbit is looked upon as a perfect godsend by shooters of small means, while no greater enjoyment can be provided for tenant farmers and their friends than a day's rabbit shooting in the woods lying adjacent to their farms or on land which is not in their own occupation. Here they not only enjoy a good day's sport, but have the additional satisfaction of helping to reduce the numbers of such as would otherwise invade their farms and damage their crops.

There is yet another class of persons to whom the presence of rabbits in their neighbourhood gives undoubted satisfaction, namely, the agricultural labourer. Unable to share with his employer the concurrent right to kill rabbits which is vested in the "owner" and "occupier" by the provisions of the Ground Game Act, the fact that the land is not in his own occupation does not deter him from trapping or snaring a rabbit or two now and then as opportunity may serve, for his Sunday's dinner. Nor is the professional poacher to be forgotten, who finds, in the course of his experience, that "ground game" is the easiest of all to take, and the easiest to dispose of. Many a small poulterer or fishmonger has no objection to hang up a few rabbits, where he might not care to display pheasants or partridges for fear of arousing suspicion as to the source of supply. Thus there are very many persons who, for one reason or another,

201

look favourably on the existence of rabbits within their reach. Incidentally a great many trades are benefited where rabbits are preserved. Gun makers, cartridge makers, boot makers, gaiter makers and others, in turn derive a profit by supplying the wants of local sportsmen, nor should we lose sight of the fact that an enormous addition is made to imperial revenue by the number of ten-shilling licences which are taken out under the provisions of the Gun Licence Act.

On the other hand, as above hinted, there are many who regard rabbits with detestation. Foresters on large estates are never tired of denouncing the damage done by rabbits in young plantations, as well as in game coverts. Landowners who let their covert shooting generally take care to have inserted in the leases a covenant on the part of the shooting tenant to keep down the rabbits, while we have often heard a good-natured host declare that he would like to see rabbits exterminated, as being the cause of constant squabbling and litigation, giving more trouble than they are worth. Before the Ground Game Act was passed, farmers no doubt had a legitimate grievance, in respect of damage done to crops by hares and rabbits, and claims for compensation were of regular occurrence as rent day came round; but now they have the power to obviate much of the damage done by killing the ground game over land in their own occupation. If no other interests but their own had to be considered, this might be all very well, but unfortunately, as daily experience shows, the operation of the Ground Game Act is by no means regarded with general approval. On the contrary, it has given much dissatisfaction to those who have as great, if not a greater, interest in the matter than the tenant farmers, namely, the owners of the land and their shooting tenants. To a landowner who lets his shooting it means depreciation of rent; for his shooting tenant will not pay anything like so good a rent as formerly if the killing of hares and rabbits has to be shared with the tenant farmer, or "occupier," as he is termed in the Ground Game Act; while the shooting tenant himself is still further dissatisfied by the constant disturbance of the ground by the "occupier" who, under pretext of keeping down the rabbits in exercise of a legal right, is perpetually setting traps and wires, which catch not only rabbits, but pheasants, and ferreting hedgerows which afford some of the best nesting sites on the land for partridges. Moreover, there appears to be amongst tenant farmers a widespread ignorance of the conditions upon which the Act gives them a concurrent right with their landlords to kill or take the ground game. Presumably





THE RABBIT

it does not occur to them to inquire where they can obtain a copy of the Act in order to ascertain what restrictions there are upon shooting and trapping ground game, and they imagine that they can invite a party of guns to participate in a day's shooting, or, under the pretext of employing a professional rabbit killer, allow a friend to have a day's rabbiting and give him a few rabbits by way of reward. This is not only unauthorized by the Ground Game Act, but expressly prohibited by the section which defines what persons may be authorized by an "occupier" under the Act to kill ground game with firearms. But it is unnecessary in this place to pursue the subject further, since we shall have to discuss it at greater length when we come to deal with the law relating to deer and ground game in the final chapter of this volume.

In the present chapter it is proposed to devote a few pages to the natural history of the rabbit, indicating some of the points in which rabbits differ structurally from hares, showing also the divergence in their habits, variation in colour, production and care of young, relative speed, average weight, average age attained, power of swimming, choice of food, natural enemies, unexpected courage in defence of their young, and other traits of character little dreamt of by those whose only object in approaching a wild rabbit is not to observe its ways, but to take its life.

The structural differences between a rabbit and a hare are chiefly apparent in the skull, and the relative length of the ears, and hind limbs, which are much shorter in the rabbit than in the hare. In the latter animal we note the greater complexity of the maxillo-turbinal bones. The dentition in both hare and rabbit is typical of a rodent or gnawing animal. Four large incisors, two in the upper and two in the lower jaw, are formed of dentine or hard bone, the front surfaces being composed of layers of very hard enamel. In the natural condition these teeth are in opposition, and wear each other away in the act of gnawing. The hard enamel in the upper pair cuts away the softer dentine in the lower, leaving the sharp front edge of enamel standing up like the edge of a chisel, and the lower perform the same duty for the upper. Thus four sharp chisel-edged teeth are formed which act most efficiently in gnawing the hard food of the rodent, such as bark and roots. If by any accident the lower jaw of the animal is displaced, as occasionally happens from the impact of a shot, the incisors in the fractured jaw are distorted, and do not meet those above them; and as they are not then worn away by use, they continue to grow sometimes to an extraordinary length. The manner in which

203

animals thus deformed adapt themselves to new conditions is marvellous. They not only continue to feed, but to live a long time after the injury, as shown by the ossified condition of the fracture when at length it comes to be examined.

The different mode in which hares and rabbits feed is noteworthy. You may generally tell whether turnips have been nibbled by hares or rabbits by the difference in the mode of attacking the roots. A hare will bite off the peel and leave it on the ground; a rabbit will eat peel and all. A well-known Irish naturalist, Mr R. M. Barrington, has observed a marked difference also in the method pursued by a rabbit and a rat when eating a turnip. If the turnip is growing, and a portion of the bulb is still in the ground, a rat generally eats all round it and leaves the centre for the last, whereas a rabbit begins at one side and works right through to the other side. A rat will bite off the rind, as a hare does, and will leave it in chips on the ground; a rabbit, as just remarked, will eat peel and all. Rats very often will leave a turnip half eaten to go to another; but if they mean to consume the bulb they invariably finish in the middle. The top falls over at last with a truncated portion of the bulb attacked.

When pointing out some of the most marked differences which exist between a rabbit and a hare, we alluded *inter alia* to that which exists in the relative length of the limbs, and this is correlated with the different mode of retreat adopted by the two species. A rabbit seeks safety by concealment in a burrow; a hare seeks safety in flight. Obviously the greater length of the hind legs in the latter animal gives greater power and speed, and this is especially noticeable when a hare is going up hill. The shorter limbs of the rabbit are useful in other ways, namely, for throwing out the soil behind it when burrowing, and for giving the alarm to its companions by thumping on the ground, and so attracting the attention of those within hearing.

The advantage of having a white under-surface to the tail is also apparent on reflection; for when, on the approach of an intruder, while rabbits are out feeding, those nearest to him begin to scuttle away, the little white flag in motion at once attracts the attention of others, and all speedily make for their burrows.

One of the most important differences between the rabbit and hare is the condition of the young at birth. In the case of the former the young are born underground, and are blind at birth; in the case of the latter they are deposited in a "form" on the surface of the ground, and are born with

THE RABBIT

the eyes open. This difference, no doubt, is correlated with the divergent habits of the two species; for the very young leverets are so soon able to move away from the place of their birth that they do not stand in need of the same protection and concealment as the blind and helpless young of the rabbit.

The wild rabbit will begin to breed at the age of six months, and may have half a dozen litters in the year. Early rabbits will breed the same year. The period of gestation is twenty-eight days, and the number of young in a litter is generally from five to seven.

Instances in which rabbits have produced their young aboveground, like hares, are occasionally reported, but cannot be regarded as common. A good deal depends upon the nature of the soil in the locality frequented by them. For example, on moors where the soil is very wet, rabbits will sometimes refrain from burrowing, and content themselves with runs and galleries formed in the long matted heather and herbage. In very strong ground, too, where burrowing is more laborious, they will sometimes merely scratch a slight hollow, and make a "form" like a hare. In some cases in which newly born young have been found aboveground, it is quite likely that they may have been temporarily removed by the parent from some source of danger, as, for example, the flooding of the burrow by heavy rain. In such circumstances these animals will quickly remove their young, carrying them one at a time in the mouth, as a cat does her kittens.

Although the regular breeding season with rabbits is from February until September, does in young are sometimes killed as late as November, but this is not a common occurrence.

One may tell an old rabbit from a young one by feeling the joints of the forelegs. When the extremities of the two bones which unite to form the joint are so close together that no space can be felt between them, the rabbit is an old one. On the other hand, if there is a perceptible separation at the joint the animal is a young one, and is more or less so as the bones are more or less separated. Another mode of distinguishing the two is by the claws, which, in an old rabbit are very long and rough, in a young one short and smooth. The latter also has a softer coat. When fresh killed a rabbit will be stiff and the flesh white and dry; when stale it will be limp, and the flesh will have a bluish tinge.

The average term of life in the wild rabbit can only be surmised from what has been ascertained of individuals kept in confinement. One

captured when about ten days old, and allowed the run of the house, became very tame, and lived for six years. Another taken when only a few weeks old, and brought up by hand, was reported to be alive and well in its eleventh year.

The average weight of a wild rabbit may be set down at from 3 lb. to $3\frac{1}{2}$ lb., or about the weight of a good cock pheasant, but, naturally, much will depend upon the abundance, or otherwise, of food, and the difference in weight between rabbits on a light soil with nothing but innutritious grass to feed upon, and those from highly cultivated farm lands growing plenty of roots and clover, is very noticeable. A rabbit shot in Lincolnshire in November, 1892, weighed 4 lb. 10 oz., and several have been reported in "The Field" which weighed considerably over 4 lb. An old buck killed in the snow just before Christmas weighed, before being paunched, 4 lb. 13 oz., and this was in a district where no fresh stock had been introduced to increase the size. Under similar conditions at Newport Pagnell, in January, 1890, one which attracted attention from its size, was found to turn the scales at 4 lb. 14 oz. Rabbits weighing 5 lb. and upwards, although, of course, not common, have been several times reported. In February, 1890, a correspondent at Lichfield wrote word that he had obtained one which weighed 6 lb. all but 2 oz., and was of opinion that it was a pure bred wild rabbit. When so-called wild rabbits of such extraordinary size are reported there is naturally reason to suspect that they must be the result of a cross with tame rabbits that have been turned down, if not on the same ground, at all events on adjoining land; and in some cases this has been proved to be so. In the opinion of the writer it is a mistake to turn out tame rabbits on a sporting estate, for although the result no doubt will be to increase the size of the progeny, that is not what is wanted if they are to afford sport with the gun, and tame rabbits seldom burrow, but live on the surface like hares. The desideratum is a strong active rabbit with the highest possible turn of speed, and not a clumsy animal that can hardly be made to move. In a warren, of course, where rabbits are only reared for market and are always ferreted or netted, or trapped, the case is different; speed counts for nothing, and the heavier the animal the better will be the market price obtained.

Within certain limits, wild rabbits are subject to some variation in colour without any admixture from tame stock. White, black, sandy and silver-grey are all well-known varieties, and although they cannot be said

THE RABBIT

to be common, several localities might be mentioned in which there is an unusual preponderance of either white or black ones. "Silver-greys" can be readily reared in the open, and there is no difficulty in keeping them apart from the ordinary wild stock; but they have nothing to recommend them from the sportsman's point of view, and the value of their skins at the present day is hardly sufficient to warrant any special outlay in rearing them. The question whether rabbits and hares ever inter-breed has been already discussed in the chapter on the Mountain Hare (page 190), and the reader may be referred to the remarks there made. After what has been stated above as to the very different conditions of the rabbit and hare at birth—the young of the former being naked and blind, while those of the latter are clothed with fur and with their eyes open, it must be apparent that a cross between these two animals is a physiological impossibility.

The rabbit is usually regarded as one of the most timid of animals, seldom permitting a very near approach—unless when in a "seat" it believes itself to be undiscovered—and usually bolting at the first alarm. The case is different, however, when a doe has young to look after. Her natural courage is then displayed in a way that is often astonishing. In defence of a young one she will boldly pursue, and even succeed in driving away a weasel, or a crow, and rescue the youngster by carrying it away in her mouth. I have elsewhere chronicled several instances of this kind. Yet notwithstanding the fierce way in which both rabbits and hares will defend their young, we very seldom hear of their attempting to bite when taken in a net or when picked up wounded. In forty years' experience as a sportsman, during which time I must have killed, and seen others kill, thousands of rabbits, I have never seen anything of the kind happen, but I have heard of perhaps half-a-dozen such cases, from which I infer that they must be quite exceptional.

As to the comparative speed of hares and rabbits, some difference of opinion prevails. A rabbit is said to run faster than a hare for thirty-five yards; and no one would think of comparing the two but for the few seconds that elapse after a rabbit is pushed from its "seat"—when it runs its fastest—and after the hare is started, uncertain, timidly cantering off, but occasionally racing away at a speed which few four-footed creatures excel. The rabbit, with its short legs, only half the length of a hare's, and its shorter body, twists and swerves aside with a jerky motion, and really seems to be going at a tremendous pace. The hare, with her long

legs and the stride and grace of a racehorse, moves away so evenly that most people do not realize her true speed. No one who has shot at a hare can doubt her superior pace.

Sportsmen who shoot much over marshes and districts where dykes and drains abound, must have noticed that hares, and occasionally rabbits also, will take to the water when hard pressed. Hares have a great liking for sitting out upon the higher ground of the saltings, and then, of course, when overtaken by a spring-tide, they are sometimes forced to swim the creeks in order to reach dry land. Rabbits probably have less occasion for exercising their swimming powers, since they do not travel so far away from the woods and hedge banks, in which they usually take up their quarters. Nevertheless, they have been occasionally observed to swim well. The appearance presented by a rabbit when swimming as compared with a squirrel and stoat, is well shown in a sketch by Mr J. G. Millais at page 44 of his work on "British Deer." For the purpose of obtaining accurate pictures of the various modes in which wild animals swim, he had live specimens caught and placed in the water, and then rowed alongside them for some distance, until he had made correct outline sketches.

Rabbits are unquestionably the kind of stock to make the finest turf; they bite closer than any other animal that grazes, and the best turf for gardens is that taken from warrens, or from downland on which rabbits abound. Sandy commons covered with furze are a favourite resort of rabbits, and on such ground they often increase rapidly in numbers. The soil being light and friable, is easily excavated, and the furze affords not only a secure retreat, but also a never failing supply of food in the young tops of the plants, which are sufficiently tender before the spines have become matured.

In the choice of food rabbits do not appear to be very particular. They will eat almost anything that is green. Indeed, so destructive are they to most plants and young growing trees, that it is a matter of importance to game preservers, who want underwood in the coverts as shelter for pheasants, to ascertain what shrubs are "rabbit proof." Common rhododendron, though not absolutely "rabbit proof," is not so liable to be attacked as many other shrubs. It will grow in shady places better than any other evergreen, especially if the soil is sandy and moist. But although, as a rule, rabbits will not injure rhododendrons when the latter are well established, they will gnaw them—when freshly planted—unless

THE RABBIT

protected. It is said that they will not touch Rhododendron ponticum even if the plants are small and the winter severe. Nor will they feed upon elder, which has the recommendation of growing well under trees, and when "plashed," rabbits will lie well under it. They are not to be trusted near hollies or young osiers. Indeed, they seem to be rather partial to hollies, and in time of snow will attack even old trees. In hard weather, too, both laurels and privet suffer from their depredations. The larger kinds of box, snowberry plant (Symphoricarpus) and butcher's broom (Ruscus aculeatus) are recommended where the soil is favourable for their growth. and for wet places scarlet dog-wood (Cornus sanguinea). In moist woods too, a good thing to plant is Carex pendula, a common sedge which forms good evergreen ground covert, and is very free. In like soil the woodrush (Luzula sylvatica), briar, and wood grass (Aira cæspitosa), may be recommended. In the way of berried shrubs nothing is more beautiful than a well-grown specimen of Cotoneaster affinis. Every year it is laden with bunches of glossy red berries. It is well adapted for planting along the edges of game coverts, as it affords plenty of food for pheasants, which are very fond of the berries. Sir Herbert Maxwell, in his delightful "Memories of the Months" (1897, p. 92), has published a useful list of ornamental plants for game coverts which may be more or less relied on to defy the attacks of rabbits; although there are others such as the American partridge-berry (Gualtheria) and several kinds of barberry, which, if protected when first planted out, can take care of themselves afterwards. In young plantations where rabbits and hares abound, there is nothing so effectual as wire netting until the trees are strong enough, and tall enough to be out of the way of their attacks. Where it is necessary or desirable to feed rabbits in winter there is nothing better than old roots and hay, but they are fond of acorns also, and fatten well on them. The oak, indeed, is an invaluable tree in game coverts; for not only rabbits, but pheasants, wood pigeons, and wild ducks are all very partial to acorns, and feed greedily on them. In addition, such pasture as they can get for themselves may be supplemented by hay, crushed oats, and wood-cuttings for the sake of the bark; but this applies rather to warrens and to places where the food is restricted by reason of enclosure with wire netting. Where rabbits are not restrained within certain limits, but are able to get out and roam where they like in quest of food, they can generally manage to get a living without any such assistance as that above indicated, even in districts which look most bare and unproductive.

209

Like most other wild animals, rabbits have a host of natural enemies. Foremost amongst these, because so pertinacious a pursuer, hunting by scent, is the stoat, which will not only enter a burrow, like a ferret, and cause the inmates to bolt, but will pursue a rabbit in the open like a foxhound, and sooner or later overtake it and kill it.

I have many times been an eye-witness of both these manœuvres, and, standing motionless to watch the performance, have been struck with the courage and pertinacity displayed by a stoat in attacking and vanquishing an animal so very much larger and heavier than itself. Its smaller relative, the weasel, from its diminutive size, is compelled to restrict its attacks to comparatively small rabbits, and can more easily obtain mice and small birds, which form its staple food. Indeed, its extreme utility in destroying house mice in the rick yards and outhouses, and short tailed voles in the meadows, where they do an infinity of damage to the grass, should ensure its protection at all times, whatever may be said against its larger relative, the stoat. Badgers will dig down upon young rabbits at the end of a burrow and scratch them out, as may be seen by the marks of their claws on the surface, and bits of fluff that lie scattered about near the scene of operations. The fox will lie in wait for rabbits of any size, and usually captures them by stealth or stratagem. A mortal enemy to young rabbits is the common brown rat, which, during the summer months, quits the barns, stables, and outhouses, and lives out in the country, frequenting the coverts and hedge banks, especially those which have been perforated by rabbits. Here these marauders take up their abode, and do no end of mischief in taking the pheasants' food, eggs, and pheasant chicks, in addition to the young rabbits. There is no greater pest to the game preserver than rats in the coverts, and many pounds sterling would be saved in the course of the year if only concerted measures were taken to ensure their destruction. For this reason we are not at all in favour of exterminating stoats; for although both rats and stoats kill rabbits, they are not only rivals in this respect, but deadly enemies. We have seen a stoat attack a rat much heavier than itself, and, after a severe struggle, kill it and drag it away out of sight. Stoats therefore do good by keeping down the rats, and thus saving the pheasants' food. Other enemies of the rabbit are the buzzard and the brown or tawny owl, both of which birds are sorely persecuted by keepers with trap and gun, and seldom allowed to live long when once their presence has been made known. But here, again, we think a mistake is made, for while both these birds will take

THE RABBIT

rabbits, the owl has neither the strength nor the weight to hold an old one; both are inveterate rat-catchers, and (the buzzard by day and the owl at dusk) persistently kill them whenever they have a chance. We have seen a brown owl between 4 and 5 o'clock in the afternoon, just after the pheasants had been fed in a long ride, come off an oak tree, glide down the ride, and pick up a rat that was busy with the pheasants' food, and carry it away into the wood. Rats and mice being the natural prey of owls, we are inclined to think that in keeping down the numbers of these pests they do more good than harm, and accordingly deserve greater protection than is usually accorded to them. We know, from an examination of their "pellets" or "castings" that the number of rats, mice, and small birds (chiefly sparrows) captured by them is greatly in excess of any other prey.

J. E. HARTING.

RABBIT SHOOTING

OT until the autumn leaves have commenced to fall, and

briar and bramble have begun to look thin in the coverts can rabbit shooting be indulged in with much advantage. The undergrowth will be too thick for any game to move through it rapidly, and the rabbits can only creep about, scarcely showing themselves and affording but poor chances of a shot across the rides. For so long as there is any covert they will stick to it, and until the underwood gets thinner they will double back and defy the most strenuous efforts of beaters to get them out. Nevertheless, long before the big woods can be beaten, rabbits will afford some amusement in the hedgerows amongst old pastures, if worked with one or two good spaniels and a gun on either side to shoot those that can be forced to bolt. Again, when the corn is ripe, and the reaping machine is at work, going round and round the field, laying swathe after swathe, and gradually reducing the area of standing grain, the rabbits, instead of bolting, will work towards the centre, availing themselves to the last of the little shelter that remains, until the reapers, at the bidding of the sportsmen, stop the horses, and, constituting themselves beaters for the occasion, put out rabbit after rabbit towards the expectant gunners. Thus pressed, they will make in fine style for the nearest hedgerow until turned head over heels by a well-directed charge of No. 6 shot. In this way a score of rabbits may often be killed in half an hour by a single gun, while if two guns are posted on opposite sides the fun will be all the merrier while it lasts. The farmer will be well pleased, and the harvesters too, if they receive, as they should do, a rabbit or two apiece for their pains.

Pending the advent of covert shooting there are few pleasanter ways of spending an afternoon than by shooting rabbits on a furze-clad common, either with dogs or beaters, or both. It is an advantage to use spaniels that can retrieve, for a wounded rabbit will often crawl away into thick furze where, without the aid of a dog, it is difficult to find. The stuff is often so dense that it is impossible to see the surface of the ground, and many a rabbit hit hard, or, as sometimes happens, killed by the dogs, is left behind for want of one that can bring it out. For this purpose spaniels are preferable to terriers, and, being less excitable, they are not given to wander so far from the guns. Their longer coats, too, serve them in good stead in the sharp-pointed furze brakes which they are compelled to face.

RABBIT SHOOTING

In the earlier part of the season, when the underwood is still pretty thick and patches of fern and bramble afford strongholds for game that can scarcely be invaded without the help of dogs, spaniels are extremely useful, for they can creep through places where a beater would be hung up, and push forward many a rabbit which would otherwise be certain to go back. In such covert, too, a stray woodcock will often lie so close as to allow a beater to walk past him, while his scent will betray him at once to the questing spaniel, who will very soon have him on the wing.

On this account a team of close-hunting spaniels will be found invaluable early in the season, especially if broken, as they should be, to hunt always within range of the guns, and to drop to hand when bidden.

Later on, when the woods get more open, and the beaters can move more freely, the spaniels may be dispensed with, and in their place two or three steady retrievers may be employed, which should never leave the heels of their owners until bidden to "hie lost." They should then be allowed to work entirely under the direction of their masters, and not be confused by directions given by other people, who are often too ready to tell a dog what to do instead of leaving him to his own devices, which are much more likely to lead him right if he is a good bred one and has been properly handled.

Where the stuff is very thick, rabbits will often linger on the edge of a ride until the beaters are almost upon them. Three or four may be seen crossing at the same time, and the variety of shots afforded by rabbits in covert is best known to those who have tried to hit them. The secret of success lies in holding well forward, and swinging the gun ahead as the trigger is pulled. Truly a day's covert shooting without rabbits would lose much of its enjoyment; for firing overhead shots at pheasants all day would be very monotonous work. This is so generally recognized that on the eve of a shooting party a great deal of trouble is often taken to stop the rabbits out, so that they may be found above ground when wanted. To do this properly will give employment for several days to the keeper and his men, and requires no little skill and judgment. A good deal will depend upon the sort of ground on which they are to be "stopped out." If there is no covert, or very little, and that not of the right sort, all efforts to induce rabbits to lie out will be in vain. Nor will it be of much avail if the grass is thick but grazed over by cattle, or disturbed by dogs, for the rabbits will then get no rest, and will be very loth to stay there. There is no better covert than brambles, and next to that long sedgy grass (Luzula sylvatica). If the

ground outside a covert is very bare, a good plan is to scatter small bunches of light thorns about the fields in the spring. Through these the grass will grow up, and while by reason of the thorns it will escape the mouths of cattle, it will form snug lying for rabbits.

To this it might be objected that bunches of thorns scattered about fields where sheep are pastured are not likely to improve the quality of the fleeces; but no game preserver would care to see sheep feeding close up to a game covert, spoiling the fences and disturbing the nesting-places. Moreover, the thorns serve another useful purpose in frustrating the attempts of poachers to use long nets outside the coverts.

There are various ways of making rabbits lie out. One plan is to cut a number of pegs about eight inches long with a slit in the top, into which is inserted a piece of folded paper dipped in paraffin, or spirits of tar. These are stuck in the ground opposite holes which have been first stopped (to keep the rabbits in and allow them to get hungry) and then reopened to let them out—when they will feed greedily. The smell of the paraffin, or spirits of tar, will deter them from returning. Another plan is to use a rope's-end frayed out, soaked in paraffin, and then lighted at the windward holes of the burrows. Some keepers dispense with stopping, and merely stick the pegs in front of the holes two clear nights before the coverts are shot. The use of sulphur has been tried, but is not recommended, for if only a moderate dose be applied it will cause a rabbit not merely to bolt, but to desert the hole for ever; while if the fumes are too strong the inmates will be suffocated.

Some people prefer "fuses" for bolting rabbits, and several different kinds are on the market. They may be obtained of Messrs Brunton and Co., Cambrian Safety Fuse Works, Wrexham; Nobel's Explosives Company, Kingsway, London, W.C.; or Messrs Gilbertson and Page, Hertford.

In the park at Weald Hall, Brentwood, Essex, after the use of some of these fuses a party of guns in one day shot 1,027 rabbits, and on the following day, over the same ground, 405 more. In the employment of fuses, however, success must in some measure depend upon the nature of the ground, for where the burrows are large and rambling it has been found by experience that fuses are of little or no use.

The late Mr T. J. Mann, in north-west Norfolk, adopted a plan which he found very efficacious, and which he described in "The Field" as follows:

"Two days before we shoot the woods the keepers take a lined ferret on the back of which is smeared a strong solution of asafætida. The ferret

RABBIT SHOOTING

is then worked a short way into all the holes which can be got at. The good sport subsequently obtained in the rough meadows round the woods affords the best criterion as to the success of this plan.' From personal experience we can vouch for its efficacy. The only drawback is the time it takes when a large number of burrows have to be worked.

In his practical little book on "Rabbits for Profit and Rabbits for Powder," Mr Lloyd Price has shown what extraordinary bags may be made of rabbits only, when the ground is laid out specially for their preservation, and attention is paid to the proper way of showing them.

He mentions bags of 1,850, 2,500, and 1,650 rabbits in one day, beating only half the ground, and since the publication of his book these figures have been considerably exceeded on his own ground at Rhiwlas, North Wales. For instance, a party of nine guns shooting there killed 3,684 rabbits in a single day, and on another day, two years later, as many as 5,086. Of this last number 920 were shot by Lord de Grey. The next best bag of rabbits made by a single gun was that of the late Sir Victor Brooke, who, shooting in his own park at Colebrooke, Co. Fermanagh, in 1885, killed 740 rabbits in a day to his own gun. He fired exactly 1,000 cartridges, and shot from his right shoulder for one half of the day, and from his left the other half.

With a large party and on a large acreage one of the most celebrated days at rabbits was that which happened at Bradgate Park, Leicestershire, the seat of Lord Stamford, where on one day in December a party of thirteen guns accounted for 3,333 rabbits, besides twenty-six head of feathered game. The way in which these operations were carried out has been described by the park-keeper, Mr J. B. Lucas, who kept an account of the game killed, and assisted in the management of the beaters at Bradgate for many years, including that in which this celebrated bag was made.

The principal home of the rabbits was an extent of several hundred acres of hills and rocks, rough, poor ground, covered with fern, rushes and coarse grass. A small herd of red deer existed in this part of the park, which was surrounded by a stone wall six or seven feet high, built without mortar in the manner usual in Charnwood Forest. The deerpark adjoined it on one side. Three walls, which were built at right angles to the main boundary wall and ran out into the deerpark, formed two enclosures, one about thirty acres, the other about forty acres. Holes were made and fitted with wooden doors at intervals along the main wall, so that the rabbits could be allowed to feed in the

deer park at pleasure. They were never allowed to establish burrows in the two enclosures named, and as there was plenty of fern and rough grass in them, there was no lack of covert for shooting purposes. A good many rabbits were bred in another part of the deer park. To get at these a portion of the best feeding-ground was kept free from burrows. The same tactics were pursued inside the warren. Large patches of ground alongside the wall were set apart, the fern mown down at times to improve the grass, and all holes dug out. The rabbits were not allowed to feed on these patches and enclosures for a few days before the day of shooting, and great was the anxiety of all concerned when the night for the pitch arrived. This was, of course, the night before the appointed shooting day, and the bag depended on the wind and weather being favourable. Everything was kept as quiet as possible inside the park and warren, and as soon as the proper moment had come, when the rabbits were supposed to be well on the feed, the doors in the wall were shut and locked, and long nets of the usual square-meshed stop pattern were set between the burrows and feeding patches. Sometimes the whole thing was a failure. Thick fog or heavy rain will keep rabbits at home effectually. When the pitch was successful, there was some very pretty shooting, and by no means easy. The rough ground was always well covered with long grass and fern, so that by the time the guns were posted and at work the rabbits were seated all over their allotted area. In one day 2,103 were killed over the whole beat.

In striking contrast to this kind of shooting mention may be made of rabbiting on the sandhills and in the cliffs, the enjoyment of which depends rather on the remoteness of the situation, the picturesqueness of the surroundings, and the invigorating air which blows in from the sea, than upon the amount of shooting to be obtained. For it will often happen that rabbits on the coastline may be plentiful enough, but from the nature of their haunts—which may be exposed sandhills with innumerable burrows, or rugged cliffs full of holes and crannies—it is by no means easy to get within shot of them. They will often wait, apparently with little or no concern, until you are very nearly, though not quite, within range, and then, having admirably judged the distance at which they feel safe, will scuttle off to their burrows out of harm's way.

In such situations as this, and indeed on exposed ground of any extent, such as a warren, or open downland, where rabbits are plentiful but covert scarce, the proper weapon to use is a small-bore rifle. This will be found very effective at rabbits beyond the ordinary range of a shot gun, and

RABBIT SHOOTING

makes so much less noise that rabbits are not nearly so much scared by the report. The comparative lightness of a small-bore single rifle and the rapidity with which it may be fired and reloaded when fitted with a modern ejector makes it an extremely handy little weapon for the purpose. Moreover, it affords the shooter no end of amusement and a greater test of skill than a shot gun; for it is obviously more difficult to hit a rabbit with a small bullet at sixty or seventy yards than it is to knock it over with an ounce of No. 6 shot at five and twenty.

When shooting rabbits with a rifle, a wattled hurdle may be put up here and there on open ground where the rabbits lie out, under cover of which they may be approached, or waited for within range. Their sense of smell and hearing being very acute, they should always be approached up wind. Another plan is to sit up in a tree, for by being above them they are less likely to wind you. Success, of course, will depend in a great measure on the skill of the shooter, coupled, perhaps, with a certain amount of luck in getting shots at short ranges. Something also will depend on the distance at which a rabbit is fired at. It is not every bullet that finds its billet. When shooting rabbits in this way it is well to bear in mind that the dead ones should be allowed to lie where they fall until it is time to go home; for if you leave your place of ambush periodically to pick them up, the chances of sport will be materially lessened.

J. E. HARTING.

THE POINTER

T is with regret I write the words, but it is perfectly true, that the pointer is among the breeds of old English sporting dogs-more particularly those used in the shooting field-which are making little, or no, progress in popularity. There are certainly not nearly so many pointers in the country as there were fifteen or even ten years since, and were it not for the allegiance of Mr W. Arkwright and Lieut-Colonel C. J. Cotes to a breed which has been in their families for generations, it is very certain that field trials for pointers would soon become extinct. There are other shooting men who breed pointers for breaking, of course—Captain Stirling, Mr Isaac Sharpe, Mr B. J. Warwick, Mr A. T. Williams, and Mr Herbert Mitchell among the number—while of the old school of professional breakers and handlers who still have a liking for pointers, T. Knowlton, W. L. Nicholson and T. Lauder are the only survivors. The Pointer Club has long since ceased to exist. It never had much influence, and did practically nothing to encourage the breeding of pointers of the working type, though by its support of the leading shows men were found to fill the classes, alas! far too often with "pointers which cannot point," as Mr Arkwright has very tersely put it on more than one occasion. The returns at Aldridge's sales in London just before the opening of the shooting season have proved, over and over again, that it is the setter rather than the pointer which men are anxious to buy for work on the grouse moors. It is difficult to assign a reason for this, especially as the pointer is recognized as being possessed of more stamina than the long-coated setter and better equipped by Nature for that arduous work on the moors, or in the lowlands later in the season, than any breed of setter. The fashion seems to have changed in favour of the latter, who has beauty in form as well as in action to recommend him, though we must admit to being stirred on more than one occasion when seeing a well-matched brace of the Sutton Scarsdale pointers at work.

As a description of a trial in which pointers were the actors, the verbal picture in Lee's "Modern Dogs" is a classic. No apology is needed for its reproduction. A lover of pointers can almost see the trial, so vivid and yet so plainly written is the account of a heat at Blandford in 1882 between Romp's Baby and Mr Arkwright's Revel. "The two dogs were ordered down on a ploughed field, recently rolled, and looking as flat as a billiard

THE POINTER

table, without the least covert; the sun was shining so brightly that imagination could readily lead to the belief that a beetle could be seen a hundred yards away. It was not a big field, and the wind was coming on in the right quarter. The bitches were cast off. No one quite knew which was the faster till they got together. Neck and neck they raced alongside, each doing her best. Then Baby drew out and left her friend, who, finding herself outpaced (for the first time in her life), wheeled about and took an independent beat. Baby completed her cast to the fence, took fresh ground, got the wind in her teeth, and was soon swiftly coming up the field as fast as a swallow, and as prettily. She overtook Revel, once more inviting her to test her pace, which she did; but, finding it 'no go,' again turned sulkily away, and went on her own errand. The crowd marvelled at the speed of Baby-for she was very small and of that black or blue mottled variety—and looked on with astonishment to see how Revel 'chucked the sponge,' her sulkiness at being outpaced increasing as the trial went on.

"Presently Baby, coming up the field with the wind in her favour, on reaching the centre, pulled up as in a cloud of dust, and stood like a statue, attitudinizing like a stage dancer, her neck outstretched, her stern poised stiffly, her toes hardly touching the earth, her whole form quivering. Never was there a more earnest point. But what was it? There lay the field, shining and shimmering like a newly-rolled onion bed; not a vestige and not the chance of anything being on it without being seen. Mr Brown pulled up in an attitude almost as stagey as the bitch. He had complete confidence in her; but her owner afterwards said he doubted the scent, and thought that perhaps Baby saw something. There she stood as Revel, a clever, sensible bitch, came galloping up behind her. She took in the position, came upon Baby's tracks, gave a slight jerk, half intending to acknowledge the point, and then, slowing down, passed her opponent, who never budged an inch. Revel moved about in front in a half hesitating way, and lo! to the surprise of everybody, up got a brace of birds about fifty yards on the left front. Mr Brown, of course, claimed them for his bitch, and everybody thought she had behaved very well, and Revel very badly.

"The latter was brought back; but Baby stood on, stood still, no flinching, no dropping when the birds had risen—there stood she, stiffer than ever, and, if possible, more in the air. You could almost see daylight under her feet. Her handler, his heart never in doubt, began to regard

her with attention, and then, as it were 'tumbling to it,' went up to her side, and tried to move her on. But no; she seemed to say 'I've got my birds. You may have a field full if you like, but if you want mine you must trust to me.' Every one stood in intense excitement to see the bitch 'do or die,' make a fool of herself, or come out with something wonderful. It was odds on the fool. With much pressure she was forced on a few yards, when a hare jumped up close to her, which never shook her in the least. And then, nearly a hundred yards away, a pair of birds rose right in her line. At that instant she dropped as though she had been shot! The first who came up to congratulate the owner was Mr Arkwright, who said it was the most wonderful piece of work he had ever seen."

Nothing approaching such work has been seen in this country since that memorable meeting, though during one of our pleasant trips to the Continental trials before imposition of quarantine made it impossible for Englishmen to take their dogs to one or other of the many meetings held in France, Belgium, or Holland during the spring, we saw a marvellous exhibition of brace work on ground near Namur. The dogs were perfectly matched as regards speed and nose; there was that understanding between them which makes brace work so entrancing—that something which cannot be fathomed by man—while their obedience to the directions of their handler was remarkable. That exhibition so astonished the few Englishmen who were present, that, had the Continental field trial men wished to match a brace against one from England they would have found it a difficult matter to induce the cross-channel visitors to take up the challenge.

There is, of course, no doubt about the antiquity of the pointer and Mr Arkwright has a great deal which is of interest to say about him and his predecessors in the invaluable monograph he wrote some years since. The Spanish pointer, with more than a dash of the Southern hound or the foxhound in his blood represents all that is good in the breed to-day, and the cross was very highly thought of in Colonel Thornton's time. That famous shooter owned Pluto and Juno, which were said to be so staunch that they remained on point while Gilpin sketched them for his still famous picture. The foxhound-hound cross introduced courage and speed, and pointers of the old type were strong, well formed, and very active. They travelled at a great pace, quartering with rapidity, and galloping with haunches well under, and head and tail up. His high spirit and eagerness for sport rendered him intractable and extremely

THE POINTER

difficult of education; his impatience in company made him wish to be foremost in the points, the shooter being given but little time to come up, and he was inclined to run in, especially down wind. These failings were gradually eliminated, and it is a thousand pities that so useful a dog should be among those which are on the down grade. A good pointer, such as the late Sir John Shelley's Sancho-immortalized in one of the finest pictures of a gundog in existence—is a model of beauty, his delightful—almost "airy"—movement, his perfect range and dead stop at game, his perseverance and rapid turn to catch the wind of the body scent, and his attitude when he knows he is right, compel the admiration of all true lovers of the dog, and one cannot wonder at his popularity before what may be called the battue era. Old sportsmen retain delightful memories of days spent on stubble, fallow, and in the root fields behind a well-matched brace of pointers, and comparatively few present-day dogs have anything but elementary knowledge of that which provided the best of sport, in the pleasantest conditions, for our forefathers. There is nothing in gundog work so thrilling as the sight of pointers or setters quartering their ground, systematically and thoroughly to the direction of a capable handler. The pity of it all is that such a sight is getting rarer every year.

The standard of points of the breed as drawn up by "Stonehenge" stands good, though one rarely sees the noble dog Mr J. H. Walsh must have had in his mind during his work of compilation. The head should be of good size, wider across the ear than in the setter, with the forehead rising well at the brows, though showing a decided stop. A full development of the occipital crest is indispensable, and the upper surface should be in two slightly rounded flats, with a furrow between. The nose should be long and broad, with widely-opened nostrils. The end must be moist, and, in health, cold to the touch. It should be black or very dark brown in all but the lemon and whites; in them it may be a deep flesh colour. It should be cut square and not pointed. Ears should be moderately long and thin, not folded like those of the hound, but lying flat and close to the cheeks, set on low, without any tendency to prick. Eyes soft, and of medium size; colour brown, varying in shade with that of the coat. Lips well developed and frothing when in work, but not pendant or fluelike. The neck should be arched towards the head, long and round, without any approach to dewlap or throatiness. It should come out with a graceful sweep from the shoulder blades. The shoulders and chest are dependent

on each other for their formation. Thus, a wide and hooped chest cannot have the blades lying flat against the sides. And, consequently, instead of this and their sloping backwards, as they ought to do in order to give free action, they are upright, short, and fixed. Of course a certain width is required to give room for the lungs, but the volume required should be obtained by depth rather than by width. Behind, the blades and ribs should, however, be well arched, but still deep; this last-depth of back rib-is especially important. Back, quarters and stifles constitute the main propellers of the machine, and on their proper development the speed and power of the dog depend. The loin should be very slightly arched and full of muscle, which should run well over the back ribs; the hips should be wide, with a tendency even to ruggedness, and the quarters should droop very slightly from them. These last must be full of firm muscle, and the stifles should be well bent and carried widely apart, so as to allow the hind legs to be brought well forward in the gallop, instituting a gallop which does not tire. Substance of hock is demanded, as regards the legs, not only in the shanks, but in the joints; the elbows should be well let down, giving a long upper arm, and should not be turned in or out. Good feet are all important; the stern must be strong in bone to the root, and the texture of the coat soft and mellow, but not absolutely silky. As regards colour there is little choice between liver and white and lemon and white. Black and white, with or without tan, pure blacks and pure livers are common, but perhaps the most beautiful of all are the ticked.

WALTER BAXENDALE.

THE SETTER

E must decline to back the false points of those writers who penetrate the fogs of antiquity in a vain endeavour to discover the origin of the setter. Let it suffice for the purpose of this article to state that its origin, like that of the illustrious "Jeames," is "wropt in mystery." There is sufficient evidence that the setter preceded the pointer

in these islands as a British sporting dog, and that its parent stock was shared by the spaniel. In many old works on dogs and shooting, we find a dog, which is plainly a setter, called a "spaniel." To take one or two instances only. In a book by William Dobson, of Eden Hall, Cumberland, entitled "A Practical Essay on Breaking or Training the English Spaniel," is described what we should call a very high-class setter, even of the modern type. In support of this, one sentence will be enough where the author warns:

"Do not you by the paltry consideration of a few brace of birds more during his first season begin by degrading your pupil into a low and despicable bog trotter; and so cut off all the promising blossoms of high range for ever."

Although this book was published in 1817, yet the sketch thus drawn would fit any of our best setters, and still the author terms this dashing, high ranging brilliant dog, a "spaniel." One more example. A work published in 1824, on shooting and shooting dogs, by an anonymous writer, follows very much on the same lines. When discoursing on the choice of dogs for the gun the writer says:

"There are now various kinds of dogs called setters, from their being appropriated in that service. None can have any just claim, however, to that appellation, but what is emphatically called by any of eminence the English spaniel. The Irish insist theirs is the true English spaniel; the Welsh contend theirs are the aborigines. Be that as it may, whatever mixtures may have been since made, there were, fifty years ago (1774), two distinct tribes—the black tanned, and the orange or lemon and white. In each class I have seen the short, close coat, and the loose, soft massed one; with an equality of goodness under each description and complexion. These kinds (especially the orange and white) are fond, docile and spirited. Were I ever to break another dog to the net, I should prefer the highest hunter of that sort, to the

reduced half-breed by the pointer, and engage to perfect him in less time. There is not that inequality of temper, as in the other classes of that species; and I challenge any sportsman to give an instance of a full English spaniel being sullen after proper correction." (The italics are ours.)

In Sir Walter Scott's novel, "The Antiquary," we find Hector, Monkbarn's nephew, calling his setter a "spaniel," and praising her for her "travel" (i.e. pace and range), provoking his uncle to retort, "Then I wish she would travel away from here."

Much more evidence could be produced, but without labouring the point to the limit of weariness, it is plain that the setter was at one time known as the "English spaniel," and it would appear that the spaniels of that day were divided into two classes, i.e. the larger, or the setter, and the lesser, i.e. the springer—the one taught to sit or set, for the purpose of allowing the partridge net to be drawn over it (hence the name "setter," i.e. sitter), and the other, the "springer," to find and spring the game. One of our authors mentions using the net, and that fifty years before the date at which he wrote, 1824, the dog used with the net was an English spaniel, called setter, from being taught to set. In this connexion, it is interesting to notice the author's description of the colours of those old setters, i.e. black and tan, and orange, or lemon and white. This subject may be returned to later. Outside the evidence of these old authors, the pictures and old prints of sporting scenes which have come down to us from those days show a strong family likeness between the setter and the old springer, and this point is emphasized, even as regards the modern setter, by no less an authority than the late Mr Edward Laverack, who sums up a detailed description of his ideal setter, in a letter in the possession of the writer, in the following words: "In fact the general appearance of the dogs would be that of a strongly built spaniel."

It may, therefore, be taken for granted that the setter was the larger spaniel, and being thus longer on the leg, and possessed of more "travel," was selected to be trained for the net, that, in fact, the first setter was "a setting spaniel."

The first person who broke a dog to the net has been stated to be the Duke of Northumberland, in 1535; and although their use for that purpose has long been discarded by the legitimate sportsman, they have been used, to the certain knowledge of the writer, by poachers very much nearer these modern days, for taking partridges at night with the net, for which

The second secon





purpose their crouching habit renders them preferable to the pointer. For a great number of years past the setter has been used with the gun, which circumstance has, in the process of time, somewhat modified the crouching attitude to which he was trained in the days of the net, being discouraged, as being inconvenient to the shooter, who would be apt to lose sight of the dog in rough cover, so that at the present day there is no practical difference between the attitude of a setter or a pointer when on point; the setter standing up as boldly and "stylishly" as the pointer. This applies, however, more to the English setter, for the Irish breed still are greatly given to drop, or crouch, when on game. At the present day, and for several years previously, the setter family has been ranged into three distinct groups, i.e. English, Gordon (or black and tan), and Irish, while, of course, there are some lesser sub-divisions and crosses between them yet, broadly, the above are the three main divisions.

Of the three classes named, the one distinguished as the English setter enjoys the widest limits, for any setter not an Irish or a Gordon, can claim the title of English, even though its ancestry may be founded on crosses from all three. While this is so, and that any cross-bred setter falls under the common name of English, there are certain strains which stand out as pure bred. The colours of the English setter are as varied as their lines of blood. They may be red and white, black and white, liver and white, black, white and tan, grey (called Belton grey) and pure white. Some years ago there were many such, which were valued and carefully kept up in the families of the country gentry and nobility. Not a few of these were wholly unknown to the general public. The writer was acquainted, many years ago, with a number of setters in the south and west of England. These bore a strong family likeness. They were mostly fine, big, upstanding dogs, with splendid shoulders, any amount of bone, and profusely feathered, had good heads, and square muzzles. These were almost invariably lemon and white, with dark eyes. Their fault generally was that their necks were inclined to be short. The late Mr Geo, Gibbs, of Bristol, the noted rifle shot, gunmaker and sportsman, had several, and among the Cornish shooting men excellent specimens might be found. A good one could occasionally be picked from the men who used to act as guides to shooters on the Bodmin moors, wild rushy bogs dangerous to strangers to the ground, and abounding in those days with snipe, which these dogs were trained to find. There was also another sort, seen more

225

GG

towards the eastern counties, i.e. a big dog, with a broad, shortish head, and apt to be somewhat curly. In Northumberland the writer has seen, in the district bordering on the Cheviots, several setters of a grey colour, with well-made bodies, long and low, long head, narrow and somewhat pointed muzzle, and yet another sort in the same locality, made much on the same lines as the foregoing, but liver and white in colour, and with the striking peculiarity of a distinct top-knot of curly hair on the head, and while their colour was liver and white ticked, the ticks or spots stood out like tufts, so that they could be separated by the fingers from the rest of the coat, and made to stand out distinct. From the sharp muzzle, the top-knot of hair, and the short, straight tail, more or less scantily feathered, one would imagine a cross of water spaniel at some time, although they had been kept as a pure breed for many years in the families that then possessed them. Among others who had them was the late Mr Geo. Gray, of Wooler, Northumberland, also the late Colonel Cowen, of Blaydon-on-Tyne. They are known to this day as the Naworth breed.

The writer once possessed a setter bitch, which came from the kennel of the late Prince Albert. Although this was long before the days of shows, which were supposed to have done so much to improve the quality and appearance of dogs, I have never seen a setter to surpass, and only few to equal, the type of this bitch. She was pure white, with a coat of superb quality, a make and shape as near perfect as possible, and with a beautiful long, lean bloodlike head. There was a general high-bred air of refinement about her, which proves that the modern breeders have very little to boast about. There used to be a white breed kept in the New Forest many years ago, a specimen of which was brought out at the field trials near Southampton by Commander Venner, R.N. This was a large, wellmade dog, though by no means handsome, but a fine worker, and made a good impression when handled by his owner. He tied for first and second prizes with a very superior dog named Bruce, bred by Mr Statter, and then the property of Mr Barclay Field. The latter was a good "trial horse," to fix the merit of the New Forest dog. A breed, somewhat similar to the foregoing, used to be kept up at Moreton-in-the-Marsh, in Gloucestershire, and these also were white, or nearly all pure white. In days gone by the sporting county of Devon could show some beautiful setters. The late Vincent Calmady, a well-known sportsman, M.F.H., and an allround Devon and Cornwall celebrity, had some lemon and white setters of excellent form. The writer was privileged to see some of these, They

were dogs rather on the large side, and inclined to be heavy, with good, square, sensible heads, and coats of ample quality, the colour, lemon and white ticked.

The fault of most old breeds was that their necks were inclined to be short, but in other respects they were of good form, and all that pertains to utility in running gear was present in them. There were in the fifties and sixties of the last century liver and white coloured dogs of a breed common in Cumberland, and the rest of the Border counties, strongly built and heavily feathered; and specimens of these were to be seen in the hands of the well-known Edward Armstrong, who hailed from the Border, and right up to the time of his death he was in possession of them. Whether any of these exist now is more than doubtful. Then there were at Taymouth the Marquess of Breadalbane's "red marbles," or "mottles," and "blue marbles," and the black and white setters of Balloch. Shropshire possessed a breed of setters, among which was a lemon and white breed belonging to the late Sir Vincent Corbet, whose well-known bitch, Slut, was one of the pillars of the modern field trial line of setters. What has happened to this is what has happened to all of the old breeds, with very few exceptions, and while Sir Vincent kept and bred and shot over setters his estate is now "driven" and the Corbet setter is a thing of the past. The Revolution, for it is no less, that has overtaken shooting, is in many ways very unfortunate to the interests of the setter. Formerly no sportsman thought of going shooting without his pointer or setter, and so these dogs were prized, and no establishment of any pretensions was without its kennel of pointers or setters. At the present day not one shooting in a hundred has either pointer or setter. Thus "driving" once begun has taken root and yearly increases. Another breed peculiar to a locality is, or was, the small Mid-Wales breed called the Llanidloes setter. These dogs were not much to look at, being very little larger than spaniels, but compact and well formed, of a milk-white colour, or, as it used to be called, "chalk white," a thick coat with more or less curl. The head was inclined to be snipey in the nose, and ears were set high. These were active little dogs, and well suited to the deep dingles and steep hillsides of their native Montgomeryshire. The late Mr W. Lort, a well-known shooting man, and born judge of every kind of animal, had a great opinion of their suitability for their work, and used to say, "You may beat us with your dogs on the flats and the tops, but we will beat you in the dingles and on the bottoms," referring to his

227

Welsh dogs and ground. This old breed is now practically extinct. The inroad of "driving," and the introduction of more fashionable breeds, combined with want of care for them on the part of their owners, having brought about their downfall. At Beaufort Castle, Inverness, there was at one time an old breed of setter kept up for many years in the family of Lord Lovat, and the pedigrees were jealously guarded. The dogs were white, black and tan, and when the writer saw them were of moderate size, but strongly built. They were not, however, as taking in appearance as one might have wished, and were not as setter-like in looks or character as some setter families. They had thick, short heads, and were deficient in coat and feather. No doubt inbreeding had gone far enough. Since the shooting on this estate has been let to American sportsmen, and "driving" has superseded the old method of shooting the moors over the setters, the kennel has gone down, and has by this time probably become extinct. A somewhat similar kennel of setters was kept at Cawdor Castle, Nairn. These also were white, black and tan, but were better looking, and with more setter character than the Lovat dogs. They were lighter built, and more active, and much better in head and coat. The blight of "driving," that has given the death-blow to so many fine old breeds, has, without doubt, extinguished this one also, as for many years no specimen of them has been heard of.

There was a breed of setter talked of a good deal some years ago, but which has seemingly been lost sight of for a considerable time, i.e. the Russian setter, so styled. That such a dog existed, and not only so but possessed high qualities of working ability and value, is evident without going further than the evidence of such practical men as General Hutchinson and Mr Joseph Lang, the noted sportsman and gunmaker. The latter particularly speaks of them in the highest terms, and his experience of them places them very high in comparison with English setters which he has used, and since in his day setters were far more generally used than at the present day by shooters, and that Mr Lang has vast shooting experience, his estimate of them may be relied upon. He relates an instance, when he took down into Norfolk a very superior brace of young English setters, which had previously given great satisfaction, and for which he had been, not long before, offered and refused a big sum. He states that the weather was very hot and dry, and the English setters failed to find the birds. A brace of Russian setters, however, belonging to his host, having excellent noses, and carrying high heads, completely

MR R. L. PURCELL LLEWELLIN'S ENGLISH SETTER, "DAN." PLATE XXIII.





outclassed his favourites and enabled the sportsmen to make a good bag. In such difficult circumstances, one would have thought that a Russian setter, a dog of extremely rough, not to say shaggy, coat, would have felt the heat and been more likely to succumb than the lighter-coated English dog. That, however, there must have been some great excellence in the breed is beyond doubt. For several years a cup was offered at the Birmingham show in the hope that it might draw a class of Russian setters. To this, however, there was no response, and so the prize was withdrawn.

It is more than doubtful at the present day whether it would be easy to find a specimen of the genuine Russian setter in what was once its native land, for the same process has been going on abroad that has been in progress at home, viz., the dying out of old breeds, but from a different cause. With us it is owing to the increasing practice of "driving," which has resulted in the breaking up of many once famous kennels to gratify the modern craze for big bags, combined with the aversion to undergo the exertion of working for their game with their dogs, which distinguishes the majority of modern shooters. In Russia and the Continent it is owing to the fashion of imitating the English in the matter of sport, so that English breeds of dogs are imported, and kennels of them formed by foreign sportsmen, thus superseding the original breeds of the country and leading to their extinction.

The above-mentioned were the principal of what might be called the old family breeds, which, alas! are now more or less merely matters of history, and indeed the mention of them at the present day is done simply to save the memory of them from oblivion, and to serve the curiosity of the antiquarian—pity it is that it should be so. Putting, therefore, the records of these old breeds on one side, we now come to a history-making epoch in the annals of the English setter, and indeed of all setters, and not only so but it may justly be added, in the history of animal breeding of whatever kind, for the facts then for the first time brought to light are of deep interest and importance to all who aspire to study eugenics. Bench shows for sporting dogs have been held from 1859. At the early shows all kinds of setters competed together, and the chief honours went, as a rule, to the black and tan, or so-called "Gordon." These setters had been bred according to the methods of breeding generally accepted in those days. Suddenly into the middle of the coterie of breeders a bombshell was flung, so startling as to cause a violent

upheaval of all the old theories, and a complete revolution in setter breeding, the effects of which have lasted to the present day. At one of the shows there appeared a certain Mr Laverack, with a few setters, which carried all before them. At the same time he gave the following strange account of their origin. Mr Laverack shall tell it in his own words taken from a letter in the possession of the writer.

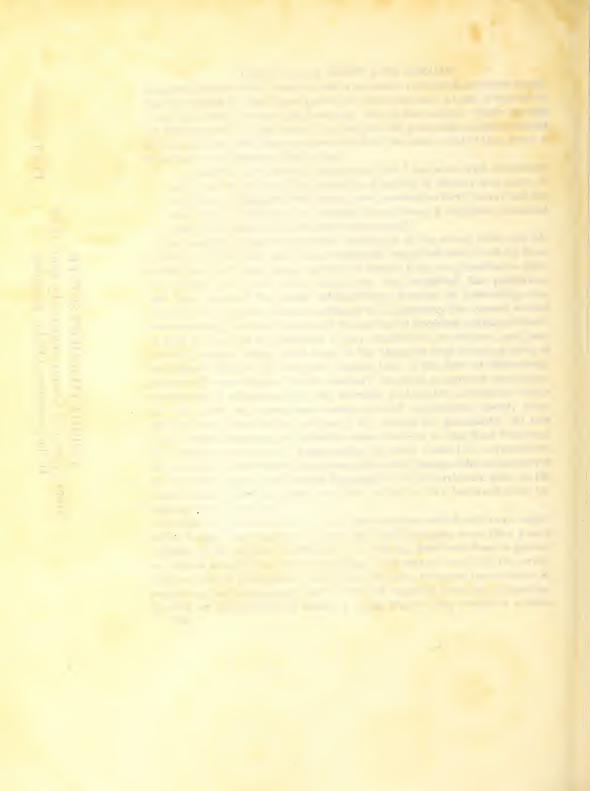
"How they originated I cannot say, but I can state with confidence that I can trace back this breed for a period of seventy-five years or upwards, having had them in my own possession forty years; and the late Rev. A. Harrison, of Carlisle, from whom I originally obtained them, had them thirty-five years previously."

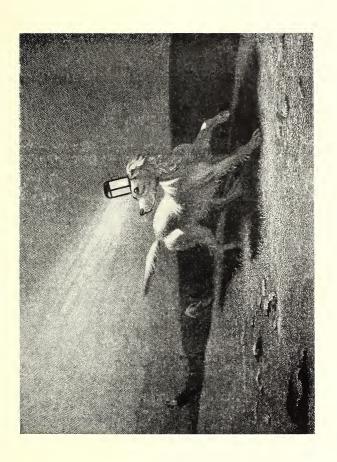
The bombshell that fluttered the dovecotes of the setter men was Mr Laverack's statement that these wonderful dogs had been bred by him, during the forty years since he had the breed, from two specimens only, viz., Ponto and Old Moll. Soon after he published his pedigrees, and these showed the most extraordinary amount of inbreeding-inbreeding to an extent hitherto unheard of. Apparently the system he had been adopting ran dead against all the canons of breeding animals hitherto held as axioms by breeders of any description of animal; yet here were the results before their eyes, in the shape of dogs showing none of the defects hitherto by common consent laid to the door of inbreeding, even to a far less degree. On the contrary, the dogs he showed were above the average in substance, size and stamina, looking the sportsman's dogs all over, and, as subsequent events proved, possessing speed, nose, stamina and indomitable endurance far beyond the generality. All this was a violent upheaval of orthodox ideas, and for a long time following the heated controversies, degenerating in some cases into acrimonious personalities, between the champions of the rival camps—the progressives on one hand, those that ranged themselves on the orthodox side on the other-proved what an epoch was the arrival of Mr Laverack with his dogs and his pedigrees.

In those far-off days Laverack had opportunities which will never again fall to a poor man such as he was, for the Highlands were then a terra incognita to the English sportsman. In nothing has there been a greater revolution than in the cost of shootings. Mr Laverack once told the writer that no one in those days could possibly have foreseen the advance in popularity and consequent rise in cost of Scottish shooting otherwise. He had an opportunity of taking a large tract of the estate of a Duke

A NIGHT POACHER'S SETTER From a picture by Cooper, engraved by Scott, 1818. In the possession of Walter Baxendale.

PLATE XXIV.







in the north, whose name he gave, for £40 a year, and he could have done so for life, and made his "fortune," to use his own words, since the same area has been cut up into half-a-dozen shootings, and let for £400 to £600 each. Those were days long before the time-shooting syndicates of City sportsmen, and of American and South African millionaires, for whom the modern shooting agents cater, and not for the British sportsman of moderate means, as in the old days. To return to the dogs. Mr Laverack had the best opportunity of developing the sporting qualities of his dogs, since they were constantly at work, and on every kind of ground, from the heather of Perth and Inverness, and the peat mosses of Caithness, to the arable fields of Ross-shire, where he had a large partridge shooting near Tain. He also used them in the scrub of Argyllshire woods, where the oak coppice was cut down every seven years for charcoal burning. Here he had fine woodcock shooting, and worked his setters with bells on their collars. to locate them in the scrub. Such treatment was bound to make its mark on the dogs, and when they became known to the public in later years it was found that they had strongly marked character in various directions, in both shape and make, temperament and instincts, so that a pure Laverack could easily be distinguished from any other setter of that period. In appearance, at that time, they were peculiar, but now that there is hardly to be found a kennel of English setters without a dash more or less of Layerack blood, those peculiarities have lost the impression they made at their first appearance. In make and shape, they were long, low dogs, with short legs, and unusually bent hocks and stifles, a crouching cat-like hindquarter, showing great power of leverage. The coat and feather were profuse, especially on the chest and under the tail. The head was good and bloodlike. The colour was a grizzled black and white, or, as it was called, "blue Belton." Later on in their history there appeared some lemon and white, ticked or spotted, exactly similar to the blues, whether owing to a cross or not is a question; anyhow, Laverack preferred the blues. In work they were fast and keen rangers, excelling in high head carriage, and of indomitable spirit. In fact, one of the charges laid against them by their critics was that they were practically unbreakable. It took as much time and trouble to break one pure Laverack as it would have taken to break half a dozen of another breed. This trait in their character did not seem to trouble their owner in the slightest, for, though their pace was great and range wide, yet their staunchness more than equalled it. Their dash, spirit, and pace were such that a stranger to them, seeing

them at work, would be expecting to see them flush birds. Their wonderful nose, however, steered them safely through all such dangers, and when once they struck a scent nothing but force would induce them to leave it so long as the birds remained.

On the knowledge of this Laverack acted, for when questioned by an inquirer, to whom he had stated that he never broke his dogs to whistle, as to how he managed to call them up at the end of the day to take them home, he replied that he "waited until they were standing on a point, and he then went up and put the lead on and led them away," a proceeding which tells more for the staunchness of the dog than for the fair dealing of the man. There is no doubt that this way of Laverack's, of never having them broken, or, as he used to say, "no word, whip, nor whistle," during so many years, had its effect on the character of his breed, for it cannot be gainsaid that a decided headstrong disposition, a tendency to, as they say in America, "bolting," was ingrained in them, and no doubt gave them the bad name they got in many quarters. As a proof of that it may be noted that the only pure Laverack's that have ever successfully competed at field trials have been Sir Richard Garth's Daisy, and Mr Purcell Llewellin's Countess and Nellie, all sisters, considering that after Mr Laverack had come south, and showed his dogs, they came into many hands, who would have entered them at public trials if they had been fit for it. Having said this much as to their weak points, it is their due to say that they possessed most valuable properties, properties which have been of incalculable benefit to the modern setter. They raised the head carriage. Here and there setters occasionally had been seen with a good carriage, but till they had been well leavened with Laverack blood a high ranger was an unusual sight. They improved the nose. In those days the setters of the country did not err on the side of a too sensitive nose, and this the Laverack corrected. Staunchness, even to a fault, belonged to the pure article, and an indomitable love of sport, for sport's sake, whereas many of the ordinary breeds worked slack without the gun, and blood. The Laverack would work just as keenly without the stimulus of the killing of game. Taking all the above points into account it is easy to see what an epoch in history the introduction of such dogs was, and what an influence they had on the setters of succeeding generations. Few men excited more controversy, or wrath and animosity, from the vested interests which his dogs upset. His story as to the descent of his dogs from two specimens met with much incredulity, and for years

in and out of the Press discussion waxed warm between partisans on opposite sides. This culminated at length (after his death, be it noted) in an appeal to the tribunal of the Kennel Club, who, after a more or less exhaustive inquiry, pronounced a somewhat inconclusive verdict, which left the matter pretty much where it was. Be that what it may, these pedigrees have got to be accepted as they stand at this time of day, for there is hardly a setter kennel in existence that has not been bred according to them, and in which they have not been worked into the family tree.

The strangest notions have been prevalent for years as to the meaning of the word Laverack. The popular idea is that it is a sort of sweepstakes term for the English setter; others hold that it means a colour, i.e., a black and white setter, and these consistently deny the appellation to those that are lemon and white, although, as happens in many cases, they are out of the same litter as their black and white brothers and sisters. Quite recently the writer was informed that Laverack was the name of a place, and the dogs derived their name therefrom. To correct all these blunders let it be understood, once for all, that the Laveracks derive their name from Mr Edward Laverack, who was responsible for their breeding, who bred and shot over them for about sixty years, and who died in 1877.

The Laverack, as a pure strain, is now for all intents and purposes defunct, owing in great measure to Mr Laverack's faithful disciples, who with more zeal than discretion, mismanaged the breeding after the old man's death; being devoid of his wonderful judgment, and ignorant of the secrets which died with him. This fact is much to be deplored. Fortunately, however, for the future of the setter there was some one who, while long an admirer of the pure Laveracks, recognized their limitations, and by securing the best specimens of the breed, while still they were in their prime, and blending them with other selected bloods, has preserved all that is valuable in them from extinction, while at the same time forming a strain superior in utility and vitality.

The breeder alluded to is Mr Purcell Llewellin, whose enthusiasm was recognized by Mr Laverack, and to whom he dedicated his book, "The Setter," in the following words: "To R. Ll. Purcell Llewellin, who has endeavoured, and is still endeavouring, by sparing neither expense nor trouble, to bring to perfection the Setter, this little volume is dedicated by his sincere friend and admirer, Edward Laverack."

233

Mr Llewellin was then a moderately young man, a country gentleman of a family of sportsmen, who had, all his life, been an enthusiast on shooting and setters, and at the same time possessed of that quality which renders its possessor discontented with accomplished achievements and ever striving towards an ideal.

To follow Mr Llewellin's history and experiments would fill pages. To put it shortly, therefore, he began first with the black-and-tans, socalled Gordons, which at that time, in the sixties, held the fort under the championship of "Idstone," of Mr Walsh, the then editor of the "Field," and of most of the leading authorities, and were extremely fashionable. It was natural, therefore, that they should attract the notice of Mr Llewellin, who for them discarded his country-bred dogs. Those of this strain that were before the public were nearly all related to a dog called Kent, bought by "Idstone," about 1862. After thoroughly trying this strain Mr Llewellin felt disinclined to rest there, chiefly on account of want of endurance, and, still searching, came upon Gordons bred by "Sixty-one" (Rev. Hely Hutchinson). These were much lighter in build than the Kent dogs, and had far more endurance, but they were somewhat coarse and collie-looking, and the nose was not of the best. About that time the Rev. Cumming Macdona brought out at the National Field Trials an Irish setter named Plunket. This was a small dog, but wiry and active, and the way in which he worked took Mr Llewellin's fancy. He offered Mr Macdona what was a large sum in those days for a setter, i.e., £150, and became his owner. Mr Llewellin then went in considerably for Irish setters, breeding Plunket to many excellent bitches, and produced several first-rate dogs, notably one called Kite, with which he won prizes at field trials. About that time the Laveracks began to show themselves, and Mr Llewellin was struck with their quality. Here, at last, he thought he had reached the El Dorado of his quest for so many years. He at once recognized their possibilities, and, as opportunity occurred, became possessed of the best individuals of that strain that could be obtained, regardless of expense. His famous pure Laverack, Countess, and equally famous Nellie, his Daisy (once the property of Sir Richard Garth), his Prince, Lill, Rock, Phantom, Peeress, Puzzle, and several others of that breed have never been equalled.

The eminence of the Laverack was not recognized in all quarters when Mr Laverack first appeared, or if it was, jealousy hindered justice being done to its merits.

Owners of the black-and-tans, at that time the fashionable breed, did not care for these rivals and possible conquerors, and it became the fashion in and out of the Press to snub Laverack and his dogs. This tirade was headed by "Idstone." A champion for Mr Laverack, however, came forward in the person of Mr Llewellin, and directly challenged "Idstone" (the Rev. T. Pearce) to back his criticisms on the Laveracks and on Laverack by meeting him to run a match with a brace of his Gordons against a brace of Laveracks. "Idstone" was far too astute to accept the challenge, and if he had done so, his Gordons would have been second best in an endurance test against the little Laverack bitches Countess and Nellie. As Countess was, in her day, a bitch without a rival, a short notice of her from a disinterested source (Mr Walsh, of the "Field," one of the Gordon men, and none too prejudiced in favour of the Laveracks) is interesting. It is as follows: "Though small, Countess is possessed of extraordinary pace. Though on short legs, she is full of elegance, and her beautiful head and neck are absolutely perfect. With her high pace she combines great power of endurance, and her chief fault is that she can never be fully depended on, for when fresh enough to display her speed and style to the full, she will break away from her master and defy his whistle until she has taken her fling over a thousand acres or so."

In the Laveracks Mr Llewellin found beauty and refinement far beyond anything that had yet been seen; he found super-excellent scenting power, high carriage of head, and indomitable spirit and love of sport. Alas! there is nothing perfect in this world; a closer acquaintance revealed faults even in these paragons, and faults so serious that unless they could be in some way corrected or modified, this beautiful breed would have been, for practical purposes, useless. They were, as we have seen, fast, stylish, full of point and innate setter instinct, but their nervous system, affected by a long course of in-breeding, allowed their instinct to dominate their intelligence. They might do well one minute, and the next minute some excitement would throw them off their balance. They never could be depended on. In other words, they had not brains enough to stand high training, either for field trials or private shooting. True, Mr Llewellin won some field trials in brilliant fashion with two pure Laverack bitches, Countess and Nellie, but the experience gained through the hard work necessary to bring those bitches up to the mark to win convinced him that what lay before him was to find something suitable to cross with the pure Laveracks to correct, if possible, their

weak points, while at the same time conserving the strong ones which they possessed. While thus diligently casting his eyes about for such a cross, there appeared at the field trials, in 1871, a brace of setters belonging to Mr Thomas Statter, named Dick and Dan. These dogs were a revelation; great big upstanding fellows, and full of courage and energy. Dan stood twenty-nine inches at the shoulder, and both of them had enormous bone and power. Black-white-and-tan in colour, they were members of a litter which their mother, old Rhæbé, bore to Armstrong's Duke—Edward Armstrong's Duke, from Sir Vincent Corbet's bitch Slut, of an old Shropshire strain, and by Sir Frederick Graham's Duke. Rhæbé, the dam, was by Paul Hackett's Rake, and out of a bitch named Psyche. Mr Statter's Dick and Dan were described as being of a South Esk and Gordon cross (not the so-called black and tan), and to have a pedigree going back some forty years.

When Mr Llewellin saw these dogs and their excellent work at the trials, he offered Mr Statter a good sum for Dan alone, which was refused, but £300 was accepted for the brace; at which price he became owner. Since he merely wanted Dan, he took an early opportunity of disposing of Dick, and then he bought their sister Dora, and a little later a halfsister Ruby, all of the same blood. He thus obtained what he wanted. for, from observation, he judged that this breed possessed just the qualities he required, and that their steady nervous system, brains, and absence of all excitement, as well as their size and bodily power, would be calculated to benefit the pure Laverack mentally as well as physically. The cross succeeded to perfection. The produce were fine bold dogs of exceptional field merit. Mr Llewellin, however, reasoned that he could not carry on his breed with these dogs alone, so he obtained from time to time (and, as opportunity occurs, still obtains) whatever of collateral relationship to that line of blood was obtainable, in order to widen and freshen the base of his breed. Thus when unable to obtain any more Duke-Rhœbé he did the next best thing, viz., Rhœbé-Laveracks or Duke-Laveracks, and any combination which showed a straight lineal relationship to what he had proved to be a successful infusion. Thus was manufactured the Llewellin setter, and thus, in such a hasty sketch as has been given, the finest and most successful setter in Europe and America was produced after years of trouble and expense. It is forty-two years since Mr Llewellin first began this setter combination. As a prominent writer in a foreign newspaper has it: "Mr Llewellin is

the most enthusiastic breeder in England, if we are to judge him fairly by his works. He wanted to create the best group of setters possible, and failures did not frighten him. He studied crosses, and having decided in his own mind that they would prove good, proceeded to try them, and when they failed he discarded them for something else. He tried the red Irish and Laverack crosses at the same period when he was making the Duke-Rhæbé-Laverack crosses. He found the Irish-Laveracks failures, and abandoned them. He had a great fancy for the handsome red setters, and spent a great deal of money on them. He bred a large number of these dogs, tried them thoroughly at field trials, and finally discarded them. Meanwhile he was having great success with his Duke-Rhæbé-Laveracks, and to these he turned all his attention as a breeder."

Thus, in a broad way, the leading outlines of the history of the formation of what Mr Llewellin called "the field trial setter." In later years the Americans, in appreciation of his work, gave it the name of the Llewellin setter, under which name it has been known all over the continent of America for over thirty years. It has spread from individuals exported to America by Mr Llewellin, and is the leading setter of America. In Europe it is also known by his name.

To enter more fully than in the above brief sketch would require more space than there is at command, and to give, fully, the details of the work done and experiments made during a long series of years would fill a large volume.

About 1868 Mr Llewellin began to send his surplus dogs to America. L. H. Smith, of Strathray, Ontario, Canada, was the first to import, and took over to America a bitch named Dart, a daughter of Dora, sister to Dick and Dan. Luther Adams, of Boston, also imported two. For some years the Llewellins had to fight their way in America; the patriotic jealousy of the owners of the native dogs begrudged the appearance and success of the foreign-bred dogs at the field trials. By 1879, at the Memphis trials, they won eight places out of ten, and where they were competing not only against all other breeds of setters, but pointers as well. By this time no one disputed their supremacy. They had thoroughly beaten the native American setter, the red Irish, the Gordon, and the pointers. Anyone who ran dogs against the Llewellins knew he would have to beat them to win. In America their superiority is firmly fixed in the minds of sportsmen. In Europe also so much is the breed esteemed that, since they are unable to obtain the breed from Mr Llewellin personally, his rivals seek

to repatriate, by means of agents, some of his breed from America and other foreign countries, in order to cross on to their own sorts, to their great advantage, so that it is safe to say that one will not find a single notable setter of late years in England whose pedigree does not contain Llewellin blood. Time brings round strange revenges, and, while envy and jealousy for long bitterly assailed Mr Llewellin, who has not escaped the usual fate of the successful man, he has lived to see the tables turned on his detractors, and his breed valued as the most precious and indispensable for the salvation of all setters. It is needless to say that it is impossible to give a list of all the setters bred by Mr Llewellin in England that have been winners during the last forty years, and many of these have won both on the show bench as well as in field trials. Among others, the celebrated Count Wind'em—a dog peerless by general consent among setters; the only setter that was ever bred against whom no word of adverse criticism was ever cast, a thing unique in the history of setters: a dog who combined in himself the highest field excellence with surpassing beauty, a first-prize winner at field trials, and at the same time at the bench shows-a dog for whom Mr Llewellin was offered the sums of £750, £1,200, and £2,000 in vain. He also bred the wonderful bitch, Novel, scarcely less excellent than the foregoing, a champion at field trials and also at shows, and for whom he was offered £1,000, and refused to sell.

Dashing Bondhu, one of the most famous and successful setters in England between the years 1880 and 1885, was bred in the same kennel. The position of Mr Llewellin himself is also unique, since out of all the number of those other breeders with whom he started forty years ago, he alone remains. Not one of his present-day opponents was with him in those early days. He is the doyen of field trial men. During those long years he has seen many take up the thing, for a few years, and pass out of it. He has seen them come and go, while he alone remains. But even now, tired and worn after forty years' competition with fresh opponents, so far is he from exhaustion that he has brought out in late years some notable setters-his Countess Carrie, who was described by the Press "as the most remarkable setter seen for many years"; his Count Gleam, who himself and his offspring Grampus and Gloaming, though not quite the same line of breeding as the rest of Mr Llewellin's strain, proved to be in the firelight at every trial; his Floss Llewellin, and her sisters, Freda, Fairy, and Flame; his Lucy Wind'em, who won at the Kennel Club meeting

MR R. I.L. PURCELL LLEWELLIN'S ENGLISH SETTER, "COUNTESS BEAR." PLATE XXV.





in so brilliant a fashion as to cause the greatest sensation and enthusiasm among the spectators. Of her, the English Press said: "The feature of the meeting was the running of Lucy Wind'em, and it is some years since so brilliant a performer was seen out." The "American Field" said: "Mr Llewellin's late win with Lucy Wind'em, which showed head and shoulders above anything at the trials, shows that at this late hour he has not forgotten how to breed winners."

Nothing can add to the force of these words. With a breed that, after the lapse of such a long period of time, a long course of "line breeding," has yet possession of vigour and vitality sufficient to score a brilliant victory over opponents of younger and fresher blood, and a breeder who at the eleventh hour can put such a setter into the field, the thought arises: "Will any of his present opponents at the end of an equal time be able to duplicate such performances?" As late as the spring of 1912 he brought out four setters, three bitches and a dog, all of one litter, who highly distinguished themselves, the dog particularly. The latter, a handsome youngster, caused quite a sensation by the splendid style he displayed, and magnificent nose and game-finding judgment, several, including the president, remarking that such a setter had not been seen for twenty years. To be able to bring out such a one at the end of forty years is a triumph in "line breeding." It is not surprising to learn that a very large sum was offered and refused for that young dog, Count Beau.

Whether the dog popularly known as the Gordon setter should be black and tan, or not, has been the subject of controversy without end. It would appear, however, that fifty years before 1824 there were black and tan setters in England. The old crusted idea, therefore, that the breed originated in Scotland in the Duke of Gordon's kennels is a myth.

English sportsmen, about the time mentioned, knew nothing of Scotland as a country to sport in. All old English sporting writers are wholly concerned with English shooting and all that pertains to it, and if they thought of Scotland at all it was as an outlandish country, the chief features of which were thistles, oatmeal, cakes, and savage caterans—and as for sporting there it would be to them, as Paddy said of his own country, "the finest country in the world to live out of." It may therefore be laid down that the Duke of Gordon did not originate the black and tan setter. England had them quite independently. As a fact, black and tan is not an uncommon colour in many breeds of dogs. The old English bloodhound was black and tan, and what was called the

Talbot hound. There are black and tan terriers, otter hounds, dachshunds, foxhounds, collies, and there is no need to have recourse to the far-fetched story of the Duke of Gordon forming the breed by breeding from a black and tan collie famous for nose. Besides it is not true that the Duke's dogs were all black and tan. In the record of the notable sale, at the dispersal of the breed in 1836, there was only one black and tan in the lot, i.e., a bitch called Crop, so called because she had had one of her ears gnawed off by an escaped ferret when she was a puppy. The rest were black and white and lemon and white. This the writer had on the authority of Mr Robinson, of Solva, who was at that sale, and bought a puppy, a black and white one. No doubt if the Duke had black and tans it is exceedingly likely that they were produced by selection. It is known to most men who shoot on moors that grouse will lie better, when the season is advanced, to a dog that is of a subdued colour, and a dog as dark as a black and tan is far more likely to allow them to lie than a light-coloured object flashing about on the moor and attracting their notice. Another reason would be that they might be induced to take the dark setter for the shepherd's collie, the sight of which they are accustomed to. Thus, instead of digging deep for some mythical fancy of supposed crosses with bloodhounds or collies, it is far more easy to think that whoever had the breeding of the Duke's dogs, produced the colour by the process of selection for a specific purpose. Even the writer advocates having a dark setter or two in his kennel for use when the birds become wild and wary—why then should not the same idea have occurred to the Duke? How the so-called (erroneously) Gordon setter came, what he was, and what he is, are very different things. The Gordons of the sixties were of a very different stamp to those now seen. The writer well remembers Old Kent, who might have been called the father of the Gordons of that day, for after "Idstone" bought him of Sir E. Hoare about 1862 he was placed at public stud, and was put to most of the Gordon bitches in the country. So much was he used that it was said that "Idstone" educated his children on the money got from Kent's stud fees. How much of that is a canard I cannot say. Anyhow, Kent was much used. All, or nearly all, the Gordons of that day had Kent in their pedigree. Kent was a fine big dog, but all in front. He had a well-shaped, but heavy (which would now be thought very heavy) head, a deep forehead and shoulder, but fell away behind, his back ribs and hindquarters were not equal to his

forepart, and his action was, as might be supposed from that formation, stilty. He laboured, and his was a rocking-horse action. This was the fault of many of his get.

The bitches were much better than the dogs, and Old Moll (Handy's), though having the Gordon wide chest and round barrel, was a well-made, good bitch. So also was Mr Horlock's Moll; and his Scamp was a fine specimen of the old heavy Gordon. The Rev. Mr Stokes's Shot was one of the same stamp, as were Reuben, Russell, and Romp, all the property of Mr Sam Lang, of Bristol. These were all fine examples of the old Gordon as it was in the sixties, and were very successful at the shows. The type was the same in all those mentioned, i.e., a big, heavy dog, but well formed, with good legs and feet and bone, the head well formed, a straight coat in most instances, and of satin texture. They differed from the English and Irish setter in having a more heavy head, longer ears, a squarer muzzle, and the eye frequently showed some of the "haw" which was considered a good sign of blood. The tail was shorter than that of the English dog, though some had a large and more curled tail; as a rule their tail was shorter and neater than either the Irish or English. Some few were inclined to be curly. Mr Lang's Beau was as curly as a retriever, but in all other respects he was a beautiful dog: long, low, racing-like, with a long, well-shaped head. In spite of his curls he won prizes under that superb judge of all animals, the late Mr William Lort, and his judgment was upheld during the somewhat acrimonious discussion fought over Beau by the "Prior of Markyate" (Adye), who said that if Beau's critics could have seen him as he saw him "sweeping across the Fells of Cumberland, they would have no more doubts as to his being all pure setter." In frame and setter character, Beau was about the best Gordon ever before the public.

Such were the characteristics of the old Gordon, which was a handsome dog in its way, and particularly pleasing owing to its colour,
which was its chief distinction from the English setter. This colour should
be deep rich black over the whole of the upper part of the body, head and
neck, with plum or raven-black shades in certain lights. The sides of
the face, inside of the ears, legs, belly, and underside of tail rich tan,
with tan spot over each eye. Many, and good dogs, too, had tan of a lighter
shade, and of small proportions, and curious as it may be, and unaccountable to the writer, he has observed that the worst coloured of these dogs
were generally the best in the field. The above-mentioned Beau, for

241

instance, had but very little tan, and what there was was more of a sorrel hue, yet he had a grand frame, and was an undeniable good field dog. In many other instances, including dogs owned by the writer, he has noticed this circumstance. Another case of this was in the dogs of "Sixtyone," an old Wiltshire clergyman, an acquaintance of the writer in the sixties, who wrote most interesting articles in the "Field" over that nom de plume, and for twenty-eight years rented from Sir James Mathieson practically the whole of the Isle of Lewis. He had a favourite breed of Gordons, which were totally unlike any other. He said that the grouse in those days on the island were not over thick, and the ordinary heavy Gordon would be too slow, and easily knocked up. His dogs were smaller and lighter made by far. They had no pretensions to compete with other Gordons of the day in beauty, for their coats, instead of showing the satin sheen so much admired, were harsh and wiry, and scanty in feather, but their great peculiarity was the almost total absence of tan. They were not black, because they had some tan, but it was very scanty, and more of a pale greyish or sorrel colour. However, they were very sporting looking, and admirably suited for the hard work and bad weather they had to stand in that island during winter, for their owner frequently stayed there from July to November, or even later, on the wild stormswept island. Here, again, is an instance of excelling goodness in working qualities combined with an absence of rich tan markings. The writer can remember when the Gordons were blamed for their heaviness, and the Rev. W. Sergeantson, who used to judge setters at the shows a good deal in those days, was their chief critic. The Gordon must be lightened. That was the talk, and the writer has always been sorry for it, for the dog produced in response to that call has been, to his mind, unsatisfactory. The type has been lost, and a new type inferior to the old produced. Granted that the old type was heavy, what of that? They were fine dogs in their way; why should all breeds of setters be the same in type? Are all horses the same? Each type has its own place and usefulness, and such dogs as the old Gordon, if it could be found at the present day, would be invaluable for crossing, to correct some of the weedy, snipy-nosed, prick-eared animals often to be seen. But they are gone—and in their place is a dog more like an Irish setter. Put a red coat instead of a black and tan one on any of the modern Gordons and you would have an Irish setter of a sort, and the likeness is still more striking when they are seen at work. No one who has seen the peculiar action

MR OTTO POHL'S IRISH SETTERS.

PLATE XXVI.





THE SETTER

of Irish setters can ever mistake them for any other, no matter what colour the dog wears, and as soon as one of these modern Gordons begins to gallop, you say "There goes an Irishman in a black and tan coat," All those of the Chapman kennel, and Stylish Ranger, Mr Sharpe's, which is related to the Chapman dogs, bear a strong Irish look. I am not making little of the modern so-called Gordon, he has his strong points; all I say is, he is not a pure Gordon, but an Irish cross. The best of the modern Gordons in type were the dogs of Colonel le Gendre Starkie. These are of the true old Gordon type, but somewhat lighter, and lightened without exhibiting, as most of those other modern Gordons, the Irish head and the Irish tucked up back ribs, and want of depth of flank, and the Irish pointed muzzle. These dogs of Colonel Starkie's, which he never exhibited, but kept for private sport, were as nearly as possible devoid of tan. The very best specimen of the modern Gordon the writer has seen is, without exception, Sir George Bullough's Redruth Colonel and his Rhum Captain. These are a type to themselves. Gordon setters, judging by what we see at shows, will very shortly be extinct, for, unless it may be that the owners prefer not to show, classes of them, once well filled, are now all but empty, and, with the exception of Stylish Ranger, they are equally shy of field competitions. In America the same circumstances prevail, though in France a few sportsmen still favour them, where formerly they held the fort strongly. This is a pity, for the Gordon, judiciously bred, is a charming dog, and, for those who are not anxious to handle a whirlwind when shooting, their docility, good nose, and good temper make them pleasant and valuable shooting companions.

The Irish setter is a very old breed, unquestionably. It was mentioned as far back as 1803, in an old work entitled "The Veteran Sportsman"; and no doubt, since the author then wrote of it as well known, even in his day, its origin is remote. It does not follow, however, that the dogs of the far-off day were quite the same as those we now know, for pedigrees do not appear to have been very carefully kept until about sixty years ago. Sportsmen in the long ago were somewhat more careless, and in the words of an old author, "Gentlemen, indifferently curious, left such matters to their servants. The bitch, durante furore, was taken out for an airing. 'Plush' falls into beer at some hedge alehouse, the wanton slips out, and with a porterly mastiff—hence," etc., etc.

Coming, therefore, to more recent times, we find among Irish owners of the breed a pride in their setters, and care taken of the purity of blood.

The result is seen in a strong family likeness, which shows itself not merely in colour, but in their manner of working-in which respect there is more uniformity than in any other breed of sporting dogs. No one who has seen Irish setters move in the field can ever again mistake one of these for a dog of any other breed. This point is easy to see when they come in contact with English setters, as at the field trials. The English setter has a quicker stroke, and carries itself differently. The Irish, even when equally fast, has a more stealthy, panther-like action, which it has no doubt learned in generations in the snipe bogs of its native country, where a rushing, dashing dog would be fatal to sport. Thus the Irish setter, while as a breed a very fast dog, possesses the instinct to moderate its pace when it comes on to ground requiring caution. The writer owns a bitch of that breed which, though extremely fast and lasting on open heather ground, will, when she approaches a piece of marshy ground likely for snipe, sit down on the edge of it until her master comes up, and then proceed to creep carefully through it like a serpent, knowing full well that any rushing or splashing in the water would drive every snipe to take wing. There seems to have been a very marked change in the temperament of the Irish setter within the last thirty or forty years. The old idea of an Irish setter used to be that of a dog of surpassing pace and indomitable endurance, but extremely headstrong, requiring much severity and hard work to keep him in order, and liable to fits of reckless insubordination, not over gifted with sensitive nose, but also no false pointer. This idea held good for a considerable time, and being so general was, no doubt, founded on fact, Right or wrong, the type has changed. Macdona's Plunket, a famous field trial Irish setter, already mentioned, was by no means of the above type. A beautiful mover, fast as the wind and full of style, he yet was splendidly docile and amenable, and his training, which was perfect, never deserted him. No dog of any breed could have had better manners. Then came those of the late Rev. R. O'Callaghan, and of the late Mr Cooper, who had a strong, if not the strongest, kennel of red Irish setters in the kingdom. All of these dogs were vastly different from the old Irish setter. They were fast, but their nose and disposition had become sensitive, the nose in some of them too sensitive, so that false pointing was not uncommon, and with this the temper, instead of the bold rebellious devil-may-care Irish disposition of old, was mild and tender hearted.

The writer, having formed his own opinion, once asked Turner, the

THE SETTER

experienced trainer, who had sole charge of one of those large Irish setter kennels, what was his opinion of their temper; he replied, "You must be careful with them, because, although they like to have their own way, you must avoid harshness, or it cows them, and you can do nothing with them. Taken the right way, with judgment and patience, they are first rate -a sharp word will go as far into them as a whip would with the old sort." This the writer has put down to the increased value set on the dogs owing to shows and trials, and the resulting care taken of them. The families are more carefully and jealously kept than they once were, and much more in-bred; and, in his opinion, here is to be found the cause of the revolution in the Irish temper. The old-fashioned notion of the Irishman, therefore, is now out of date. In nose, docility, and temper they now differ but little from English setters. Where they differ is, as was said before, in their instinct of caution, combined with pace, a valuable quality, and, in most individuals, it is joined to endurance, which they learn on their rugged mountains. That bitch owned by the writer, above alluded to, has been hunted from dawn to dusk, in rough winter weather, on steep rocky ground, for woodcock, on four successive days a sufficient test of stamina.

The Irish setter's colour is peculiar, and there is no other animal that has quite the same. It must not be supposed that no Irish setter can be of another colour, though the majority are of that red hue. The writer was acquainted with the late Colonel Whyte, of Newtown Manor, Sligo, who, more than most Irish sportsmen, was a close student of the history of the native setters, and was an admitted authority. He told the writer that there was a breed of red and white setters, chiefly in the north of Ireland, and that his grandfather had no others. These were big upstanding dogs, and were inclined to be curly in coat. He said his grandfather was one of the first to take moors in Scotland, and that he used to take these red and white setters over there. The late John King, also, told the writer that there used to be a breed of black setters in Ireland, similar to the reds. One which he gave to the writer was smaller than the average red dog, but very well made, and as active as a cat. It was a deep glossy black, and well feathered. By the foregoing it would seem that the all-red Irish dog was the product of selection, by a process of weeding out the red and white ones in the litters, and retaining the solid red ones. Mr Macdona showed three or four at one of the large shows that were red and white. These were rather weedy specimens, and looked

like survivors of an old breed that had run down, by neglect, or want of a suitable cross. They also were somewhat curly. There are few Irish red setters, even in these days of pedigrees and careful breeding, that do not show a small portion of white; which would point to their descent from red and white ancestry. A celebrated dog, Dr Stone's Dash, who was never exhibited without being placed, had a large share of white. Two of the very finest red dogs were old Palmerston and Richardson's Dick. These two dogs had much in common, and as they both came from the north of Ireland it is fair to suppose them to be good examples of the breed in that part. There was a strong family likeness between them, both being long, low dogs, with fine frames, and without that herringgutted, tucked up appearance so commonly seen in Irish setters. They had first-rate heads, were square in muzzle, with well-shaped skull and low-set ears.

While they thus resembled each other in bodily make and shape, there it ended, for while Palmerston had the temper of an angel, Dick was a perfect devil. The writer was a witness at Birmingham Show of one of his outbreaks. Dick was lying on the bench, to all appearance asleep. Some man, passing by, turned to look at him. A sudden flash of red, and in one instant the man was sent flying up against the opposite bench, the blood streaming from his face. The rapidity in which the thing was done is beyond belief. It was as if a great red snake had suddenly uncoiled itself. That was the old-fashioned Irish temper, very different from what now obtains. The Irish setters of the past were more troublesome to keep in kennel together than the average of the English breed, as they were of a jealous temperament, and apt to quarrel, and being so quick, sinewy, and active, they might do each other a serious mischief if no one was present to part them.

There used to be an old Irish breed kept by the family of the de Freynes, of Frenchpark. These, by this time, no doubt, have become extinct, for, several years ago, they had come down to only a very few specimens, in the hands of two old ladies of that family, and were not broken, but only kept as family heirlooms, and for their purity of blood. Now that Ireland is passing into the hands of small peasant proprietors, the death-knell of all such old family breeds is sounded, as the old family estates are being broken up, and the gentry leaving the country, a state of things apparently likely to follow in England. Thus the old palmy days of sport will be gone, never to return.

THE SETTER

There have been several kennels of Irish setters besides those mentioned. Colonel Millner, the famous rifle shot, has for long been a great supporter of the breed, and his Airnie was not only herself considerably above the average, but bequeathed her quality to her descendants. Mr Purcell Llewellin at one time bred and kept many good Irish setters. In Mr Layerack's book, "The Setter," mention is made of Mr Llewellin's red dog Marvel, as a "remarkably pure specimen of the breed," and his Kite, Knowing, Lilly, and Cora, were all winners. Among his many experiments in setter-breeding he crossed Irish and English, and produced a bitch of superlative quality in appearance, viz., Flame, a loyely red and white, unbeatable on the show bench; a bitch he afterwards sold, and her name appears in the pedigrees of most of the show-bench setters of the day, through the late Mr Shorthose's Royalty, Novelty, etc. Mr Llewellin was disappointed in the field quality of that cross, though their beauty left nothing to be desired. Dr Baldwin has exhibited a fine Irish setter named Morty Oge, a large upstanding dog of bone and substance, and which has been successful at bench shows. The handsomest Irish setters of the day are Mr P. D. Mills's Riversdale Red Guide and Riversdale Red Light. These are almost perfect in appearance, and Red Guide has been run at field trials, without, however, gaining a place. A most famous Irish setter is a bitch, Broken Flush, owned, trained and handled at field trials by Father Meehan, of Castlebar, co. Mayo, This bitch, who is marvellously clever and intelligent, was trained by her owner in his house and garden, and, being made a pet and companion, had a thorough understanding with her master before ever she was taken on to game. She was successful in the field trials on grouse in 1910, 1911, and 1912, and the unanimous opinion of the Press was that she was the best Irish setter since the days of Mr Charles Austin's Sam Sullivan, winner of the Kennel Club Derby in 1897.

WALTER BAXENDALE.

SPORTING SPANIELS

HE statement that the spaniel is the oldest of gundogs is one that has been generally accepted by all men interested in shooting from time immemorial. Developments there have been, of course, and while the old English water spaniel is practically extinct, other varieties, with perhaps the sole exception of the Irish water spaniel, have made great progress and are as much used in certain districts nowadays as was the case at the time of the old flint lock. At that period, however, there is little doubt that what is still known as the springer (very little changed in appearance nowadays, and quite as adaptable) was the dog generally used and I know of no better picture of a dog of this type than that painted by George Stubbs and engraved by Smith in the early part of the last century. That type of springer is nowadays considered to be rather coarse, but there is at least one well-known dog of the present time which is almost an exact replica of the spaniel which served Stubbs so well as a model. That dog is Aviation, which was benched by his present owners at Stafford "not for competition" in February of this year.

The Springer.—Though the springer, either the Welsh or the English variety, is just what most men want for shooting, he is a difficult dog to break. When that has been said there is nothing more against him. In the hands of a really clever handler, amateur or professional, the springer can be made invaluable. It is indeed dense growth that he cannot push his way through. The majority have splendid noses, and very few can be called hard-mouthed. A good springer can always be depended on to be faster than a Clumber, or even a field spaniel, but the springer is perhaps not quite so useful a dog for partridge ground, his speed causing him sometimes to miss game in an open country. Since field trials were first held in 1899 under the management of the Sporting Spaniel Society, the springer has taken a very prominent part in those interesting competitions, and one has only to recall the deeds of the team so well handled by Mr Charles Eversfield, and including such dogs as Velox, Amberite and others, whose names are well known to all spaniel men, to prove that they are the most successful of the great family to run at field trials. The establishment of the meeting at Denne Park, near Horsham, by Mr Eversfield did much to encourage gamekeepers and others in the south to break their springers, and at every meeting

SPORTING SPANIELS

held since Mr Eversfield first began trials on his estate some have been brought out and sold at a remunerative figure. Of recent years the best of those dogs were Grenehurst, Dick, and Bessie, both from the same kennel, and each quite in the front rank, though none has done so well at field trials as might be expected. The Welsh springers and cockers sent from time to time from the kennel of Mr A. T. Williams have done uncommonly well in all competitions, and so long as we retain an interest in spaniels and shooting we are not likely to forget the way in which Mr Williams's spaniels showed up the failings of the English entry at trials held in the Vale of Neath in the early days of the competitions. The ground in that part of the country is considered ideal for spaniel trials, though, as a fact, there is no such thing as ideal spaniel ground. A man must make choice of the variety most suitable for the particular ground he happens to be shooting over, and the shooter who said that there was no better ground than Wales for trials when the question was raised some years since, no doubt meant that for a small, hard terrier-like dog the terribly thick, almost impossible ground in some parts of the Principality is most suitable for competitions. In the old days it is practically certain that Wales was more shot over with spaniels than any other part of Great Britain. The Vale of Neath, Margam, Gwern-y-Fed, and Wynnstay are shootings which come to mind in this connexion. It certainly would be difficult to find ground on which a spaniel of one variety or the other would be more useful than on either of those mentioned.

The Irish Water Spaniel.—A word must certainly be given in praise of the Irish water spaniel, though a trial stake at Mansfield in 1907 was not repeated, nor was a meeting arranged under the management of the Irish Water Spaniel Club at Mildenhall persevered with. It simply died a natural death, owners ceasing to take the least interest in it, a fact for which they may now be sorry, for it is certain that the variety in its way is exceedingly useful. One of the things against the Irish variety is its size. It is too big for a dog-cart or a motor car. It cannot easily be found accommodation under the seat of a railway carriage, a great consideration in these days of travel. At the meeting on the Mansfield shooting of Sir Hugo FitzHerbert in 1907, we well remember that handlers were told that their dogs must work in front of them, not in the manner of a land spaniel, which works fast and quarters its ground, but like a keeper's retriever, which trots up a hedgerow or along a river's bank, just ahead of his master, flushes all game for the gun, and does not retrieve till told to do so. It was also ordered

249

that, if possible, the dogs should be tried on water-fowl as well as on ordinary land game. The competition was not a success, though conditions were favourable; still, for all that, it is a pity the stake was not persevered with. A thoroughly trained Irish water spaniel should be a quick and tender retriever of fur and feather, from land or water, bringing his game right to hand, and carrying when necessary. It is an advantage if he is kept to heel excepting when retrieving or when sent to beat a marsh or other covert. When beating coverts, by the way, he should do so thoroughly and systematically, working to his handler's signs or whistle if required. In approaching birds which are at rest or feeding on either land or water an Irish water spaniel should keep very close, running, walking, creeping, or lying down according to the directions of his owner, and remaining perfectly steady, no matter how much shooting there is, and not moving till sent to retrieve. He should have a good nose, and, of course, know how to use it in finding wounded game or runners, and should be useful for retrieving to pointers or setters or even to non-retrieving spaniels. Even for ferreting an Irish water spaniel can be made useful, but of course he should be free from chase when either hares or rabbits are afoot.

It cannot be doubted that the institution of field trials for spaniels has done a great deal of good, and in the early days of the movement it was astonishing how well Clumbers did. Mr Winton Smith's Beechgrove Bee and Minette were a wonderful brace, and they did more to make the reputation of Alexander, their worker, than any other spaniels since handled by that very capable man. The first trial, by the way, was won by a bitch neither a cocker nor a springer in type, brought from Northumberland by Mr Isaac Sharpe. She was perfectly broken, and her owner's clever working was a revelation to all who were at the meeting, including Mr W. Arkwright, who was one of the judges. At the end of the meeting, when this little spaniel had been awarded all honours to which she was entitled, she was tried in a large lake, bringing out all kinds of game, and, as a wind up, Mr Arkwright said to her handler, "Well, Sharpe, is there anything your spaniel cannot do?" Mr Sharpe smiled and replied, in the broad Northumberland dialect, which he has never quite shaken off, "Well, Sir, she canna talk!" As a fact that was really all the little spaniel could not do. Since those days very fine ground has been visited from year to year, while the number of spaniel meetings has increased in a way never contemplated when the movement started. Pitlochry, Kirkcud-

SPORTING SPANIELS

bright, and Kelso have been visited by the Scottish Field Trials Association, and only last year one of the founders of that very enterprising society, Mr Charles Philipps, brought out a team broken on his own shooting near Castle Douglas, which surprised even the oldest field trial man who was present. The way the different members of this team ran was a revelation. They seemed to be at home on every kind of ground, they were splendidly broken, showed no fear when asked to push their way through brambles or whins, while their steadiness in all circumstances was remarkable. Only a few weeks before Mr Arkwright had been just as successful with a similar team at Sutton Scarsdale, the estate he owns near Chesterfield, and on which the first spaniel trial was held in 1899. At that time Mr Arkwright laid out part of his park with a view to making the competitions as severe as possible. The plantations and hedgerows formed then have now very greatly improved, and it would be difficult to find ground more equable in every respect than that at Sutton Scarsdale. The third open meeting held last season was the one at Wytham Abbey, the shooting of Mr Charles Butter, a few miles from Oxford, and in a long experience of these competitions, dating from the very first meeting, we do not remember seeing better work than that done by Mr Eversfield's team, the cockers of Lieut.-Col. Heseltine, and Nell Guy, the clever little spaniel brought from Staffordshire by Mr J. R. Winterton.

The Clumber.—Clumbers are now rarely seen at the trials, their slowness being a handicap, though there is a great deal to admire in them, and it is well known that not only the Duke of Portland, but the Duke of Devonshire, the Duke of Westminster, and the Duke of Newcastle still employ the Clumber for beating out thick covert. The late King Edward was a great admirer of the breed. His Majesty not only supported the chief dog shows, but for a great many years he maintained a fine kennel at Virginia Water, and it was one of the sights of Windsor Forest to see the old spaniel man, now pensioned off, I believe, in charge of the royal team during shooting or for the purpose of exercise. The last time I was privileged to be shown round the Windsor shooting, Weir was very enthusiastic about maintaining the team of Clumbers. As a fact there was some talk of building new kennels quite close to his lodge, where the dogs would be under his personal supervision. In the early days of shooting, Clumbers were invariably worked in teams. They are not very clean retrievers, and are seen at their best on partridge ground or in moderately thick under-

growth, though of course the cocker, the field spaniel, or the springer is much quicker. The Clumber, however, is untiring, easily broken, and does not require very severe handling. It is also in his favour that he is not so much given to running into shot or to chase game as is his highspirited brother the springer. It has been said of the latter, by the way, that there is no gundog which possesses the inborn love of the gun to such an extent as he does. The scent of game seems to be a delight to the springer, and it is very charming to see a really good team at work. Quartering their ground like pointers or setters, all stop to a signal from their handler. A rabbit is pushed out of gorse, every dog drops to shot, and though the handler makes his choice of the springer he wishes to retrieve the dead game, not one of the other members of the team shows the least trace of jealousy. At one of the trials held in Yorkshire I remember the spectators getting quite excited during the working of Mr Eversfield's team. A similar demonstration was made on one occasion in South Wales when Mr A. T. Williams's Welsh springers were at work, while I have also seen capital performances by Clumbers handled by Mr Custance, who a few years since bid fair to bring back the lost popularity of the Clumber as an aid to the shooter.

The Field Spaniel.—Very little need be said about the Field Spaniel beyond remarking that no gundog has been more improved since field trials became so popular. Shows were beginning to ruin the breed, field spaniels indeed being described by a very well-known and sound authority as elongated hair trunks. Thanks, however, to the institution of working competitions in all parts of the country, that reproach is being slowly but surely removed, and as recently as Cruft's Show in February, 1913, Mrs E. C. Rouse benched Clareholm Primus, one of the straightest legged and most typical field spaniels seen for many a year. As a fact he is just what lovers of the variety have been looking for. His influence on the breed must be great, and it is to be hoped that owners of working bitches, anxious to retain all that is good in the field spaniel, and at the same time eliminate the harm which has been done, will help Mrs Rouse to bring back the lost prestige of the breed as a gundog. Mr P. Eliot Scott, a Shropshire shooting man, proved that the black field spaniel was not so bad as he had been painted, by bringing out at the working trials the beautiful bitch Besford Beauty. She won several important stakes, thus proving that the lack of working qualities in the variety was more a matter of

SPORTING SPANIELS

structural formation than of actual loss of working instinct. This means that the field spaniel of the show type had been bred so heavy in bone and so heavy and long in body—to say nothing of his ridiculously short legs—that he could not do the work required of him. However much his sporting nature prompted him to try, long years of inactivity had brought about a distinct loss of natural love for the gun. There was also a loss of intelligence. It is, however, only structural formation which is wrong, and, bred on the lines of Clareholm Primus, the field spaniel is certain to come into his own once more.

The Sussex Spaniel seems likely to become more popular, and at Birmingham in January, 1913, Col. Claude Cane, an old admirer of the breed, drew a surprisingly good entry, and in his review written to the "Kennel Gazette," he pays a tribute not only to the entry, but to the breed, in the following words:

"I do not know whether the surprisingly good entry was due to my being one of the few old Sussex breeders or to a revived interest in this very handsome and useful variety, which is probably older and purer in blood than any of the other breeds which find favour nowadays. I sincerely trust the latter reason is a true one, and that in future we may see this improvement maintained. Harviestoun Daisy, whom I placed first, is a really good bitch, full of Sussex type, and of beautiful golden liver in colour. . . . She has a true Sussex head and expression, and is quite high enough off the ground to be as active as a kitten, in fact she was, with possibly one exception, the best mover I had before me all day. Rosehill Rattler, second, is a nice dog, and I know that some of the extremists expected me to put him at the top. Mr Newington is certainly to be congratulated on boldly discarding the caterpillar type, but I think he has gone too far in Rattler's case, and in consequence has lost a good deal of Sussex character. I should think, however, Rattler ought to be a very useful sire. In spite of his length of leg he was not so active as the comparatively short-legged winner. . . . There was a notable absence of the true Sussex golden liver colour about the remainder of the competitors."

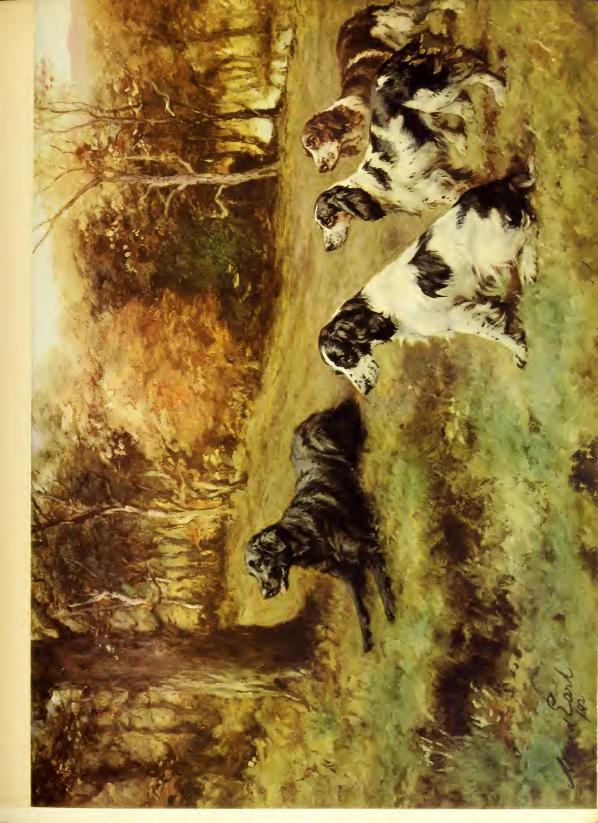
A Sussex spaniel, to be perfectly pure, must have no white about him. The breed, by the way, has quite an interesting history, for it was founded in the early part of the last century at Rosehill, Brightling, near Hastings, by a Mr Fuller who died in 1847, when his famous kennel was dispersed.

Relf, his gamekeeper, however, being allowed to make a choice of a dog and bitch, selected George and Romp, and from them most of the Sussex celebrities of to-day are descended. Mr Campbell Newington, of Ticehurst, has long been a very staunch admirer of the breed. As a fact it is to him and to Mr Moses Woolland, Col. Claude Cane, and Mr J. Ernest Kerr that the breed exists to-day. Mr Woolland finding the claims of the very flourishing business in the West End of London prevented him from paying attention to his kennel, cleared out the breed in 1905. The best of his stock went to Mr Newington, one of the dogs fetching something like eighty-five guineas. Field trial honours have been won by dogs of this variety, and while not possessing the dash of the springer, there is something about the appearance of the Sussex spaniel which every one must admire.

The Cocker.—Mention must be made of the merry cocker, though at some of the trial meetings specimens of the variety have been handicapped by being run against the bigger and heavier spaniels, and it has been rather ridiculous to see a cocker not weighing twenty pounds attempting to retrieve a big hare. Of course some, including those run by Mr R. de Courcy Peele, Lieut.-Col. Heseltine, Mr C. A. Phillips, the Duke of Hamilton, and Mr J. R. Winterton have been able to do that, but retrieving is not the cocker's work, and we should like to see him confined to pushing out game from the gorse or hedgerow. At this work a cocker with the right spirit is the best of the gundog race, and one of the prettiest sights on the shooting field is to see a team of them beating out suitable ground. They have been found very useful on the grouse moors and are so handy that quite a team of them can be carried in a motor car or in a dog-cart for use on the moors or at a pheasant drive. If wanted for retrieving, a cocker should not weigh less than twenty-five pounds, for, after the Clumber, a cocker sufficiently long on the leg, and big enough to carry with ease a rabbit or pheasant, runs the Welsh or English springer very closely as second favourite. A pheasant is quite big enough for most of them, but a hare wants carrying. I agree with Col. Claude Cane that cockers are primarily sporting dogs, and though there is no sense in trying to get them big enough to carry a capercaillie (as one which is not at all oversized at least had the pluck to attempt), they must be possessors of physique and stamina enough to do a day's work. There is plenty for small spaniels to do, and there are places where only a small spaniel can work; but to do that work he must not be a toy or a weakling. The man who expects a spaniel to

OUTSIDE COVERT Mr B. J. Warwick's Retriever and Springers.

PLATE XV.





SPORTING SPANIELS

retrieve a hare does not want a cocker at all. He should have a springer or a field spaniel of the leggy order.

In conclusion I should like to reproduce a description of a spaniel and his work given in the "Sporting Dictionary and Rural Repository," published more than a hundred years ago. Here is a tribute to which the spaniel is as fully entitled now as he was then:

"They are indefatigable in their exertions. From the time they are thrown off in the pursuit of game the tail is in a perpetual motion (called feathering) by the increased vibration of which an experienced sportsman knows when he gets near the object of attraction. The nearer he approaches it, the more violent he becomes in his endeavours to succeed; tremulative whimpers escape him as a matter of doubt; but the moment that doubt is dispelled his clamorous raptures break forth in full confirmation of the gratification he receives. And this proclamation may be so firmly relied on (though in the midst of thickest covert) that the happy owner may exultantly boast he is in the possession of one faithful domestic who never tells a lie."

WALTER BAXENDALE.

THE FLAT-COATED RETRIEVER

ANY of our more ancient of breeds of dogs can boast of a pedigree which stretches back to remote periods, when records were either not kept at all, or kept so carelessly as to be of little value in determining the different species from which the breeds were originally drawn. Such has not been the case with the flat-coated retriever.

Dating back some sixty or seventy years, this breed was initiated by crossing the small variety of Newfoundland or Labrador dog with the setter bitch. The Labrador of those days was a long-haired dog and quite different in appearance from the dogs of the present day; the setter used was generally either the Gordon or Irish. The rapid improvement in the flat-coated retriever was due to the genius of Mr S. Evelyn Shirley, of Ettington, the founder of the Kennel Club, who has rightly been called "the father of the breed." Obviously, in order to establish a desirable type, a considerable amount of inbreeding had to be done, but so skilfully has it been effected that the flat-coated retriever of to-day shows no signs of softness or deterioration.

After Mr Shirley came Mr L. Allen Shuter, Mr H. Reginald Cooke, Mr Harding Cox, Colonel Cornwall Legh, Mr Money Wigram, Mr Lewis D. Wigan and others, all of whom have done much for the breed. Mr Shirley owned many good dogs, including Hopeful, Harvester, Tacit, Homestead and Think, but the pick of them all was Moonstone, and there are not lacking good judges who consider him the best-looking retriever of all time. Bred by his owner, he was by Mr Thorpe Bartram's Zelstone ex Think; he was good all over and carried an absolutely perfect coat, but unfortunately he was never broken. A daughter of his, Donna by name, was the dam of Darenth, whom Mr Allen Shuter bred and also broke. Darenth was by Hopeful, and it is doubtful if any dog has had a greater all-round influence on the breed, for, in addition to winning the Championship at the Kennel Club shows from 1891-1898 inclusive (twice in 1894), he was a first-rate worker. His owner tells a story of once killing fifteen brace of partridges in a field of heavy kale: Darenth was the only dog out, and picked the lot, though four birds were strong runners. At the stud he was a conspicuous success, and earned for his owner no less than £1,500 in stud fees and prizes, a huge figure when we come to consider the relatively lower fees charged in those days. His most

THE FLAT-COATED RETRIEVER

famous sons were Blizzard and Horton Rector. The former was an excellent worker, and made his mark in no uncertain fashion both on the bench and at the stud.

More celebrated still was Horton Rector, bred and broken by Mr Shuter; his dam was Black Blossom, and he was a delightfully balanced and compact dog, rather on the small side; a capital dog in the field in his young days, he became hard mouthed later, but this fact did not detract from his stud value, and he can claim as his sons the well-known dogs Grouse of Riverside, Sweep of Glendaruel, and Black Quilt. Grouse and Sweep won important field trials. Horton Rector won the Championship at the Crystal Palace three years in succession, and earned for his owner £1,400 in fees and prizes. Grouse has an extraordinary record. Mr H. Reginald Cooke bought this dog as a puppy in Bedfordshire, and broke him himself. He won first prizes in the open stakes at the International Gun Dog League Retriever Meetings in 1906 and 1909, and was also first in the open stake at the Cheshire and North Wales Retriever Society Meeting in 1909; in addition he is a champion on the show bench, and is, I believe, the only show bench champion who has won an open stake at field trials. Sweep of Glendaruel has not Grouse's record, but he is a wonderful worker, and has sired an even better dog than himself in Rab of Glendaruel, probably the fastest retriever of the present day.

Black Quilt, bred by Mr Harding Cox, distinguished himself greatly on the bench and at the stud; he was bought by Mr Cooke from his breeder, and his two great sons, High Legh Blarney and Shotover, are well remembered by present-day exhibitors. The former was bought by Mr Cooke, for 200 guineas, at the sale of Colonel Cornwall Legh's kennel, and well has the dog repaid the outlay. He has won fourteen championships, a feat equalled by two dogs from the same kennel, viz., Jimmy of Riverside, his son, and Worsley Bess. Blarney has only once been beaten, and then before Mr Cooke bought him, by, I believe, his half-brother, Shotover. He has been a huge success at the stud, and has impressed his beautiful head properties on a very large proportion of his progeny; in fact, it is not too much to say that, during recent years, nearly all the principal bench winners were by him; further, although one has never heard much about his working capabilities, he has got some excellent workers, including Longshaw Bruce, Horton Rosette, Coquette and Dolly Varden. Blarney died in his eleventh year in February, 1913.

257

Blarney's dam was High Legh Moment, and Shotover's Queen of Llangollen; the latter dog, bought fairly recently by Mr Ernest Turner, has won several certificates of merit in the field and championships on the bench. Space will not admit of my mentioning all the good dogs which have graced either the field or the show bench, but mention must be made of the celebrated bitch Rust (the winner of the first open retriever trials). She was a liver-coloured flat-coated retriever, good looking and on the small side. She was whelped on June 11, 1894, and was by Tatt, a livercoloured dog also. Tatt was a really good worker, and as he was by Taut, and his dam, Standeford Myrtle, was by Zelstone ex Standeford Trace, enough has been said to prove the excellence of the pedigree on the sire's side; unfortunately, Belle, the dam of Rust, was never registered. Rust was owned by Abbot, then in the employ of Mr A. T. Williams, but now a Shropshire gamekeeper, and the excellence of her work has won the admiration of many capable judges. Nor must we omit Mr Cooke's Wimpole Peter, Worsley Bess, Paul and Rocket of Riverside, all retrievers of the very best type, and the last-named a brilliant worker; also Mr Allen Shuter's favourite, Royal River, a big dog but an active one, an excellent dog in the field, and a delightful companion.

In breeding four such champions as Darenth, Horton Rector, Sweet Fern, and Royal River, Mr Shuter may justly feel proud of his achievements, and it is a fact that, with the exception of Horton Rosette, he has bred all the good dogs which he has owned. Then we have Colonel Cotes's Pitchford Marshal, a son of Wimpole Peter, and a winner at field trials, Mr A. T. Williams's Don of Gerwn, a son of old Rust, and later Mr Turner's Park Darkie and Mr E. W. Blagg's Busy Mite, all flatcoated retrievers of great merit in the field. Recently Mr Wigan's Rab of Glendaruel and Colonel Weller's good bitch, Meeru, have delighted onlookers, and every one regretted that the long journey south prevented the former from contesting the championship in 1911. Meeru's performances are fresh in most people's memory, and she bears out the rule that the more you have a dog with you the more it will do for you. Like Rust, Meeru is a good-looking bitch, on the small side; she is by Welden Jet, who is bred straight from the existing strain of flat-coated retrievers. Her dam, Nell, also a flat coat, was never registered, and her pedigree cannot be traced. Meeru has wonderful brain power, and an excellent nose, and complete understanding exists between herself and her owner. She is evidently one of those bitches that can be trusted to do all kinds of work,

THE FLAT-COATED RETRIEVER

and the pretty stories told about her have made her a very popular champion worker of the season. On the bench we have Mr Cooke's two beautiful specimens, Jimmy and Blight of Riverside, in my opinion the best dog and bitch in England at the present time. Both were bred by Mr Cooke, and own High Legh Blarney as their sire. They are indeed a pair to be proud of, as was the team of eight flat-coated retrievers which Mr Cooke took into the ring at the Crystal Palace Show last year.

In both appearance and temperament breeders of the flat-coated retriever have achieved a remarkable success, and it is difficult to imagine a more beautiful and lovable dog. Fashion is constantly changing, but public opinion is now steadily favouring a medium-sized or small retriever, and for obvious reasons. Occasionally fences are met with which are unjumpable, and there may be possibly only one or two places through which only a small and active dog can make its way. The advantage possessed by this type of dog over the heavier and bigger kind need hardly be demonstrated, especially when the dog is after a strong runner; moreover, small and medium-sized dogs usually jump well, are more easily stowed away than their bigger brethren, and are less inclined to tire during a long and hot September day. Size, then, is a matter of great importance, and so is a long neck and good shoulder, for the former enables its owner to get its nose well down and travel fast on a line, and the latter is essential in hilly countries. A nicely bent hock is a sine qua non, with strong loins and a short back, as without these valuable points no dog can jump well; the body should be well coupled, with the chest deep, but not too broad, as one always finds a broad-chested dog going wide in front. The legs should be straight and just long enough to enable the animal to travel easily in heather; the feet round like those of a cat, and not placed too flat on the ground. The breed should have plenty of bone, with pasterns sufficiently bent to relieve the dog from excessive jar when jumping into a roadway when carrying a heavy hare. The head should be fairly long, with a jaw powerful and lengthy enough to enable the animal to carry all kinds of game; the muzzle square cut, and the reverse of snipey, the nostrils open, the crown nearly flat and with no very pronounced stop, and there must be a reasonable amount of room for the brains, but no thickness about the cheek. The eyes should be dark hazel, and not too near together, while the ears should be small and not set too high on the head. Fashion has gone most steadily against light-coloured eyes, many good judges asserting that dogs with such a blemish are bad-tempered and shifty. I cannot

say that I have found them so, but the unsightliness of a light eye is undeniable. The coat should be flat and of fine texture, and the tail not too long, and carried on a level with the back like that of a setter.

Such, roughly speaking, are the generally accepted points of the flatcoated retriever. All the influence of shooting men-and it is great-should be brought to bear in the endeavour to insist on a system of judging, which recognizes as most important those points which are of use to the breed in carrying out the work for which it is intended. When this ideal state of affairs has been reached, we shall see medium-sized dogs, with good shoulders, long necks, short bodies, straight legs and good hocks, invariably receive the good marks they deserve in the show ring. Shows are doing admirable work, and it is a great mistake to decry their value. Gradually more and more dogs are being benched of a type fitted for work in the field, and it is being recognized that a good-looking dog, always provided that he is bred from working parents, has as good a chance, nay, a far better one, of proving efficient in the field than a specimen of commoner appearance and faulty conformation. The temperament of the flat-coated retriever is ideal; he is lovable, intelligent and obedient, both on and off the shooting field; he responds in a remarkable manner to any kindness or attention shown him, and the more you have him with you the better you like him; he is full of courage and a gentleman all over. I have frequently heard it asserted by men who do not know the breed that these dogs are soft, will not face briars, and are apt to shirk entering cold water in winter. Such has not been my experience. I have seen young flat-coated retrievers, when hunting the line of a wounded bird, go clean through a large heap of cut thorns without the slightest hesitation when it happens to be in the way, and I have rarely found it necessary to encourage even puppies to enter gorse or prickly cover when working. As regards water work, these dogs are quite first-rate, and enter water readily even in the most trying conditions; it may not be out of place to quote a couple of instances in support of my contention. I was out one very cold afternoon with a favourite flat-coated bitch, Queen by name, and had three ducks down, two of which were lively cripples, and one a dead bird. They had fallen into the River Trent, and, as it was during the month of January in the terrible winter of 1894-5, large blocks of ice were coming down the strong stream which was running at the time; in addition to this there were fringes of ice more or less thick stretching out from each bank. The bitch gathered the first cripple, and also the dead bird, without

THE FLAT-COATED RETRIEVER

difficulty, but by this time the other winged bird had, unseen by her, crossed to the other side and dived under the ice fringing the far shore. I told her to go over, and, although heavily buffeted by the blocks of ice, she crossed over, being carried down stream some forty or fifty yards; she then ran out on to the bank, shook herself and looked to me for orders. I waved her along until she was opposite to and beyond where the duck had disappeared under the ice; she kept her eyes fixed on me, clearly puzzled, and I was in doubt what to do; I bent down and beckoned her towards me, and when she had reached the spot on the ice near where I had last seen the duck, I shouted out, "Seek." She got her nose down at once, got into the water, dived under the thin ice which she broke, and pulled out the duck. I once sent this bitch six times into the river in quick succession in the same wintry conditions and there was never a sign of having had enough; these are only a couple of instances out of many which I could quote.

I readily admit that the flat-coated retriever is not so suitably endowed by Nature for water work as the Labrador or the curly-coated varieties, being longer in coat and consequently taking longer to dry; for this reason they require more care when they come in after a hard day in the water; but who minds a bit of hard work in drying and making comfortable a dog which has worked well that day? Personally I do not feel happy until I have seen my dog thoroughly dry and well groomed. If you see to this yourself, and insist on legs and feet being daily examined after work, there will not be many days in the season when you have to leave your dog at home. I have often thought that some handlers fail to give their dogs sufficient scope. Naturally too much liberty cannot be allowed to a young dog, but towards the end of the second season dogs should be absolutely steady even in the most trying conditions, and it is time to allow them to think for themselves. Busy men who can only get away for the week-end and big days, have no time to teach their dogs, and for improvement in their work and general intelligence one must look to the small days. Flat-coated retrievers are more than machines, and, in addition to big driving days and ordinary water work, can be used as spaniels, also as stops and in a variety of other ways. Their setter blood frequently prompts them to set game which may be skulking near them, and which without their aid would have been walked over; this trait should be encouraged, as it results in a large addition to the bag during a small day; absolute steadiness should, of course, be insisted on both before and

after the game is flushed. Only the other day I was struggling in the middle of a most uncompromising fence, when my dog, a flat coat, made a set; I had time to extricate myself, take the gun, load it, and walk back to the dog, which I found setting an old cock pheasant, which we had walked over. These dogs become very clever and useful with Jack Snipe, and they love the work. Most people think that using retrievers for snipe makes them slow, but I have not found it so, and it certainly tones down dogs which are inclined to gallop too fast for their noses. Occasions will frequently occur when it is advisable to walk a field or bit of covert out before picking up any of the game killed; the dog may be left behind, lying down, at the spot where you fired at and killed game. No noise is made, and there is no halt, consequently more shots are often obtained than would be the case if the game were hunted for at the time it was knocked down; then when you come to the dog, if he is of any use, he has done the marking and can usually pick what has fallen quickly when told to do so. In the nesting season these dogs are delightful companions, and speedily seem to realize that it is the close season, and that a sort of truce is reigning between themselves and winged game. I have in my mind that most charminglittle bitch, Horton Rosette, who is of the greatest assistance to her owner during the nesting season. Very tall and thick fences are the order of the day in parts of Kent, and as partridges are sensible enough to nest in the middle of them, their nests are in consequence most difficult to find. Rosette is set to hunt for the nests, during the time when birds are laying, and never passes one, standing still and wagging her tail when she has found one, looking round the while for her master, who tells me that her nose is much better than his eyes on such occasions. As retriever men will know, this bitch is fashionably bred by High Legh Blarney ex Ruby.

Some anxiety is felt among breeders as to the future of the flat-coated retriever. Fresh blood is undoubtedly wanted, and experts are divided as to whether Labrador or setter blood is to be utilized. If the present appearance of the dog is to be retained, and I see no reason why it should be altered, setter blood would seem to be the more desirable, and if that is decided on I would strongly recommend the Irish red setter; he has a capital constitution, retrieves well, and will go all day; he has also the advantage of being extremely handsome, and I have found him tractable. A cross which I tried in the early eighties between a red setter dog and a flat-coated bitch gave good results, half the litter favouring the dam in

THE FLAT-COATED RETRIEVER

colour and shape; one of these I kept, and she proved a useful worker. There is an enormous amount of luck in breeding; alliances may be arranged which are perfect in theory, and then Nature steps in, and the result is—disappointing. For a time fortune favours particular kennels, all goes well, and then, in spite of every effort to retain them, her smiles are withdrawn. Two of the greatest of flat-coated retrievers had very narrow escapes, and in each case fortune was kind to his owners. Darenth, as a puppy, was so dangerously wounded out shooting that for a long time it was extremely doubtful whether he would recover; and Paul of Riverside was condemned to a death usually reserved for worthless animals. only to be begged off by the kennel-man at the last minute. The number of men who breed and break their own dogs has greatly increased, and while we have enthusiastic supporters of the breed like Messrs Allen Shuter, G. H. and T. S. Elliot, Reginald Cooke, E. E. Turner, E. W. H. Blagg, Lewis Wigan, Beaumont Neilson and others, there is little fear that it will deteriorate either in work or looks in the future.

In writing this article it has been my earnest desire to give credit where credit is due, and if I have inadvertently omitted the names of well-known men and dogs I trust that I may be pardoned. My warmest thanks are due to friends who have taken an infinite amount of trouble in supplying information which I hope may prove of interest to lovers of the breed.

W. COAPE OATES.

THE LABRADOR RETRIEVER

F recent years the Labrador has come into great prominence in the shooting world, though the breed has existed in England and on the Borders for the last twenty years or more. This increased popularity must be attributed to the great increase of retriever trials during the last seven years or so and to the success of the breed there, as well as to the fact that nowadays everything has to be done as quickly as possible and no time wasted. Shooters of the old school lament the absence of the trusty spaniel and old-fashioned curly-coated retriever of their youth and with much justice and reason; but in the early fifties and sixties driving (both grouse and partridges) as now carried out was unheard and unthought of. Large bags and haste to get on did not enter into the scheme of affairs at all, hence no particular need for the fast-moving, quick retriever now demanded by the shooting man, Whether this is to be regretted or not is a matter of opinion, but most shooters who are also dog men will agree that sufficient time to do justice to a slowworking dog at picking up, is very rarely allowed by one's host or the head gamekeeper, owing to fortuitous circumstances, and therefore a quick-working dog is essential.

The Labrador came to this country originally in 1835, when the Earl of Malmesbury of that day had some. The first dogs appear to have come over from Newfoundland as "ships' dogs" on the boats which brought salted cod to Poole harbour, which accounts for the Earl of Malmesbury being the first to acquire the breed.

Blaine, in his "Encyclopædia of Rural Sports," published in 1852, refers to two breeds—the Newfoundland retriever and the St John's breed, which latter dog, he says, "is preferred by sportsmen on every account, being smaller, more easily managed and sagacious in the extreme. His scenting powers are also very great." Probably this latter is the ancestor of the Labrador as we know him at the present day. How the breed was evolved is hard to say, but the probabilities are that the fishermen of Newfoundland wanted a good, strong water dog (since they are reported to have found them useful in cases of wrecks and wreckage on that coast) and crossed the heavy-coated, strong, black Newfoundland retriever with a black pointer, and evolved in time a hard, short-coated dog with great staying powers. That this is probably the origin,

PETER OF FASKALLY, CHAMPION
The property of Mr A. E. Butter.

PLATE XVII.



Teter of Faskally



THE LABRADOR RETRIEVER

is borne out by the fact that if Labradors are inbred, the result is often a light-made dog, long on the leg, light of bone, with a thin tail and pointer-like ears. In Labrador itself the dog of the country is a "husky" or sleigh dog, very savage and fierce, with curled tail and shaggy coat, and usually having a lot of white on chest or feet, and in no way like the Labrador retriever.

Some time after the Earl of Malmesbury started his kennel, the Duke of Buccleuch founded an establishment by three Labradors named Ned (who was by Sweep out of Juno) and a dog called Avon, who was by Tramp out of Juno. A bitch was also given, and these are the founders of probably the largest kennel of Labradors in existence at Langholm, in Dumfriesshire. The Earl of Home, on the Borders, kept Labradors between 1850 and 1860, and the Netherby kennel was started in 1860 by some given to the then Sir R. Graham from The Hirsel. The last in turn gave some to the Earl of Verulam and so started the establishment at Gorhambury, in the south. The late Duke of Hamilton got Labradors from the Earl of Home, but these dogs were disposed of in 1879.

It has been suggested that as the salt-cod boats from Labrador sailed also to the Tyne and to Tweedmouth, the Earl of Home of that day would probably have got his original Labradors in the same way as the Earl of Malmesbury. By degrees the breed extended all over England, though Northumberland was always a stronghold, due to its being so near to the Border kennels, whence, no doubt, many puppies were obtained. One often hears Labradors accused of having what the Scottish call a "dour" cast of countenance; where this does exist it is probably caused by a falling away of nose below the eyes and the eyes being rather prominent. As a breed they are good tempered unless attacked, when they can take very good care of themselves. If they do fight, they get up much more on their hind legs than most dogs, and appear to go chiefly for their opponent's throat. Labradors do not lavish any affection or attention on anyone else if their master is out, but pay strict attention to him and to the business of the day, which is as it should be. From the point of view of breaking and working, they may not suit every one, as their natural keenness which is one of the chief characteristics of the breed—has to be watched and kept under control, or trouble quickly follows. The Labrador does most of his work at a gallop, and often carries a good scent breast high, hardly checking his pace as he picks up the bird or rabbit he is sent after. This feature is probably the cause of some people saying that they are

265

MM

"rough" in retrieving. I have known only one flat-coated retriever which does the same thing as fast or faster than the Labrador. A peculiarity of many of the breed is standing for a moment and pointing at dead or wounded game in thick covert and then pouncing at it and picking it up—a trait I have known some people take exception to.

As is only natural, some do have hard mouths, but the same applies to flat or curly coats or spaniels. More often than not the breaker is responsible for any hard-mouthed Labrador, by not understanding the breed and its habit of coming back at a great pace and snatching at the object retrieved as the young dog comes up. From the very fact that the dog returns as fast as he can, he holds the bird or whatever it may be far tighter in his mouth than he would if he sauntered back at a gentle amble to his handler, and for this reason it is advisable to take the game gently and let the dog give it to your hand. For thick covert, Labradors are not to be beaten, and as they are tireless they will continue working and hunting long after other breeds have given up. They are natural hunters and love it, and will continue to hunt in thick heather after a drive for an unlimited period, ever ready and willing to take another cast, though they may be convinced that it is a useless proceeding. Their short, hard, thick coats make them ideal dogs for working in water after duck, and they are excellent and natural swimmers. The thickness of coat also prevents the water from soaking them, and after a good shake and a roll on the bank they are comparatively dry and do not starve with the cold like a longer-coated dog is bound to do on a windy, frosty night. The shooter, therefore, is not faced with the unpleasant feeling that while he may be warm and passably comfortable his dog is chattering with cold. A further advantage is that their coat collects less mud and burrs, and after a day's shooting a short rub down is all that is needed, while on a blazing hot day on the moors in August the dog is not affected by the intense heat like his unfortunate co-retrievers of other breeds.

In type, the breed varies greatly, due to the fact that Labradors have always been kept in the past for work and work alone, and owners were not particular as to appearance so long as the working qualities were there. Some owners have for years past bred from dogs of the type they liked, provided they were good workers, and what fixed type now exists is due largely to their efforts, but the far greater number of men owning, perhaps, one or two Labradors for their own use, bred formerly from whatever good worker they knew of within easy reach. The breed so far

MR MAURICE PORTAL'S LABRADOR, "FLAPPER." PLATE XXVII.







THE LABRADOR RETRIEVER

has not suffered from excessive showing, and it is earnestly to be hoped never will do, though now that the leading show-promoting societies offer prizes for them the risk of becoming spoilt is very great, for there are many men who do not first ascertain if the prizewinner is a good worker and a soft-mouthed broken dog, before making use of him. One can hardly conceive a course of procedure more fatal to the breed as a whole or more diametrically opposed to the result the owner is really striving to attain. In the earlier types of Labradors in the sixties there is ample evidence that the great majority had light eyes and often very bad tails, and very often white on the chest and sometimes white on a toe. The white on the chest most probably comes from the original Newfoundland retriever and probably the indifferent tail is a legacy from the same, but it is hard to adduce any valid reason for the light eye. It is no blemish and is in fact the proper colour, but popular fancy prefers a dark eye, and the eyes of two-thirds of present-day Labradors are dark in colour, which gives a more pleasing expression to the countenance. In body conformation the Labrador should be well and strongly built, with good, clean, straight forelegs, not out at elbows, with plenty of bone and no feather. The body must be well ribbed up, deep in girth and with strong loins and quarters (not dropping away behind) and with a tail well set on, straight and shaped like that of an otter and of a fair length. The head must be of medium length and breadth, rather wide across the skull with plenty of room for brains, and with an open type of countenance. A long narrow snipey sort of head is entirely wrong. The nose should not be too short nor in any way like that of the pug, and the nostrils fairly open. The ears well set on, not too low down and of medium size. The small ear set on rather high, or the big one like a vine leaf in shape, should be avoided. The coat must always be short and wiry, and with a good sort of close under coat. It must not show any wave or curl or brokenness; where this is apparent it is almost certain to arise from some flat-coat cross, and, lastly, the coat must have a good hard feel. In many of the breed, if the hair is examined, it will be found to be like that of the badger near the roots. In colour the Labrador should be pure black.

There are, however, two sub-varieties: the yellow, owned by Captain Radclyffe and by the Earl of Lonsdale and others, and the white, owned by Mr Austin Mackenzie at Carradale in Argyllshire. The whites are typical as to coat and make and differ merely in colour. They originated from a dog owned by Mr R. Fenwick, called Sam, who was by Shift out of Sloe.

Sloe was by Stag, the sire of Flapper, going back to the Duke of Buccleuch's strain and that of Sir R. Graham. For some unexplainable reason, since so far as can be traced all ancestors are black, three litters by Sam all came of a colour best described as buff, excepting one bitch, which was pure white. This bitch Mr Mackenzie put to a black Labrador, and the result was another buff-coloured litter; so next time she was sent to Lord Lonsdale's dog Blanco, a bluish-white dog, by Captain Radclyffe's Ben, and this cross produced eight white puppies and the colour was fixed. The coats are hard and short, and they have good bone and are low on the leg. They are hardy dogs, as fit for a long day's work as their black relations and in no way inferior to them. A white-coloured animal is often thought to be deficient in stamina, but in this case, there is no sign of it. They are rare, as naturally their owner does not part with any of the colour, with the exception of two given to Lord Lonsdale as puppies. A nearly white Labrador, owned and bred by Lord Helmsley, ran with credit in the stake promoted by the Yorkshire Retriever Society on Lord Feversham's shooting in October, 1912.

Those owned by Lord Lonsdale originated from dogs given by friends who happened to breed yellow puppies from black parents. Lord Lonsdale has found that they do not breed true to colour, and has even reared three litters without getting a single yellow puppy, which is unfortunate, and would point to the fact that black is the predominant factor yet in the breed. In their work the Lowther yellow Labradors are as hardy as the black, and are first-rate in their working qualities.

The fawn, or yellow, coloured Labradors, owned by Captain Radclyffe at Wareham, are true Labradors, and must not be in any way confused with the Ilchester or Tweedmouth breed, or the so-called golden-coloured retrievers. The ancestors of the breed now at Wareham were brought from Newfoundland to Poole Harbour by the owner of a schooner trading between Labrador and Poole, in the year 1858 or 1860. Hawker brought over some four different lots. These were all black in colour, with white mark on chest, and some were bought by Captain Radclyffe's father, and the breed has been kept ever since. A dog named Ben, owned by Captain Radclyffe, was the first pure-bred yellow Labrador he possessed, and this dog and his sons now get from 50 per cent to 75 per cent of their puppies yellow in colour, though mated to black bitches, so the colour appears to be predominant and fixed, though it should be stated that once all the puppies of one litter, the sire and dam being yellow, came pure

THE LABRADOR RETRIEVER

black again. Ben was out of a black Labrador bitch named Duchess by Neptune. For many years the Labradors at Hyde came the normal black colour, but by a freak of Nature two yellow puppies were born in a black litter, and one of these was Ben. It is rather a curious fact that it is only of recent years that any of the black bitches began to produce fawn or vellow puppies with any frequency, though an odd, light-coloured puppy had occasionally appeared, but very rarely. The yellow Labradors at Hyde have a rather coarser and slightly longer coat than most black dogs, but they have the true thick and dense undercoat, which the pure-bred dog invariably possesses. It is possible that the coarser and longer coat is due to the fact that the breed there has been kept pure by breeding from dogs belonging to the Earl of Malmesbury and Lord Wimborne, all of which are descended from the original dogs imported by Hawker to Poole. There has always been a careful selection of type of dogs kept for breeding, and any with narrow heads are put down. The result is that they now have a good broad head, with ears well set on, and a very nice open type of countenance. There is no necessity for inbreeding to maintain the colour and type for Mr A. Browne, of Callaby Castle, in Northumberland, has had a strain of black Labradors for the last twenty-five years, the bitches of which at times throw a yellow puppy, and if the actual puppies in a litter are black ones, they often in their turn produce yellow ones. Mr H. G. Atkinson Clark's Sloe is an instance of this; she was one of Mr A. Browne's breed and black in colour, yet frequently producing yellow puppies, even though mated to a black dog. When mated to Captain Radclyffe's Ben, she produced Blanco, now owned by Lord Lonsdale.

Some breeders have tried crossing the flat or wavy coated retriever with the Labrador, and from the point of view of work this cross is excellent. Colonel C. J. Cotes's Pitchford Monarch and Lord William Percy's Fleetfoot are both notable examples of a good result, and have won field trial honours. Many people have made use of this cross to get the darker eye, but crossing for this purpose alone is to be deprecated. Those who have made use of the Labrador to bring new blood into the flat-coated breed have done so with the intention of breeding back as fast as possible to their own breed, and that excellent authority on dogs, Colonel Cotes, informed the writer that in four generations the result would be pure flat coat again in appearance. In the first cross it will be found that as a rule fully five out of six puppies in the litter come almost Labrador in appearance and take after the Labrador almost entirely, so much so

that at first glance one accepts them as pure Labrador. The tail and the coat usually betray the cross, but as regards nose and mouth the first cross production is very hard to beat, and possesses some of the charming characteristics of the flat-coated dog in manner and affectionate ways. If crossing two half-breds is essayed, the result will not be found satisfactory, and the produce cannot be depended on to come to any type.

A Labrador dog named Flapper (by Stag-Betsy) made his first appearance at field trials in 1906 and ran four times, winning second at the International and Kennel Club meetings in that year, first at Kennel Club trials in 1907 and again first in 1908 at the International fixture. His style of work and power of using his brains and nose, and "adaptability" was appreciated by many who formerly looked on the Labrador breed as a negligible quantity. His stock coming to the front in field trials helped to add to the popularity of the breed and in some measure contributed to make it the success it is at the present day. The son of Stag was made use of extensively at the stud by Labrador as well as some owners of flat-coated retrievers, and as he is the sire of some eight hundred puppies it is safe to say that his influence on the breed must be very lasting. Several of his progeny have gone to France and also to America; some of those sent to France winning trials there. In his breeding Flapper goes back to Lord Malmesbury's Juno on his sire's side and to Sir R. Graham's Kielder on that of his dam. The Duchess of Hamilton's Dungavel Juno (by the Earl of Shaftesbury's Ben ex Gyp) was one of the most consistent performers and bred several excellent puppies, which appeared later with success at retriever trials. This bitch won second prize at the International and Kennel Club in 1907, first at the Kennel Club fixture 1908, first at the Western Counties' gathering in 1909, and second at the International and Scottish trials in 1910. Dungavel Juno is also the dam of Dungavel Thor, which won first and championships at shows. Mr A. Butter's Peter of Faskally (by Waterdale Gamester-Nell) has been a very brilliant performer at trials, though handicapped on one or two occasions by his owner being unable to work him personally. In spite of this he won fourth in Kennel Club Open Stake and third in the Junior event in 1909, following this up by being first at the Kennel Club and Scottish trials, and fourth in the championship in 1910. Finally he won second at the Scottish and first at the championship meeting of 1911. Many of this dog's puppies have won at trials and show great natural intelligence, nose and dash. As

CAPTAIN RADCLYFFE'S YELLOW LABRADOR, "DINAH." PLATE XXVIII.







THE LABRADOR RETRIEVER

a fact, the first five dogs in the Junior Stake at Gaddesden, in 1912, claimed him as sire.

"PETER OF FASKALLY," Born February 2, 1908.
PEDIGREE.

	FEDIGREE.									
FASKALLY. Born February 2,[1908.	Sire & Dam.	G. Sires & Dams.	G.G. Sires and Dams.	G.G.G. Sires and Dams.	G.G.G.G. Sires and Dams.					
	WATERDALB GAMESTER-376 P. W. Rudston Faulconer.	SHERFIELD SPRATT 1900. J. B. Taylor.	MUNDEN SIXTY— 1897. Hon. A. Holland Hibbert.	NITH-1891 Duke of Buccleuch.	AVON-1885, Duke of Buccleuch. GIP-1889, Duke of Buccleuch.					
				MUNDEN SARAH— 1893. Hon.A. Holland Hibbert.	SCIPIOII—1888, Viscount Grimston MUNDEN SAUCY—1889.					
			MUNDEN SCOTTIE 1897. 218 H. K.C. Hon. A. Holland Hibbert.	DRAKE-1891. Duke of Buccleuch.	{ AVON-1885. GIP-1889, Duke of Buccleuch.					
				BELLE—1892. Duke of Buccleuch.	NED-1882, Duke of Buccleuch. TRICK-1888, Lord G. Scott.					
		TWINKLE-993 L. W. Faulconer.	MUNDEN SENTRY 1900. Hon. A. Holland Hibbert.	MUNDEN SIXTY— 1897. Hon. A. Holland Hibbert.	NITH—Duke of Buccleuch. MUNDEN SARAH— Hon. A. Holland Hibbert.					
				MUNDEN SCOTTIE— 1897, 218 H. K.C. Hon.A. Holland Hibbert.	DRAKE—Duke of Buccleuch. BELLE—Duke of Buccleuch.					
			VENUS— 1902. R. Ward.	BRAMBLE— Rowland Ward.	JOCK-Duke of Buccleuch. ROSE-Rowland Ward.					
FASK. Born				SOLO— F. Shoolbred.	OTTER—Sir R. Graham. ROOK—W. Stewart Menzies.					
PETER OF K.C. Stud Book 317 P.	BIRKHILL JULIET (late NELL)-1906. J. Smith.	MUNDEN SOVEREIGN 1902, 2164 K.C. Hon. A. Holland Hibbert,	SIR RICHARD— 1899. A. Nichol.	TAR-1894. Sir R. Graham.	SWEEP-1889, Earl of Verulam. ESK-1892, Duke of Buccleuch.					
				NELL-1896. A. Craw.	JOCK-1892, Duke of Buccleuch. JUNO-1891, Earl of Home.					
			MUNDEN SINGLE 1899. 2154 K.C. Hon. A. Holland Hibbert.	MUNDEN SIXTY— 1897. Hon.A. Holland Hibbert.	NITH—Duke of Buccleuch. MUNDEN SARAH— Hon. A. Holland Hibbert.					
				MUNDEN SCOTTIE— 1897, 218 H. K.C. Hon. A. Holland Hibbert.	DRAKE—Duke of Buccleuch. BELLE—Duke of Buccleuch.					
		SUSAN—1902. Capt, Bald.	BRUCE— 1896. Duke of Buccleuch.	SAILOR—1892. Earl of Verulam.	SCIPIO II—1885, Earl of Verulam. SAPPHO III—Earl of Verulam.					
				BELLE—1892. Duke of Buccleuch.	NED-1882, Duke of Buccleuch. TRICK-1888, Lord G. Scott.					
			NINNIE— J. Liddell.	BEN— C. Liddell.	SAM—C. Liddell. JUNO II—F. Barnett.					
				SAH— A. H. Straker.	{ DACRE—1882. NELL—A. H. Straker.					

The Hon. A. Holland Hibbert started his kennel of Labradors at Munden in 1884 from dogs from the Earl of Verulam, and has taken great

pains to breed to a type and for use as well as show. Probably his Munden Single was the first Labrador to run at a field trial, this bitch running at Warwick in 1904, since when his dogs have been recognized at trials as well as at some of the large dog shows. In type his Munden Single and Munden Sovereign were two of the best Labradors of their day. Mr A. Glen Kidston's Juniper by Flapper—Sandhoe Juno is another consistent performer at trials, winning reserve at the Kennel Club meeting in 1909, second at the Western Counties 1910 fixture, fourth at the Scottish and second at the International in the same year, and finally first at Western Counties, first at the International and second in the contest for the championship in 1911. From the few instances above-mentioned, it will be seen that Labradors have more than held their own by working well and consistently at trials open to all breeds of retrievers.

FIELD TRIALS.
PETER OF FASKALLY'S RECORD.

Date.	Show.	Class.	Award.	Specials.
1909 .	Kennel Club Trials	Open Stake	4th	_
	Scottish Trials	Junior Stake	3rd	-
1910 .	Kennel Club Trials	Open Stake	1st	Cup
	Scottish Trials	Open Stake	1st	Cup
	Champion Trials	_	4th	-
1911 .	Scottish Trials	Open Stake	2nd	-
	Champion Trials	_	1st	Cup

At shows classes are given for Labradors, but, with the exception of the Kennel Club and Cruft's, the number of entries is not large and not to be compared with the flat-coated variety. For some years they were not recognized as a breed by the Kennel Club, and until 1905 no classification was given them. Since that date the numbers registered at the Kennel Club have risen from 73 to 233 for 1911. The variation in type probably has most to do with the fact that they are not a popular show dog. Of show winners of recent years the best have been Brayton Swift, Broome Park Bob, Watford Sall, Dungavel Thor, and Kassatka. None of these has won at trials, though Dungavel Thor obtained certificates of merit. In time no doubt a type will appear and be fixed. Then the field trial winner and show bench winner will be on equal terms.

MAURICE PORTAL.

CURLY-COATED & OTHER RETRIEVERS

HE curly-coated dog has always been looked on as the keeper's retriever, no doubt because of its hardiness and workmanlike appearance, and it is not at all strange that the best groups of the variety seen in public the year round are those got together at the show of the Gamekeepers' Association of the United Kingdom. Two days before writing this article, as an addition to those already contributed by Captain Coape Oates and Mr Maurice Portal, I was at the 1913 show of the combination named, held in the General Market, Stafford, and formed one of a group of field trial men who followed with great interest the work of the judge, Mr T. Duerdin Dutton, a popular member of the Kennel Club, and an especially sound authority on most breeds of gundogs. He expressed his surprise at the excellence of the entry. Nor was he alone in that opinion, and it is certain that if Paterson, the Heythrop gamekeeper, or Peter Taylor, who has the charge of an extensive shooting in Ireland, could only be persuaded to bring out a really good curly-coated retriever at one of the open trials, the breed would get the lift it really deserves. A Gloucestershire shooting man who was my companion at the show, a man identified with the flat-coated retriever ever since he first handled a gun, declared that if he could only be certain of a curly-coated retriever of the type of either Deveronside Kaffir or Baronscourt Beauty being good in the field, he would give the breed a trial. For years I have heard men express the same opinion, and after following the retriever competitions since the first meeting on the Sussex-Hampshire border above Havant, I feel convinced that nothing more than the appearance of a creditable field trial performer is needed to place the old-fashioned and neglected curly-coated dog on the same plane as that occupied by either the Labrador or the more handsome flat-coated retriever.

With what Captain Coape Oates and that good authority, Mr Maurice Portal, have said about their favourites I have no wish to interfere, but I am glad to be able to put in a plea for a variety really worth encouragement, and one which has been too long neglected by all but gamekeepers. Mr S. Darbey, Mr C. Flowitt, and other men who generally filled the classes apportioned to the breed at the Crystal Palace and other shows up to ten years since are not heard of in these days; as a fact the last time I was in Doncaster I found the once famous Belle Vue kennels

273

of the latter converted into stables for the accommodation of thoroughbreds trained on the Town Moor; while as regards Mr Darbey he cannot now be counted on as a supporter of any but west-country shows. Mr A, R. Fish seems to have taken his place, and his strain of Penworthams is pleasing to the eye, all the dogs being especially close in curl, very wedgeshaped in head and fine in muzzle; while few flat-coats are so deep in brisket, or so good in legs and feet as those sent to the chief shows from the famous Lancashire Kennel. I can say nothing about their ability in the field, but the men who were responsible for the bulk of the entries at the show at Stafford the last week in February assured me that all their dogs were broken, and that few showed the slightest trace of being hard-mouthed. Why then cannot some one show a little enterprise by having a good-looking curly-coated retriever broken and prepared for the field-trial campaign? His lowly origin is against him, I will admit, but had the poodle-Labrador or Irish water-spaniel cross had such a friend as his flat-coated relation possessed in Mr S. E. Shirley, he would probably have long ago received the recognition which is his due. In appearance he is a workman from stem to stern; he can stand a day's work as well as any dog; while his fondness for water makes him invaluable on some shootings. The coat of a really good one is so closely curled as to be practically impervious to water, and that, of course, is a material advantage. As a gundog this variety is certainly worth better recognition than it has yet obtained.

Yellow or golden-coloured retrievers, made popular by the Hon. L. Harcourt, who uses no others on his Nuneham shooting near Oxford; Mrs W. M. Charlesworth, Mr W. A. Sturdy, and Macdonald the Ingestre Park gamekeeper, have attained a position in the list of gundogs by the provision of classes at some of the leading shows, and Mrs Charlesworth showed enterprise by having a small team broken with a view of competing at the field trials. Normanby Sandy ran well at the Kennel Club meeting and was awarded a certificate of merit, quite a triumph considering the quality of the entry and the closeness of the competition. This dog was splendidly handled; he showed initiative, proved that he had a good nose, and showed no fear when asked to face rough covert. It was, however, his lack of dash, when compared with the handy and adaptable Labrador, which accounted for the judges not giving him a prize, but he proved himself to be a very capable retriever, and in a less important stake he might have realized the fondest hopes of his owner.

MR W. GORDON CANNING'S RETRIEVER, "MAJOR." PLATE XXIX.





CURLY-COATED AND OTHER RETRIEVERS

Mrs Charlesworth was plucky to run him at one of the biggest meetings of the year, and the breed certainly got a very fine advertisement; for those of the same colour which I had seen run in Scotland and Yorkshire did not convince me that the yellow or golden-coloured retriever was any better, or even so good, a gundog as the Labrador or the handsome flat-coat.

No notice of retrievers would be complete without mention of the Marjoribanks and Ilchester trackers, brought to public notice by Colonel the Hon. W. le Poer Trench, of St Huberts, Gerrards Cross, and I shall not readily forget the sight of a team which I saw at work during the early part of the autumn of 1912. A man not interested in shooting would have passed the field in which they were working to the directions of their breakers without noticing that what, at the distance, looked like Irish setters were being sent for game. Being of an inquiring mind I stopped and heard a great deal which was of interest concerning the St Huberts's retrievers. This variety was introduced into England shortly after the Crimean War by the Hon. Dudley Marjoribanks (afterwards Lord Tweedmouth). He saw them at a circus at Brighton in 1858, where they were being shown by their Russian owner. They were so handsome that Mr Marjoribanks determined to acquire them, and he bought the lot, transferring them to his deer forest in Inverness-shire. There they were found to possess the qualifications of tracking and retrieving. They were so much valued that the family kept the breed apart, the only kennels breeding them being those of Lord Tweedmouth, and of his nephew the late Lord Ilchester. Bitches were never given away, and the favoured few on whom the dogs were bestowed treasured them. The result of this system of in-breeding was that, about 1880, the variety was found to have deteriorated and to have become soft. Lord Tweedmouth, therefore, sent to Russia, hoping to get new blood, but his agent was unsuccessful. The locality he visited could not produce a single specimen, but it was found that dogs of a similar character were known in a wild and unfrequented part of Asiatic Russia. As there appeared to be no chance of getting any specimens of the original strain, a bloodhound cross was tried, but, as could only be expected, that resulted in the character of the breed being practically destroyed. A dog bred by Lord Ilchester, however, passed into the hands of Colonel le Poer Trench. and after years of experimenting and cross-breeding between the Ilchester and Tweedmouth dogs, fixity of type was secured, and at St Huberts

to-day may be seen one of the most remarkable teams of retrievers in existence. Colonel le Poer Trench made a journey to Asiatic Russia in 1912 hoping to get an out cross, but the dogs he bought in the interior escaped from their temporary kennels. Now he has placed a commission with a trustworthy agent, and may yet be successful in getting the fresh blood which is necessary if the standard of this breed is to be maintained. He has received great encouragement in his quest, for shooting men who have seen his dogs in the field have shown anxiety to acquire some. They are first-rate water dogs, charming companions in the field or in the house, and are not handicapped by the strong smell generally noticed in retrievers after immersion in water. They are absolutely distinctive in type, and are bound to become popular once they are really known.

WALTER BAXENDALE.

THE BREAKING OF GUNDOGS

LTHOUGH different varieties of gundogs require different methods of education, there are some general rules that apply to them all. The most important, and a good foundation for all future virtue, to say nothing of the simplifying of training, consists in preventing the young "hopeful" from contracting bad habits that often have to be sternly suppressed later on. Let your young dogs spend their spare time away from the sight and smell of game and rabbits. A young dog who has never had the chance of a wild chase "on his own" has not such a strong inclination to pursue everything he sees, and it makes it a much simpler process to direct his thoughts into the right channels.

Begin young! Get the puppy quite accustomed to the sound of a gun. When he is too small to run away, take him to a strange field, with old dogs, whose sedate demeanour he will imitate. Let an assistant fire a gun about three hundred yards away, getting nearer every day, and firing only one shot per diem. Ninety-nine dogs out of every hundred that are gun-shy have been made so by stupid management. If a puppy is nervous be most careful. If he is not nervous treat him at first as if he was. Were this precaution always taken gun-shy dogs would be scarce.

It is a good beginning never to give an order you cannot enforce. For instance, take hold of the check string, before you tell the puppy to "sit down," then there can be no difficulty in getting the order obeyed, and we should not hear so often of the dog who could not be caught, when he had transgressed. It may be remarked in passing that the obvious way to deal with such an animal is invariably to keep a check cord, of about fifteen yards, attached to his collar, at least till such time as he gives up his knavish tricks. Nothing impresses a puppy with his master's power so much as a few yards of salmon line attached to his collar, which is light enough not to encumber his movements, and strong enough to hold him if required.

Though the education of retrievers and spaniels can hardly begin too young, pointers and setters respond better when their early training is confined to coming to whistle and not chasing fur. When they are keen on game it is time enough to teach them to drop; it saves trouble later if they are allowed to develop their natural hunting instinct without too

many restrictions, which, if applied too soon, tend to damp their ardour for ranging. Pointers and setters should be handled with as little noise as possible, and taught to work entirely by signal, or, at most, a whistle and signal. Having never run wild nor indulged in "self-hunting," it is extraordinary how quickly they take to their work. With fifteen yards of light cord on the dog, which he drags loose, the trainer proceeds to an oblong field, giving the dog the wind. He begins at one end, by walking across the field; he starts the puppy off, checking him should he start straight up the field and waving him in the direction in which he is himself walking. When the dog reaches the fence, he whistles, turning himself in the direction he wishes the dog to take, and walks back diagonally across the field, the object being to make the pupil quarter his ground in such a manner that every part of it will come under "observation" of his nose, and so no game can be passed over. As the dog nears that part of the field where birds usually lie, the handler will be near him, and when he hesitates, on winding them, as he most likely will do, the end of the check cord must be caught, the dog restrained from rushing forward, and made to stand steady for some minutes before being encouraged to creep forward and flush the birds, when he will be gently pressed down and kept at the down "charge" for some little time. Some young dogs at first take no notice of scent, and charge into covey after covey. Here the simplest, if not orthodox, method is of making a steady old dog find the birds, and allowing the young one, led on a check cord, to come up behind; when he feels the scent the old dog may be ordered to "drop," and the juvenile to advance and spring the birds. This may be done till the young dog takes an interest in birds, when he must start again and find them for himself.

One great difference exists between pointers and setters and other gundogs; the former are always under the eye of their handler, whereas a retriever or spaniel may be a quarter of a mile off, on the line of a runner, and so must act on his own initiative, and do what the human race so often shrink from—take the responsibility of their actions.

In teaching all dogs to retrieve the same methods and objects equally apply, to get the game brought quickly and tenderly right up to hand. Begin young, because when the playful moods of youth have passed away, it is not always easy to get the beginner to "pick up" at all. This is a most aggravating state of affairs. On the other hand, a small fat puppy generally wants to carry anything it sees, either with a view to a meal

THE BREAKING OF GUNDOGS

or to tearing it to pieces. The motive matters not, but importance lies in the fact that this is the golden moment not to be missed in turning that carrying instinct to account. With two dead pheasants' wings tied tightly together repair to a field the puppy does not know, throw the wings a couple of yards; as the puppy reaches them get up and walk away. He will most probably come tearing after his master, carrying the wings, fearing he will be lost, in what is to him an unexplored wilderness, and not wishing to leave his new toy behind. Catch him and remove the dummy by opening his mouth gently; a great step has been successfully taken in his education. With a little care and tact he will learn, with the assistance of the aforesaid salmon line, to wait till he gets the order to fetch. While these simple early lessons are in progress, a few stout and tame Belgian hares may, with advantage, join the class; their constant presence immensely simplifies the fur question in the future, when runners have to be caught in rabbit warrens.

Young dogs cannot see too much of the world, they are the better for being taken everywhere; the more they see the better. When possible, a short stay in a town does them great good. Learning to sit where told in the street while their master disappears from sight, all tends to the great point in a good gundog, keeping his head in all circumstances. Too much trouble cannot be taken to ensure a tender mouth. Young dogs should start retrieving cold birds, i.e., those that are stiff and rigid; when quite skilful at picking them up cleanly, it will be time enough to begin with a freshly killed one. A partridge is the most suitably sized bird to begin with, and beginners should not be sent for runners till their retrieving of dead birds is quite perfect, and there is no danger of the fatal squeeze to make the struggling bird keep quiet. Always make a retriever wait before sending him out, except, of course, in the case of an experienced old friend who can be sent at once, when necessary, without danger of his running in next time.

Dog training is very much a matter of common sense, and must be varied to suit certain conditions; much that has been suggested for pointers and setters applies to spaniels. They must quarter their ground nicely, and drop to hand, shot, and wing, though when broken purely for woodcock shooting, in thick covert, it is better that they should come to heel, instead of dropping to shot. They must be perfectly steady from chase, and one of the easiest ways of making spaniel puppies drop to wing, and keep within shot, also to correct their range and quartering, is to work up

landrails with them in the summer, as they are then under your observation. You can make them do exactly as you wish, which is not so easy in a thick covert full of ground game.

Beyond what may be called, for want of a better term, physical dog-training, those of us who have spent our lives among dogs have come in contact, though we may not all have realized it, with a peculiar influence, which may be called "telepathy," "animal magnetism," or anything else, but there it is. As in human beings, one mind often has a governing influence upon another. Considering the amount of thought and mental energy applied by a trainer to his dog, is there any reason to marvel that the impressionable brain of the animal can, to a certain extent, be dominated by the stronger will of his master? The dashing young setter, two hundred yards off, makes a move to chase a hare, stops, looks back at his handler (who has not made a sound or moved, merely thinking his charge will not commit himself, and thinking it very earnestly) and drops. Most people who have broken many dogs have seen something like this.

In careful hands pointers and setters, if of a good strain, vary comparatively little as to their inclination to absorb knowledge. Nothing is more miserable than a fine August day, and the dogs tired by lunch time. This is quite avoidable. All setters and pointers should do four hours three times a week on the road for six weeks before the Twelfth. In handling dogs the mistake is often made of being afraid of their doing wrong; better to keep cool, and trust that the time spent on their education has not been thrown away; if the worst happens, a chase after a flying and unwounded pheasant is futile, and no one finds it out quicker than the dog himself.

WALTER BAXENDALE.

EVOLUTION OF GUNS AND RIFLES

I

HE development of firearms has been a long process as man counts time. It has taken many generations. The records of the subject are incomplete; for firearms, as an invention, began somewhat earlier than printing. Yet they are of very recent growth in the history of mankind. What is a period of seven hundred years compared to the unnumbered ages during which men slew their prey with stone and stick, javelin and arrow, knife and sword, during which the arts of hunting with dogs, snaring and netting were developed and brought to a high pitch of perfection?

The history of firearms necessarily begins with that of gunpowder. Incendiary mixtures had been used in war for centuries before projectiles were impelled by explosives. Chinese fireworks and Greek fire were alarming and dangerous, but of limited use. The second Council of the Lateran, in 1139, in vain laid under anathema all persons who made igneous compositions for military purposes, and it may be noted that the same Council condemned with no more effect the deadly and odious arts of cross-bowmen and archers. Our want of precise knowledge of the origin of gunpowder is presumably due to the perpetual danger incurred by the early chemists of being accused of practising unholy magic. The English monk, Roger Bacon, described its composition in elaborately cryptic language before 1249 in his "de Secretis." In his "Opus Tertium," written about 1266 by order of Pope Clement IV, since concealment was no longer necessary, he wrote a clear description of "the powder known in divers places, composed of saltpetre, charcoal, and sulphur," and describes its blinding flash and stunning noise when exploded. He speaks of the knowledge of gunpowder as having by that time spread to many quarters. It is not clear whether he looked on it as being anything more than a destructive and terrifying explosive. Yet if some early chemist experienced its explosion in a mortar, as is likely enough, a hint would thereby have been given as to its possible use for projecting missiles. However this may be, the most rudimentary form of the gun appears to have been that of an iron pot. It is on record that at Rouen in 1338 there was in the arsenal an iron weapon called "pot de fer" for propelling bolts, together with saltpetre and sulphur to make powder for it. In the manuscript entitled "De Officiis

281

Regum," written by Walter de Millemete in 1325, and preserved in the library of Christ Church, Oxford, one illustration shows a pot with a narrow neck, loaded with short thick bolt; it lies on a trestle table, and is directed towards a door; the gunner is applying a light to the touch-hole by a match held in a linstock. This is the earliest known illustration of a gun.

If we may believe John Barbour, Archdeacon of Aberdeen, who wrote in 1375 of the expedition made against the Scots in 1327 by Edward III, "crakys of war" were then used by the English, weapons which the Scots had never before seen. It is very possible that this tradition was correct, and that some primitive form of gun was brought from Flanders with the contingent which John Hainault raised for the expedition. Towards the close of the same century the knowledge of guns was sufficiently general to enable Chaucer to substitute for the hackneyed simile "swift as an arrow from a bow" the new one

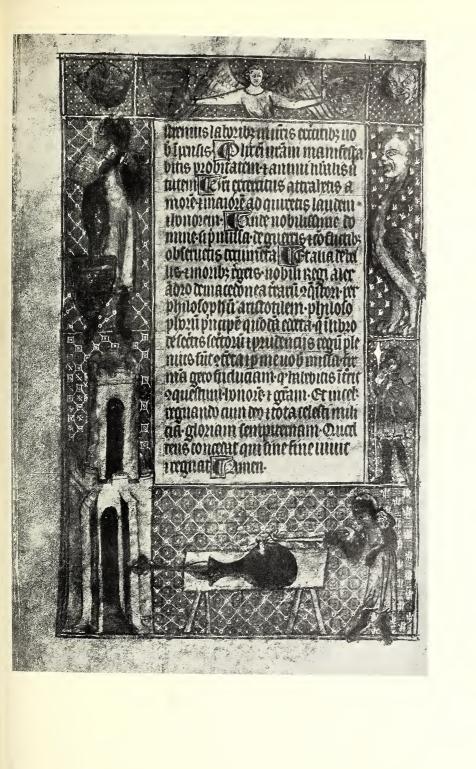
"Swift as a pillet out of a gonne When fire is in the pouder yronne."

From 1340 the mention of guns in war gradually becomes more frequent, though it is doubtful whether there is any foundation for the often-repeated statement that they were used at the battle of Crécy in 1346.

It is impossible to say what length of time firearms might have taken to come into use had the demand for such weapons been for sporting purposes only. Their development was due to war. The next stage after the pot was that of a straight tube of iron with a prolongation to the rear serving as a stock. The shooter applied by hand a light to the touch-hole, which was on the top of the barrel. The earliest firearms were, in fact, hand cannon. Later, a wooden stock after the fashion of that of the crossbow was introduced to hold the tube, and to enable it to be directed at a mark, but the recoil of the hand gun was taken by the hands holding it, and not by the body. The earliest firearms were of very rough workmanship, but when the possibilities of the new weapons were understood, skilled armourers applied their experience to producing and mounting barrels strong enough to be safe, yet of manageable size and weight, with admirable results. The art of war, if we except the cult of the long-bow by the English in the fourteenth and fifteenth centuries, was almost entirely developed on the Continent. Similarly, in the production of firearms for sporting purposes, England lagged behind until comparatively recent times.

PLATE XXX.

The earliest illustration of a firearm; an iron pot firing a bolt. From Walter de Millimete's MS." de Officiis Regum," A.D. 1325, in Christ Church Library, Oxford.





EVOLUTION OF GUNS AND RIFLES

The earliest weapons fired round balls, of stone, iron, or lead. In default of a ball, it would be an obvious expedient to fire a load of any smaller stuff that might be at hand. No record, however, appears of the first making of small round grains of lead for use in firearms, i.e., of small shot as distinct from bullets. Yet this was a very positive advance, and one distinctively identified with firearms.

There remain in museums and armouries many specimens from which the successive steps of improvement may be gathered. The touch-hole communicating with the charge was made to emerge at the side of the barrel instead of at the top, and was fitted with a hollow shelf or pan to hold enough powder to ensure the ignition of the charge by the slow match. In this position it was both better sheltered and more accessible, and it became possible to fit a swinging or sliding cover to it. A simple curved lever to hold the match was fitted to the stock; this served to lower the match to the pan, and avoided the difficulty of holding the weapon firmly and also properly directed on the mark, with one hand, while the other applied the match. This simple mechanism was soon modified and the cock for holding the match put in front of the touch-hole, a spring keeping it from falling until a small movement of the "tricker," magnified by a system of levers, lowered it.

This arrangement gave a weapon which was of practical use, and which, even to the present day, holds its own where conditions are really primitive. Given such a gun, powder, shot, and any rudimentary form of wadding, the shooter's equipment only requires a hank of match, which can be made at home, and some means of striking fire to light it, to be complete. But even so, how laborious, how uncertain, and how much at the mercy of the weather were the efforts of the sportsman! The mere loading of the charge in four separate sections, powder, wad, shot, wad, and the cleaning out and priming of the pan, common to all muzzle loaders, were by no means everything. For all these operations had to be performed while the match—a cord of smouldering tow, lit at both ends—was held in the fingers; and when it was desired to fire, the match was "cocked" i.e., it was inserted in the "cock" and so adjusted for length that, on the cock being lowered, its end should come into contact with the priming powder in the pan. This could be done only a very short time before firing, since, as the match smouldered, it grew shorter, and ash accumulated on its end, and had to be removed by blowing with the mouth. The greatest care had to be exercised to avoid the imminent risk of the fire from the

match coming into contact with the powder during loading. In a high wind sparks would fly from the match, possibly reaching the powder in the pan and causing a premature discharge. Further, the match was particularly liable to take up moisture and become unserviceable till dried; in wet weather the gun became almost useless. The rate of fire was naturally very slow. In view of these drawbacks it is perhaps surprising that such a weapon made headway against the bow, especially as at first the latter had the advantage in range. We are not surprised to find that a great stand for the superiority of the bow was made by some experienced soldiers in Queen Elizabeth's time, and that archers occasionally fought alongside arquebusiers and musketeers until the end of the seventeenth century, and that there were advocates for their revival till a much later date. Montaigne, who wrote in 1585, is quoted by Greener as saying that the effect of firearms, apart from the shock caused by the report, to which one does not easily get accustomed, was so insignificant that he hoped they would soon be discarded. The long bow in the hands of a trained man was effective at twelve score paces-240 yards; it was both more rapid and more accurate than the early gun. In these respects it was also in advance of the crossbow. But to get the best results from it, it was indispensable that the shooter should have had long training and constant practice in its use, preferably beginning in childhood. It was no doubt this point which accounts for the legislative endeavours constantly insisted on, but not very successful, to make practice with the bow universal in England.

Hunting animals with dogs dates from prehistoric times. But while the dog could either himself take the quarry, or enable his master to come up with it and use knife or spear, birds could defy the dog and all the weapons of man except projectiles. Arrows and other missiles propelled by hand were, however, of little use against them. The arts of netting, snaring and hawking had therefore been brought to great perfection, but a special field in fowling was open to the gun as the weapon par excellence for killing birds. Thus it is that the name fowling-piece lingers with us even yet, and that to this day the trade in smooth bore guns is known in Birmingham as the "Birding trade."

The various steps of progress in the application of firearms to military purposes may be followed in the writings of different periods. The record of sporting firearms is far less complete. But it is evident that the matchlock as a sporting weapon can have had but a very limited scope. It would

PLATE XXXI.

Soldier of 1607 armed with matchlock Arquebus or Caliver.

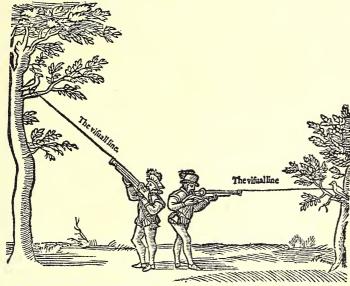
After Jacob de Gheyn.

The Soldier carries at his waist a bullet bag, a powder flask, a small flask of priming powder, and a hank of spare match. He has cocked his matchlock, and is in the act of presenting.





serve for a deliberate shot at a quiescent mark, but could hardly have repaid the labour of taking it out to shoot in wild places. At moving game it was quite ineffective. The crossbow therefore held its own as the convenient missile hunting weapon until the invention of the wheel lock. This was the first system for striking fresh fire for each shot instead of keeping alight a fire to be applied to the touch-hole when the right moment



Matchlock gunner shooting at sitting bird, from Lucar's translation of Tartaglia's Commentaries, 1546.

"Schioppetiero. 'You shall understand that I haue in my time killed with my Peece 2000 little birdes, and my long experience hath taught mee to know that which now you haue told mee: therefore when I haue occasion to shoote at any little birde fitting on a height upon a tree within a conuenient distance, I take my marke alwayes at the feete of the bird, but when the birde fittes on a place lying leuell with my Peece, then I take my mark precisely at the body of the birde, and by so doing I doe feldomtimes misse with my shoote."

came. The wheel lock is said to date from 1515, and to have originated in Nuremberg. The lock contained a steel wheel with a roughened edge; a spring, which could be wound up by a key, caused the wheel to revolve. At the top of the lock was an opening into the pan, through which the wheel projected, thus being in direct contact with the priming powder. The cock

had jaws, between which a piece of pyrites was tightly held. When it was desired to fire, the pan was opened and the cock lowered so that the pyrites entered the pan, being pressed by a spring against the edge of the wheel. On pulling the trigger, the mainspring was released, the wheel revolved, and its rough edge scraped against the pyrites and struck sparks, which ignited the powder. The ingenious mechanism of the wheel lock, though gradually improved, always remained uncertain in action. It was too complicated and too easily disorganized by breakage or the presence of dirt in the lock. Yet it ranked among the most practical weapons of the chase for 150 years, and nothing could surpass the elegance and fine finish of the engraving and inlay lavished on some of the early wheellock weapons.

It will be noticed that the stocks of sixteenth-century arms gradually developed from a small straight stock which was held by the two hands in front of the shoulder, somewhat as if it were a two-handed pistol. The straight stock appears sometimes to have been adapted to rest on the top of the shoulder. By an inevitable process of evolution, the stock was lengthened and curved until it could bear upon the body at a point which enabled the eye to look along the barrel. Speaking of the soldiers' musket in 1590, an English writer says, "Were they stocked crooked, to be discharged from the breast, fewe or none could abide their recoyling: but being discharged from the shoulder (if they be straight stocked) there is neither danger nor hurt." The French fashion at this time was to have the short curved butt, which was less practical for aiming than the longer stock used by the Spaniards.

The progress of invention was unceasing, and it is perhaps remarkable that almost nothing is known of the origin of another great step in the progress of firearms, the use of rifling, which appears to be nearly contemporary with the invention of the wheel lock. We do not know who the genius was who first tried to spin the ball by means of spiral grooves. The invention has been variously attributed to Gaspard Kollner, of Vienna, before 1500, and to Augustus Kotter, of Nuremburg, in 1520. It is likely enough, that, like some other improvements, it may have had its origin at the latter place. It undoubtedly proved its value almost at once for sporting purposes, though it was a very long time before it was suitable for military uses. The man who had a wheel lock rifle before 1550 must have been conscious of being equipped in the most advanced and up-to-date manner for shooting the larger game.

The knowledge of rifling was brought to England in due course. The 286

PLATE XXXII.

1

German wheel-lock rifle, XVIth century, elaborately inlaid with ivory. The form of the stock should be noted.

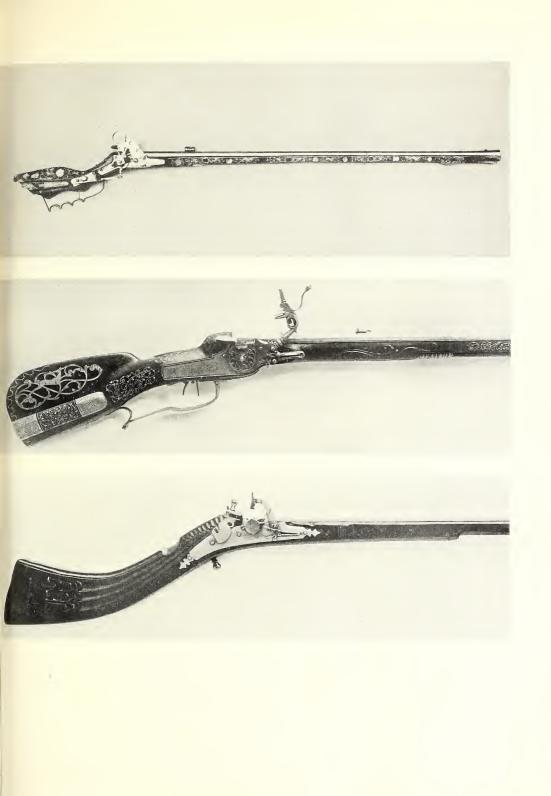
In the collection of Mr J. Hamilton Leigh.

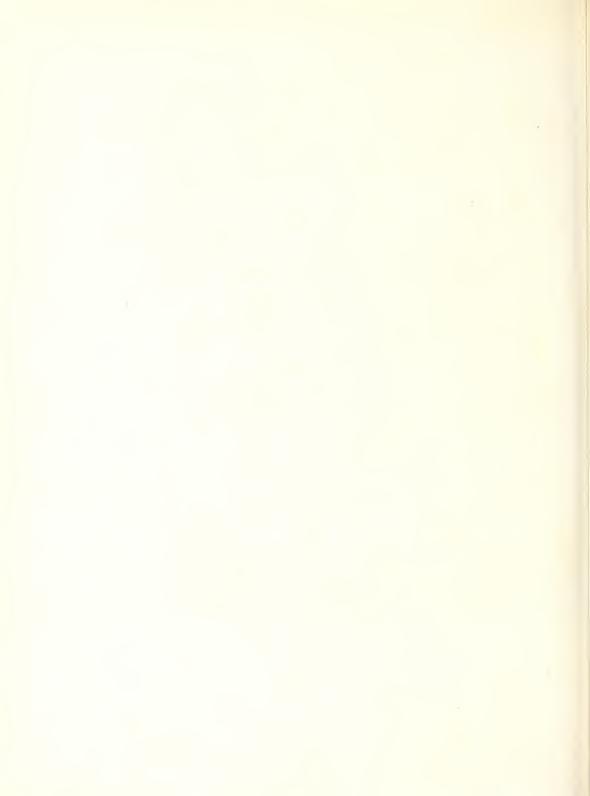
2

German wheel-lock rifle with hair trigger, XVIIth century, inlaid with silver. A trap in the butt contains the key to wind up the lock. Hexagonal rifling. In the Royal United Service Museum.

2

Scottish snaphaunce musket, 1685. The form of the stock and trigger are both unusual. In the Royal United Service Museum.





first mention of it in an English book is that in 1594, by Sir Hugh Plat, who, in his "Jewel House of Art and Nature," describes a pistol with a grooved barrel as shooting accurately to 160 yards, but without remarking that the grooves are spiral, not straight. The difficulty in loading rifles, caused by the tight fit of the ball in the grooves (necessary to spin them) and the accumulation of fouling from the powder, hindered their general adoption for many years, but on the Continent for shooting the larger game and for target practice, in which the need for rapid loading was not great, the rifle was at once taken into favour and gradually improved. Thus at Berne, in 1563, complaint was made of the unfairness of using rifles in competition with smooth bores for target shooting.

The advantage which would be gained by inserting the charge by an opening in the breech was not lost sight of in the sixteenth century. The system had very early been applied to cannon, but with the increasing power of firearms was becoming more and more impracticable, the especial difficulty being that there was no means of preventing the leakage of fire from the joints of the breech. Yet the thoughts of inventors and gunsmiths always turned to such a system, and no age failed to make its contribution to the endeavour. But the solution of the problem was not yet due.

II

The wheel lock was not long without a rival. The idea of adapting to firearms the ordinary method of obtaining fire from flint and steel led to the production of the first form of flint-lock, the snap-haunce. This was a Spanish invention. A small flint of squared form with a bevelled edge in front being screwed tightly between jaws in the upper part of the cock, was brought, on the trigger being pulled, into collision with a piece of steel, so throwing sparks into the pan and firing the piece. The steel was on an arm, hinged on the further side of the pan from the cock. The cover of the pan was first pushed to one side, and the steel was then lowered into position, with its edge on the top of the pan, where it was ready to be struck by the flint on the release of the cock. Weapons on this principle were made as early as 1520, but they were not common till the latter part of the sixteenth century. In the improved flint-lock, the hammer struck by the flint was in one piece with the cover of the pan: hence the latter was protected until the actual moment of firing. This marked a great advance, but for a long

time the ignition remained uncertain, and the system was looked on with much prejudice. It was well known in England from the beginning of the seventeenth century, but in spite of various attempts to introduce it as the arm of the troops, conservatism long prevailed. The view of those in authority was, that though it was simpler and easier to use than the wheel lock, it was less certain to fire the charge. It was to some extent used in the Civil War, and underwent much improvement in 1650, but it was not till 1692 that the flint lock began to supersede the match lock in the British Army.

The gun had been recognized as a sporting weapon abroad before 1515, in which year the "Ordonnance des Chasses" of Francis I speaks of "Escopettes" or light sporting firearms. Claude Gaucher's poem, "Le Plaisir des Champs," 1583, mentions various kinds of shooting with the gun, as at partridges, ducks, wild boar, roe, etc., but does not allude to shooting flying. A book on shooting, published in Rome in 1669, mentions that shooting on the wing had been known there for about eighty years, i.e., since about 1590. It seems clear that this only became possible when the flint lock was well developed, after which the wheel lock did not long survive for sporting weapons. The flint lock became known as the "fusil," from the Italian "focile," meaning a steel for striking fire.

The sporting weapons used in England at this period were made by continental craftsmen, for there were excellent gunmakers in Germany, Italy, France and Spain. Captain Vita Bonfadini, in a treatise on game shooting with the arquebus published at Bologna in 1640, gives an interesting comparison between the various locks. For deliberate shooting, he thinks highly of the match lock, as giving the quickest discharge. He does not care about the wheel lock, which is unpractical. The chain is liable to break, so may the hook attaching it to the wheel. The spanner is detached, and if it is lost the arquebus is useless; dirt must get into the lock by the hole in the pan and may hamper the turning of the wheel; the inside of the lock must be constantly cleaned and polished to keep it in working order. For the shooter at game, the fusil or firelock, as now commonly used, is the best, if it be well made; a single piece of flint suffices for as much as thirty shots. The best gunmaker in Italy he considers to be the Fleming called Il Parigietti, of Florence. The experience and technical knowledge of guns which Bonfadini shows is in odd contrast to the view of Raimondi, of Brescia, who in an elaborate treatise on hunting and fowling (1626), alludes to the arquebus only to

say that it is unfair to use it against wild animals whose weapons are only teeth, claws, and horns; even arrows and darts must be left to lady hunters; only hand weapons should be used by men. But by some mischance one of his plates shows a man firing a gun at a hare. The prejudice as to the unfairness of new inventions of increased destructive power, whether in war or in sport, was quite as strong then as now, and, though it does honour to human nature, has produced, until late years, little practical effect.

We may note how wide was Bonfadini's knowledge of shooting 250 years ago. Though he considers that the shooter will do well to make his own powder and shot owing to the difficulty of procuring them of good and even quality, he shows how the closest shooting charge and the most effective range should be ascertained by trial at a paper target. He says there are boasters who declare they never miss, but that these are liars, though the experienced shot will kill if nothing goes wrong. He knows that a barrel does not shoot well if rusty, and that not only the size of shot, but the powder charge, must be varied for different game. The loading must be by measure; the powder is best carried in a flask, not a bag, so that the grains may be kept dry and not crushed; the shot must be of even size and not rammed hard. The wadding is a soft pad of flock, or of tow; and the gun has to be carried muzzle upwards to prevent the charge from shifting. In firing, the shooter must stand firmly, holding the butt pressed against the shoulder, his cheek on the stock, and his right elbow held well up. It is again and again repeated that the left hand must keep the gun from moving until the shot has left the barrel, a precaution necessary with modern guns, but much more so with the chronic hang-fire of the early flint-lock.

The method of aim for straight-away shots, crossing shots, and overhead shots is described. It is recommended that for shooting in the open, the barrel of the gun should be 40 inches long; for shooting in covert, 2 feet 6 inches; and for shooting wildfowl, 4 feet 7 inches. Unfortunately the bore is not given precisely, but apparently it was 20 bore or thereabouts; it is to be such as will carry $1\frac{1}{4}$ to $1\frac{1}{2}$ ounces of shot. The charge for partridge shooting is $1\frac{1}{3}$ drachm powder and $1\frac{1}{3}$ ounces of shot; for young partridges and quails 1 drachm powder and 1 ounce shot; for wildfowl 4 drachms powder and $1\frac{1}{3}$ ounces shot. The quality of the powder was no doubt inferior to that of modern black powder. For ordinary use the stock should be formed with the heel of the butt $3\frac{1}{2}$ inches below the line

289

of aim; for flighting (overhead shooting) the stock must be straighter, having only $2\frac{1}{2}$ inches of bend, and must be cast off slightly to the right. The fore-end is to extend only one-third the length of the barrel. Pearwood is recommended for the stock. The setter had long been used in taking gamebirds with nets, and was naturally utilized for the gun, but retrieving dogs were also used at this time. The method of walking up game on open ground is described, four guns being in line with beaters between, and so is the beating of game out of a thicket to the guns, a gun being, if necessary, posted to deal with game breaking back. Bonfadini gives a receipt for a dressing to make boots waterproof, for much of his sport was with wildfowl in the marshes. It is as follows:

Tallow, 8 ounces; hog's lard, 4 ounces; of turpentine, fresh yellow wax, olive oil, each 2 ounces. Melt all together and rub into the boots before a fire.

The same recipe may be found in Daniel's "Rural Sports," a century and a half later. Bonfadini is careful to warn the shooter to keep cool if he misses, and not to blame the gun; he also cautions him against shutting his eyes when he pulls the trigger, or being flurried when a pheasant gets up at his feet.

That the uncertainty of guns as regards safety was at that date a prominent feature may be gathered from the author's careful reminder to the reader of the desirability of regular attendance at Mass in view of the dangerous nature of his weapons and sport.

The slow progress of sporting firearms in our own country was probably due in part to legislative restrictions. By 33 Hen. VIII it was enacted that no one might shoot with, or keep in his house, any cross-bow, hand-gun, hagbut, harquebus or demihake, who had not lands of £100 per annum. No one might shoot with or have a hand-gun under the length of one yard, nor hagbut or demihake under the length of three-quarters of a yard. No one might travel with a cross-bow bent or hand-gun charged (except in time of war) or shoot within a quarter of a mile of a city, borough, or market town, unless for the defence of himself or his house or at a dead mark. Wide exceptions, however, are made in consideration of the needs of national protection and of self-defence. The followers of Lords Spiritual and Temporal, Knights, Esquires, Gentlemen, and the inhabitants of cities, boroughs and market towns, may shoot at any butt or bank of earth, only in places convenient for the same, with guns not under the aforesaid length. The owner of a ship may also keep and use a gun for

the defence thereof. He that dwells two furlongs distant from a town, or within five miles from the sea-coast, has a similar permission; and this last may shoot at any wild beast or fowl, save only deer, heron, shovelard, partridge, or wild duck. But none under the degree of a Baron might shoot with any hand-gun within any city or town, or shoot at any fowl whatever with any hail shot. It is evident from these provisions that while it was desired to encourage in a large degree the use of firearms as weapons of war, they were not to be used, except by a very limited number of people, as shot-guns for sporting purposes. Sport remained, as it had for centuries been, a monopoly of the privileged classes.

Germany seems to have been the chief mother of the gunmaking art. But in France there seems to have been a factory of sporting arms at St Etienne as early as 1535. Henry VIII imported firearms from the Continent, and finally brought from Hainault a number of skilled handgun makers. They were quartered in the Tower, and represent the first establishment of the gunmaking industry in this country. In Elizabeth's reign the business of gunmaking was firmly established in the Minories. The industry was made the subject of a monopoly by James I, and soon came near to extinction, but survived, and was finally incorporated as the Gunmakers' Company in 1637. The gunmaking craft in Birmingham rose to importance about fifty years later. The proof of guns, both in London and at Birmingham, appears to have been systematic in, and since, the seventeenth century; but it was only 100 years ago that the proof was regulated by Act of Parliament. Naturally enough, we have to look abroad for information as to the art of gunmaking in its earlier years. In this matter the Spaniards, then a leading nation of the world, were second to no European nation.

The interesting book written in 1644 by de Espinar, who was arquebus bearer to Philip IV of Spain, tells us that the first gun barrels of any excellence which were used in Spain came from Germany, and gives a list of the marks used by their makers. He also speaks of a famous Italian maker of former times named Lazari Cominazzo, who flourished in the early years of the seventeenth century. His barrels had a wide reputation, and were known among connoisseurs as Lazzarini. So famous were they that forged imitations of them became common. De Espinar tells of two workmen sent by the Emperor Charles V as being his best gunmakers in Germany to serve Philip II of Spain. Their names were Master Simon the elder and Master Peter his brother. This family remained in Spain

and were the royal gunsmiths till after 1620, and other hardly less distinguished gunsmiths succeeded them. Spanish iron, especially that from Biscay, was considered to be incomparable. Spanish blades had long been famous; Spanish gun barrels now became so, and retained their preeminence for more than 200 years. De Espinar speaks of one Juan Salado, as having worked, among other places, at Salamanca; he was famous for his skill in rifling, boring, and straightening barrels, and also as a maker of wheel locks; for in those days the armourer made every part of the weapon. Salado's pupil and son-in-law, Juan Sanchez de Mirvena, gunsmith to Philip III, introduced an improvement in the forging of gun barrels. Up to his time the method seems to have been to beat out a flat bar, and then to bend it over a steel mandril until its edges met, when they were butted together and welded. This could not but leave a continuous line of weakness along the whole length of the barrel. Even the improvement made by an overlap of the two edges did not entirely remove the objection. De Mirvena was the first to forge barrels otherwise than in a single piece. He shaped six or seven lumps of iron according to the part of the barrel for which they were intended, and welded them one to the other. If in forging a flaw appeared in one, then another could be substituted, and as the joints were transverse, no flaw could extend any distance in the length of the barrel. De Mirvena's barrels are stated to have resisted very heavy proof charges, and to have been acknowledged to be the best of their day. The standard proof charge in Spain at the time when de Espinar wrote was a load of powder equal to the weight of the ball which fitted the calibre, and four times this weight of shot; this proof being repeated three times. The usual calibre at this time appears to have been 22 or 24, and the weight of a barrel 4 feet long at least 4½ lb. In the eighteenth century, the Spanish gunmakers twisted the iron of the barrel twice round upon itself, thus gaining great strength.

The most famous of the Madrid gunmakers of the eighteenth century was Nicholas Biz, who died in 1724. We are told, half a century later, that barrels made by him and by his contemporaries, Juan Belen and Juan Fernandez, were worth in France as much as 1,000 livres, or £44. Biz was followed by many other famous makers, both in Madrid and in the provinces; in 1789 the barrels of the best contemporary artists of Madrid used to sell for 300 French livres, or over £13. The barrels made by the Spanish masters were in great demand in other countries, and, naturally enough, were largely counterfeited. The French gunmakers were

PLATE XXXIII.

From de Espinar's "Arte de Ballesteria y Monteria," Madrid 1644.

A drive of deer and wild boars in a mountain pass. The sportsman in the act of killing a fox stands against a tree and has a rest for his arquebus.



I. Fernando Pelomino. f.



also famous in the seventeenth and eighteenth centuries, not only for the general quality of their productions, but particularly for artistic finish and ornamentation.

By the early years of the eighteenth century the sporting gun was coming into general use in England, but it is noteworthy that the sporting books of the period have very little to say about it. Thus Blome, in "The Gentleman's Recreation," a comprehensive work containing little original matter, makes but little mention of guns for killing animals of the chase, though he says that the gun may be used by the keeper to maim a fat buck out of the herd, so that he may easily be run down by the hounds, or to kill the hunted stag when at bay. He also shows the use of the spring gun to kill rabbits. Coming to the shooting of birds, he dismisses it in four pages, though he allows that "it is now the Mode to shoot flying"; he declares it a "vulgar Error" to suppose that it is necessary to shoot ahead of the birds. Two of his four pages are devoted to the use of the stalking -horse and to movable screens. For small birds, the barrel is to be 4 feet 6 inches long; for wildfowl, about 6 feet long, "with an indifferent bore under the size of a musket." The musket bore was about $\frac{3}{4}$ inch. "For the Stocke, Walnut tree or Ash are very good for use, but Maple is the finest, and best for Ornament." The killing of birds was still done almost entirely by nets, snares and birdlime. In Nicholas Cox's "Gentleman's Recreation," 1721, the use of a stalking-horse of painted canvas is described. When, however, we are told that some stalk with stags similarly made, the colour lively painted, so that the birds cannot discern the fallacy, or behind painted canvas made into the shape of a willow or poplar, we may conclude that the fowl of 200 years ago were preternaturally innocent, or that the author is rather a writer of books than a gunner. In reading the various encyclopædias of sport and recreation published at this period we find clear evidence that on the bulk of the subjects treated of the information is at least second hand.

The "Compleat Sportsman," of 1718, by one Giles Jacob, is written with a more practical knowledge of shooting. It states that "in ancient times the best fowling-piece was thought to be that which had the longest Barrel, and a Barrel to a gun five Foot and a half, or Six Foot in length was esteemed a moderate Size; but of late these Guns are entirely disused, unless it be for the killing of Water-Fowl." The lighter gun, with a barrel about $3\frac{1}{2}$ feet long, is recommended for ordinary shooting, but it must not be too light, for safety's sake; the gun for shooting flying should be nearly of musket

bore. Shooting into a flock of birds rising or flying seems to be mainly contemplated. For crossing shots, the following advice is given: "If the Birds be out of reach, fire as at a mark about six yards before, and then the Shot will take them as they are passing."

A book of rather later date, the "New Complete Sportsman," contains a chapter "Of Shooting, and Shooting Flying," which opens as follows: "Go early to the field, take with you some rum in a wicker bottle that will hold about a gill...but do not take too much, for too much will make your sight unsteady." Other directions are: "Ram the powder well, but the shot lightly; let one-third of the charge be powder and two-thirds shot, securing the charge with tow. When you are about to fire, take time, and keep your temper quiet and unruffled as a Stoic."

It was not till the latter part of the eighteenth century that the art of shooting flying was generally cultivated in this country. Daniel, in his "Rural Sports" (1801), says that within sixty years of the time when he wrote "an individual who exercised the Art of Shooting Birds on the Wing was considered as performing something extraordinary, and many persons requested to attend his Excursions, that they might be Eyewitnesses of it. Since that period, the practice has been more common, and is at present almost universal; so that Lads of sixteen bring down their birds with all due accuracy." Shooting, in fact, became a rage in England towards the end of the eighteenth century and in the beginning of the nineteenth. The Sportsman's Directory of 1792 says: "The rage for shooting was never at a higher pitch than at present; and, as the art of shooting flying is arrived at tolerable perfection, perhaps there needs no additional instruction towards annihilating the different species of game." It was during this period that English gunmakers at last began to lead, instead of following, those of other nations.

III

It had long been the custom to use for the material of the best barrels old horsenail stubs, these being of iron of good quality already much worked. These were usually imported into this country from Holland. They were sorted and cleaned, and, in the early part of the nineteenth century, mixed with a proportion of scraps of steel, the latter being usually three-eighths of the whole. A mass of about 40 lb. weight

From Blome's "Gentleman's Recreation," 1686.

I. Shooting flying, from a Shooting pony.

PLATE XXXIV. 2. Stalking wildfowl with the Stalking horse.







was thus formed, and was welded, hammered, and rolled, into a thick and narrow ribbon of metal, about $\frac{3}{6}$ inch broad by $\frac{1}{16}$ inch thick. This was twisted spirally round a mandril, and the edges welded together, thus giving a fine twisted figure to the barrels, in addition to showing the fine grain of the interwoven iron and steel within the ribbon itself. Such "stub twist" barrels (as they were called) were constantly imitated, and the name was wrongly applied to many varieties of twisted barrels which were not of the genuine material. The fine spiral, by which sixteen turns of the stub ribbon only made 6 inches of barrel, involved the welding together not only of the rings of each coil, but of successive coils, in order to build up the whole length of the barrel. The welding was therefore of the utmost importance, and the perfection of the tube depended on the skill and the care of the workman. The best barrels were sometimes further hardened by light hammering when cold.

William Greener, of Newcastle, who dealt fully with the subject in an admirable book written by him in 1834, says that if the purchaser goes to see his barrels forged "A gratuity is, of course, expected, either of money or beer, and I believe a few pots of the blood of Sir John Barleycorn will infuse more strength into your barrels than you could purchase for ten times the amount in money, as it has the effect of making the hammer descend with increased velocity." The production of stub twist barrels became hampered by the increasing difficulty of obtaining supplies of the old horsenails. This, however, mattered the less, as a new method of making best quality barrels now appeared on the scene. Damascus barrels were introduced about 1819; and in them the method used in preparing the metal for the highest quality of blades in the East was copied. The first process was to place bars of iron and steel alternately on each other—six of each. After being forged into one bar, this was rolled into a rod 3 inch square. This material was known as wire twist. The rod was then heated, and one end being held fast in a suitable machine, the other was twisted severely, till it had from twelve to fourteen turns to the inch, the rod thereby becoming round, and reduced in length from 6 feet to 3 feet. Three of these rods were then placed together, welded, and rolled into a bar the inch wide, from which the spiral tube of the barrel was formed. The Damascus barrel had an elaborate and very pretty figure or grain. Stub iron was sometimes treated in the same way, the bars being twisted upon themselves before being beaten out into ribbon form. Barrels so made were known as Stub Damascus. The danger of the occurrence

of minute spots of imperfect welding, known as "grays," in such barrels was minimized by the great skill and experience of the barrel forgers.

Greener maintains, and rightly, that the twisting and welding of stub and Damascus barrels left them weaker than if made of plain iron of high quality, and adds that the custom sometimes adopted of brazing together double barrels at the breech, greatly detracted from the strength of the metal. But the virtue of twisted barrels, besides their attractive appearance, was to distribute and to limit possible weak places; they proved to be of a strength adequate for all purposes, and held the field for many years. Barrels were also made from charcoal iron, a good material, from "threepenny skelp" iron; and from the still more despicable materials, "twopenny skelp," and "sham damn skelp." The last, most fittingly named, was of the most inferior scrap; it was often painted to imitate fine twist, and guns made of it sold for much more than their true value, which was not more than 12s. to 20s. Such rubbish was largely used for export to uncivilized countries, especially for the American trade. In spite of proof-house regulations, these weapons were extremely dangerous.

Greener advocated the introduction of a larger proportion of steel into the material of stub iron barrels, but laid down that steel alone "is not sufficiently tenacious of itself, from its fineness of grain, to resist the sudden explosion of gunpowder." It was not till the latter years of the nineteenth century that the control of the quality and temper of steel was well enough understood to overcome such objections finally. Since that time, steel as a material for barrels has come into its own, and its use is now almost universal.

From early times attempts had been made to multiply fire by fitting several barrels on one carriage for military purposes; and by developing breech loading and revolving systems. The hopeless endeavour to fire a series of charges loaded one in front of the other in the same barrel was often made. Exceptionally we find both guns and pistols made with two barrels, one lying below the other, and capable of revolving on an axis so that the hammer of either barrel could be brought into position to be struck by the flint of a single lock. These guns bore a close outward resemblance to the "under and over" breechloading double gun of the present day. This system did not come into general vogue. The single barrel was heavy and clumsy enough, and until barrels had become short and could be made light and yet strong, two barrels in the same weapon were out of the question. So the single barrel reigned supreme until nearly

PLATE XXXV.

I

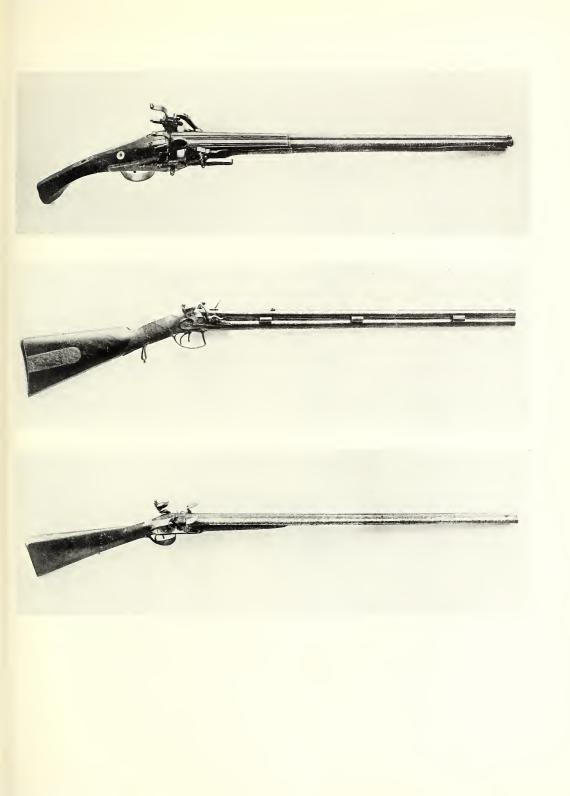
Double wheel-lock pistol, late XVIth century. Barrels 22in. long, placed alongside each other. Probably German. In the Royal United Service Museum.

2

Double flint-lock under and over gun by Tatham, London, about 1820. The top barrel is rifled. In the Royal United Service Museum.

2

Double flint-lock gun, 20 bore, by Joseph Manton, end of XVIIIth century. Barrels 34 inches long, low rib. In the possession of Lord Cottesloe.





the end of the eighteenth century. The arrangement of two barrels side by side is to be found in a very few seventeenth-century weapons. Double guns for sporting purposes were, however, a novelty as late as 1789. They soon came into general use, although, like other improvements, they did not commend themselves to all of the older generation. Their production coincides with the period at which English gunmakers began to come to the front, and their popularization is attributed to Joseph Manton, of Davies Street, the best gunmaker of the beginning of the nineteenth century.

An improvement at this period was the patent breech, invented by Henry Nock in 1787. Hitherto a plain plug with a flat face had been screwed into the breech end of the barrel. Nock's patent breech was longer and had in it a thimble-like chamber of diameter less than that of the barrel, and designed to contain the powder charge. A hole communicating with the touch-hole entered the chamber at the rear end. This form of breech was designed to make the combustion of the powder more rapid and effective; it was also considered to diminish the accumulation of fouling in the barrel. A further improvement was effected by Joseph Manton, who, instead of a deep chamber, formed in the face of the false breech a hemispherical cup of the full width of the barrel. Another improvement of his was to cut away a part of the solid portion of the breech so as to shorten the length of the touch-hole, and at the same time to enable the locks of the double gun to be brought closer together, thus removing a chief element of clumsiness in the double gun. That most sporting of parsons, the Rev. W. B. Daniel, tells us in his "Rural Sports" that the joining of the two barrels was commonly effected by filing away half the thickness of each at the breech end, and then soldering them together. This weakened the barrels but reduced the over-all width of the gun; Manton's device enabled the full amount of metal to be retained in each barrel without loss of compactness. Having so joined them, Manton inserted a rib, to fill the greater part of the groove between the barrels; he also, by elevating it at the breech, made it serve the purpose of a sight, throwing the charge fully up to the line of aim. To these improvements he added another. It had become customary in best quality guns to inlay the edges of the touch-hole and to line the inside of the pan with gold, to save the iron from the damage caused by the powder. Manton was the first to substitute platinum for the gold, a metal harder and much more proof against such damage. John Manton, of Dover Street, made guns only next in

297

reputation to those of his brother Joseph; he preferred, however, the flat breech, and the breech plugs of his guns were fitted over the outside of the barrels instead of inside them. The gun barrels made by the Mantons were remarkable in their day for the accuracy with which they were bored; this was done by mechanical means instead of merely (as was usual up to that time) by hand tools.

Joseph Manton also invented a method of rifling cannon, the ball being fitted in a cup of soft wood which took the rifling and served as wadding. He brought his invention to the notice of the authorities in 1791, but after some haggling on their part, and attempts made at Woolwich to imitate his methods, the negotiations came to nothing, and the matter ended. A trial of the system is quoted by Daniel as having been made in the presence of the Duke of Richmond in 1791. Of eighteen rounds loaded in the ordinary way and fired from a six-pounder at a target 9 feet square, 330 yards distant, ten only struck the target; of thirty rounds fired with a similar gun rifled by Manton and loaded with the wooden cups, twentynine struck the target, and the thirtieth only missed it by a few inches. We can but admire the ingenuity of Joe Manton, whose thirst for invention proved fatal to his solvency, but who did so much to raise English gunmaking to a position of pre-eminence. His epitaph, written by Col. Hawker, calls him "the greatest artist in firearms that ever the world produced," and "the father and founder of the modern gun-trade."

IV

The reign of the flint lock as the perfect form of ignition lasted until well into the nineteenth century. It was probably an English monk who invented gunpowder; it was certainly a Scottish minister who secured the first successful patent for application of fulminate to igniting the charge of powder in a gun. More than one inventor had tried to ignite the charge by chlorate of potash or other material exploding when struck, but so far all had failed to produce a suitable mixture which should be both safe in use and certain in ignition. The Rev. A. J. Forsyth, minister of Belhelvie, in Ayrshire, patented his invention in April, 1807. His specification detailed the use of fulminating metallic compounds such as fulminate of mercury mixed with other substances. The principle of ignition was by so closing the touch-hole or vent by means of a plug or sliding piece, as to prevent any outward escape,

and to force the priming, when fired, to take effect in the direction of the charge. Thus, a small quantity of the detonating mixture was placed at the bottom of a hole in which the plunger worked and which communicated with the charge; the plunger being struck by the falling of the cock ignited the fulminate and fired the charge. Such mechanical methods, however, gave much trouble. Many improvements, practical and otherwise, were produced, as that the fulminating mixture, instead of being loose, should be enclosed in paper, or in metallic covers of tube form or otherwise, or merely rolled into balls. The difficulty was finally solved by the invention of the copper cap containing the fulminate in its crown. The touch-hole, instead of issuing horizontally at the side of the breech, was brought upwards and inclined backwards, and terminated in a nipple on which the cap fitted. The cap was ignited by the blow of a hollow-ended cock, or hammer as we may now call it: for the hammer proper to the flint lock had disappeared, and it was not long before what had hitherto been called the cock began to usurp its name. It is difficult to assign among several claimants the original invention of the cap. Egg, the gunmaker, among others, claimed to have originated its use. It seems clear that Joe Manton, at that time the acknowledged leader of the gunmaking trade, who had a successful patent system for using the fulminate enclosed in a tube laid horizontally with its end against the touch-hole, tried the system of a cap suggested to him by Colonel Hawker; and that this method proved such a success that, not being patented, it soon came into general use, to the exclusion of all other systems. Colonel Hawker, however, maintained till at least 1838 the opinion that primers or tubes. whether of copper, as used by Manton and Lancaster, or of steel, as used by Westley Richards, were far more to be depended on than caps, especially for shooting affoat or in wet weather. In 1834 Greener speaks of Joyce's caps as excellent, and says that the use of flint guns is now nearly exploded. It was long considered that the flint lock shot more strongly and with less recoil and pressure than the detonating lock. Accordingly, it remained for some time a common custom to bore a vent hole in the breech of percussion guns, a fashion useless and wasteful of the energy of the powder. The percussion lock had a great advantage in firing a quick shot, or at night, and the allowance necessary in shooting at a moving object was, speaking generally, only half that made necessary by the slow ignition of the flint lock. Colonel Hawker's deliberate opinion, as regards punt guns, was that "in firing a heavy charge among a large flock of birds, the flint

has the decided advantage." He admits, however, the superiority of the detonator for shooting diving birds at night with the ordinary gun, as they had no longer time to duck to the flash. The improvements made by English gunmakers for their sporting customers were naturally followed for military purposes, but only at a respectful distance; the conversion of the Army musket or "Brown Bess" from the flint lock to the percussion system does not seem to have been completed till 1842.

The use of flint-lock guns has not altogether ceased. They are still made for export to savage lands, and the industry of making gun flints, which has been carried on at Brandon in Suffolk for hundreds of years, is still practised there.

The muzzleloader thus arrived at its final perfection, and as used in the middle of the last century was a weapon of which both the maker and the user might be proud. The calibre, according to the individual's taste, was usually from 11 to 16.

Greener, in 1846, speaks of a 15 bore as being the best compromise for all circumstances, and says that "this size will long hold a position in the front rank of sporting guns." Another writer, in 1855, recommends a gun of 14 or even 16 bore as preferable to the heavier 9 bore at that time most in fashion. A third author, in 1861, advises a gun of any calibre from 12 to 16 for partridges, and from 11 to 14 for grouse and blackgame.

We thus see that though larger bores than formerly were in use, and such sizes as the 20 to 24 gauge of Joe Manton's time were no longer normal, there was not yet the tendency to standardization which has become so marked a feature of breech-loading days. Variations in calibre only affect, as regards the muzzleloader, the wadding. Within limits, any sporting powder and any size of shot was suitable for any sporting gun. The possession of a wad punch of the size to suit his gun enabled the sportsman to cut his own waddings, for which old hats ("hats with naps," as Mr Cox says in the famous farce) furnished what was accepted as the best material. The enclosure of the whole charge in a cartridge capable of being used in a gun of only one calibre was a great step towards reducing the variety of calibres used. Who ever hears now of the 15 bore which Greener regarded as ideal?

The muzzleloader was rapid and certain in ignition, and the rapidity of loading had been much advanced by the fashion of using a heavy loading rod, hung on a leather tab attached to a button on the coat, in place of the ramrod which had at each shot to be taken from its place under

PLATE XXXVI. Positions in loading and firing from "The Dead Shot" by "Marksman," 1861.

End of muzzle loading period.

The object of holding the left hand close in front of the trigger guard was to save the hand in case the gun should burst.





the barrel of the gun and restored every time after loading. The process of loading was never without danger, especially with the double-barrelled gun, and accidents from the unfired barrel being left at full cock while the other was reloaded, or from the ignition of the powder flask, sometimes inflicted heavy penalties for carelessness. Joseph Manton's "gravitating stops" were a safeguard against the former, as, when the gun was in or near a vertical position, they interposed a bolt which prevented the hammer falling. The plan worked well; that it should have been practical at all shows how the conditions of shooting have changed. Nowadays it would be impossible to suggest the use of a bolt which came into action whenever the gun was raised for a shot at an overhead bird.

 \mathbf{v}

The introduction of breech loading as a practical improvement in small arms followed the development of the percussion system. The impossibilities of one age are the commonplaces of the next. Many early endeavours to solve the problem had failed, but they were continued almost without interval. The best invention of the eighteenth century, Colonel Patrick Ferguson's breech loader, an action opened and closed by a screw rising and falling vertically, was of some practical use. It was patented in 1776; and it is believed that some rifles made on this system were used in the American War of Independence, in which he fought with distinction. If so, it appears that his invention was the first breechloader to be used in war by British soldiers. Other inventions of the same period attained no success, although not wanting in ingenuity. Egg, in 1803, and Searles, in the same year, took out patents for breech-loading systems. In 1814, J. S. Pauly, of Paris, patented a gun in which the charge was ignited by the heat of compressed air, and also a breech-loading action depending on a hinged lever which was lifted to allow the cartridge to be inserted. The first step towards overcoming the difficulties caused by the escape of gas from the breech was taken in 1816 when Pauly patented the use of a plug of lead or copper placed between the powder and the breech so as to give way under the force of the explosion and to cover the crevices of the joint and act as a gas check. In the breech-loading needle gun invented by Dreyse in 1838, and adopted for the Prussian Army in 1841, a self-consuming cartridge was used; with this much inconvenience was caused by the escape of gas from the breech, so that the soldiers preferred to fire it from the

hip rather than from the shoulder. In this weapon, the needle was driven forward through the base of the paper cartridge, and struck a disc of fulminating material inside it. The needle was apt to become much corroded, and to break; this was another grave drawback to the weapon. Hence other nations continued for some time to prefer the muzzle loader. But the great success of the needle gun in the wars of Prussia with Denmark in 1864, and with Austria in 1866, confirmed the superiority of the breechloader. In the latter year France adopted the Chassepot, a superior arm on the principle of the needle gun; this rifle also fired a self-consuming cartridge, and though a more powerful weapon than the needle gun, necessarily suffered from the drawbacks incidental to the system. These two rifles were hammerless, and their breech actions were on the door-bolt principle, i.e., the breech was closed by a bolt moving fore and aft, and locked by lugs brought into play by a partial turn. Breech actions on this principle are now almost universal for military arms, but the system was long viewed with disfavour in this country owing to certain dangers of accidental discharge, since completely guarded against. Hence the Enfield rifle of the British Army was converted to a breechloader on a block system, that of Jacob Snider, an American, a block hinged at the side and pierced for a striker, being interposed between the hammer and the breech end of the barrel. In this rifle, very successful in its day, the Boxer central-fire cartridge was used, having the cap and an internal anvil in the base of the cartridge, and a flange round the base to engage the extractor. This centralfire cartridge extinguished the breech-loading systems, such as the Westley Richards, in which the flash from a cap placed on the nipple penetrated the paper of the cartridge and ignited the powder. The chief objections to the breech-loading system were thus finally overcome, the cartridge case, expanded by the explosion, absolutely preventing all escape of gas at the breech. If it required a special movement to pull the cartridge out of the chamber and another to remove it from the action, at all events the fouling difficulties due to the remains of the self-consuming cartridge were no longer to be feared. The need for handling the empty cartridge was eliminated in the next stage of development, for in the Martini Henry and other falling block actions, both its extraction and ejection followed automatically on the movement of opening the breech. The operation of pushing the cartridge into the chamber with the thumb next disappeared with the general adoption of the bolt action. In military, and in a majority of sporting, rifles at the present time the cartridges are not handled

PLATE XXXVII.

1

Snaphaunce Revolving Pistol, XVIIth century. Six chambers, brass barrel and fittings. In the Royal United Service Museum.

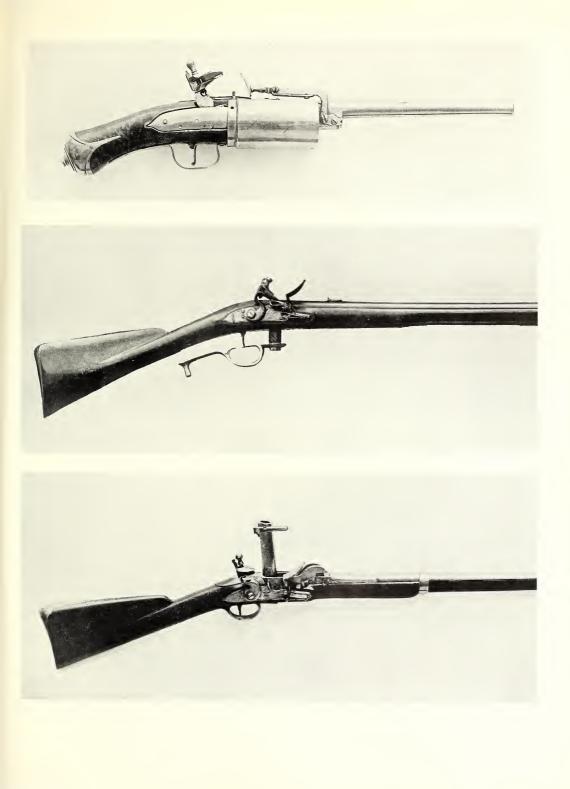
2

Col. Ferguson's flint-lock breech-loading rifle, 1786. Shown with the breech open. The breech screw has 12 threads to give rapid motion in opening and closing.

3

Egg's flint-lock breech-loading carbine, early XIXth century. The chamberpiece is shown opened and elevated to the loading position. In the Royal United Service Museum.







individually before firing, but they are put five at a time into a magazine, which supplies them as needed for loading in the chamber. Thus in the course of evolution we have arrived at a point where the mere opening and closing of the breech takes the place of the many movements formerly required to load each item of the charge separately.

The problem of applying a breech-loading system to the double barrelled gun was quite a different one. In this case the two barrels had to be closed or opened simultaneously; both the bolt and the falling block systems were therefore found inapplicable. The final solution was arrived at in France. Among firearms of the seventeenth and eighteenth centuries may be found examples of breechloaders having the barrels hinged at, or close to, the breech on either vertical or horizontal pivots. In the latter case, the barrel, on the release of a catch or bolt, usually on the top of the breech, dropped downwards, exposing the breech end. Such a mechanism had been patented by Pauly, and, improving on this, Lefaucheux, a gunsmith of Paris, brought out in the "thirties" a modification of this "drop down "principle, in which the hinge was horizontal, under the barrels, but a little distance in from the breech. By this means the breech end of the barrels was raised above the false breech at a convenient angle, while space was given for a locking bolt on the screw principle, and actuated by a lever underneath the fore end, to engage in a lug or lugs fixed to the underside of the barrel towards the breech end. The barrels were effectually held down, for the proportion of the explosive force tending to open the breech is not large. At the same time the mechanism was compact, and did not interfere with loading. With the self-consuming cartridge, such a breechloader would have succeeded no better than others. But Lefaucheux adopted a non-consumable cartridge invented by Houiller, containing its own cap and also a plunger or pin which projected vertically through a hole in the upper side of the breech. This pin being struck by the hammer or cock, communicated the blow to the cap. The projecting pin made it easy to withdraw the fired cartridge case. The lever of Lefaucheux's original breechloaders lay horizontally underneath the fore end and was pulled to the right to open the gun. It was soon found that an equally effective position for the lever, and one much more convenient, was that it should be shaped and fitted to lie under the trigger guard when closed. In this form the action was strong and effective.

"Stonehenge," the late Mr Walsh, of "The Field," speaks in 1859 of the Lefaucheux gun as having been in use in France for about twenty years,

but says that it was almost unknown in England till Mr Lang, of Cockspur Street, took it up in 1851. Its real success, no doubt, began with the perfecting of the pinfire cartridge. Englishmen are slow to bless ideas to which they are unaccustomed, and the most was made of the imperfections of the breechloader. Owing, it would appear, mainly to the need for elastic wadding of substantial thickness between the powder and the shot not being understood, the breechloader at first required a substantially larger charge of powder to give the same penetration as the muzzle-loader. The extra charge was variously estimated at from $\frac{1}{4}$ to $\frac{3}{4}$ of a drachm. Comparative trials of the shooting of breechloaders and muzzleloaders were conducted by "The Field" in 1858 and 1859, all the guns being of English make. It appeared from these that the breechloaders, which were all pinfire guns, required nearly 10 per cent more powder than the muzzleloaders, and gave slightly less close shooting, and that they were, on the whole, decidedly heavier. In each trial guns of 12, 13, 15 and 16 bore were fired. The cartridge cases used at this period were mainly of French make, but it was not long before Messrs Eley manufactured them successfully for the English market. The advantages of the breechloader, one of the chief of which was the rapid and simple removal of the charge from the gun when safety required it, undeniably outweighed its drawbacks, and it rapidly became popular, although, as always happens, some sportsmen of the old school were never induced to give up their favourite muzzleloaders. The breechloader was such a revolution that we can hardly be surprised at the keeper who, in a contemporary number of "Punch" (1863), exclaims "He's bin and broke is gun the werry fust shot."

The muzzleloader, indeed, died hard. The objections to its rival were stoutly upheld and were catalogued by a writer in 1860. First came the comparative weakness of shooting and consequent shortness of range, due, it was considered, mainly to the breech being of a flat shape instead of cupped, for the accusation of weak shooting was not devoid of foundation, but we may note that the same had been urged with less grounds against the percussion system when first introduced. Next, the extra weight of the breechloader was a draw-back. It was accused of suffering more wear and tear; of liability for the mechanism to go wrong; of heavy recoil; and of the action being liable to be weakened by the constant escape of gas at the breech. The labour of loading cartridges at home, and the expense of buying them ready loaded, were also objected to; so was the supposed need for carrying them in a metal case with a separate com-

PLATE XXXVIII.

Series of guns by Purdey.

Т

1815-20.

Flint lock, 16 bore, stub twist barrels, with elevated rib. The locks have intercepting safety catches freed by pulling the trigger. The hand safety grip and padded stock were fitted for the particular customer.

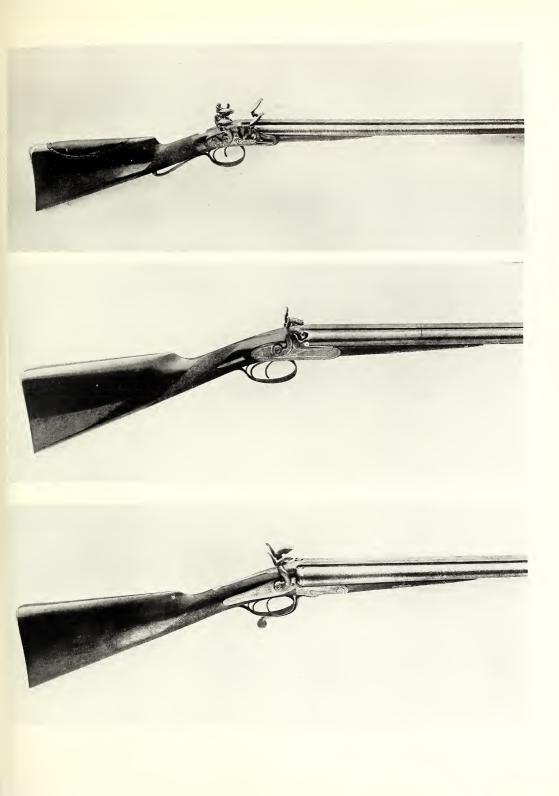
2

1857.

Percussion muzzle-loader with vents, 14 bore. Damascus barrels.

1861.

Pin-fire breech-loader, 12 bore. Damascus barrels; lever over trigger guard; single grip action.





partment for each cartridge, to avoid damage or the risk of explosion. The weight of the cartridge cases increased the load to be carried by the sportsman. But the proof of the pudding is in the eating, and the rapidity and certainty of fire and the reduction of the sportsman's labour in the field, outweighed the drawbacks until further improvements eliminated all cause of complaint.

The pinfire cartridge had certain inherent disadvantages. The shooter had to carry an extractor, having in it a hole which could be slipped over the pin to afford a sure grip for pulling it out; the extractor was also provided with a hook for the purpose of removing any part of the paper which might be left behind in the barrel if the cartridge tore in being pulled out, which it was liable to do, especially in wet weather. The cartridge might explode if it fell and the pin was struck in the fall. In loading, the pin had to be fitted into its notch, which required care.

It now remained for a fresh step to be taken. The various needle guns fired the charge by a fulminating disc in the centre of the charge towards the base, and in 1847 Flobert had invented the system of the rim fire cartridge as now applied to rifles of small calibre. About 1852 Charles Lancaster had introduced a gas-tight cartridge with a perforated metal plate in the base, on the back of which was the priming, this plate being covered with a copper base projecting at the edges so as to give a grip for the extractor. Such a cartridge had merely to be placed in the chamber, and the priming came automatically into place opposite the striker. In 1861 Daw introduced an improved central-fire cartridge based on the patent of F. E. Schneider, of Paris, which contained an ordinary cap in the base, set in a cup which contained an anvil, and had fireholes to give the flash access to the powder. The firing pin indented the cap, driving the fulminate against the anvil, and so producing the flame. On this cartridge Colonel Boxer's cartridge for the Enfield rifle was based. The military authorities had for twenty years been bent on the fruitless attempt to produce a satisfactory breechloader with a cap put separately on the nipple. Useful actions on this principle had been brought out by Prince and by Westley Richards, but it was now at last recognized that a cartridge containing its own means of ignition was not necessarily dangerous. In 1867 Daw failed in an action against Messrs Eley, in which it was sought to prove that Schneider's was a master patent covering the central-fire principle. The central-fire cartridge from this moment superseded the pinfire, and, with improvements in detail, remains the same to-day, and has

305

become universal. Speed of loading was increased, since the cartridge had no longer to be inserted with a particular part of the base uppermost; time was also saved in extracting the fired case, since by an automatic action, it was moved a short way out of the chamber on the gun being opened, so as to afford a ready grip for the fingers.

The Lefaucheux gun, as has been said, had at first an awkward under lever, for which the lever lying under the trigger guard was soon substituted. This was a strong, simple, and convenient arrangement. A lever at the side was subsequently fitted by some gunmakers; others used an under lever projecting downwards in front of the trigger guard. This was for many years a feature of Purdey's guns. Such improved levers were fitted with springs which returned them automatically to the locked position on the gun being closed. A rival system, which soon obtained almost a monopoly, now appeared, the lever being placed above the action, and lying snugly for use with the thumb of the right hand, a small movement of it to the right being enough to release the holding-down lugs, while, on the breech being closed, it snapped back into place. In this position the lever lent itself very conveniently to an additional locking of the barrels to the breech by an extension in the line of the top rib, fitting into a suitable hollow in the breech and secured there by a bolt.

After firing a shot with the pinfire breechloader, the first need was to raise the hammer to half cock, in order to free the barrels and allow the gun to be opened. With the central-fire system, it was possible to open the breech without first raising the hammers to half cock. This, however, was a source of danger, since it was possible, on reloading, if the breech were closed sharply, to bring the cap under pressure from the striker, with every probability of its being fired. The invention of the rebounding lock by Stanton in 1867 met this difficulty, as it provided for the automatic return of the hammer to half cock after the blow had been given to the striker.

The boring of the barrel has always been recognized to exert a paramount influence on the spread and penetration of the shot. In the early "seventies" the invention of the choke bore, a constriction of the barrel at the muzzle, came prominently before the public. It would seem that though boring suggestive of the choke had been previously practised, the principle was not fully applied before 1866, when Pape, of Newcastle, patented a barrel in which the bore at the muzzle was reduced in order to give a closer pattern. The invention apparently was of American origin.

The fuller development of the choke, with a constriction of from two-to four-hundredths of an inch, soon followed, with the surprising result of an increase in the closeness of the pattern of some 80 per cent, accompanied by a substantial gain in penetration. It was no wonder that choke bores became the rage. At the standard distance for trials of forty yards, the number of pellets of No. 6 shot which could be put into a 30-inch circle with the cylinder bore was from 100 to 120; with the choke it was 200 to 220, making the escape of a bird within that circle very improbable, instead of very likely. The charm of the increase of killing range carried all before it, and it is only now after some forty years that a reasonable reaction in public opinion has shown itself, and it is recognized that at the distances of from twenty to thirty yards at which the preponderating number of shots are taken, the cylinder gun is, in the hands of the great majority of shooters, a more effective killing weapon than the choke bore. Satisfaction in bringing off long shots is too dearly bought by increased difficulty in killing the much more frequent shots at nearer range.

The gradual change from the use of iron to that of steel as the material of barrels need not detain us long. For centuries steel was an intractable material, strong but brittle, and lacking in toughness. Naturally enough it was considered to be for ever unsuitable for gunbarrels. Experiment with it for this purpose had led to disaster. When therefore improved processes produced a mild steel it was long under suspicion, and only very gradually did it live down its bad reputation. In Damascus iron it was difficult to ensure a complete freedom from flaws, more or less minute. Steel of a proper ductility had an advantage in strength, and, above all, it was homogeneous. For guns of the better classes it has completely superseded iron at the present time. Whether fluid compressed steel, or good steel of less special make, it has an ample margin of strength. Its simple surface lacks indeed the fine "figure" of the twisted barrels; yet use is largely the arbiter of taste; steel shows a sleek and uniform surface; and the elegance of the gun cannot be said to have suffered by the change. One charge only has been preferred against modern steel barrels, that with rapid firing they heat more rapidly than iron ones, an accusation which has not checked the preference for them. The advent of steels of special strength and toughness, which alone make it possible to utilize high pressures in modern rifles, has quite out-classed the best outcome of the limited metallurgy of the earlier Victorian era, good though that may have been.

From improved barrels we proceed to improvements in locks, taking final shape in the hammerless gun. This is perhaps something of a misnomer, for most patterns of hammerless locks have concealed hammers. The idea of locks with internal mechanism is ancient enough. In the case of hammerless rifle actions, a compressed spiral spring drives the striker violently forward, so that the end of it strikes the cap. Such mechanism was found to be unsuited to double-barrelled guns, which still have double locks of the type in which concealed hammers take the place of the outside hammers formerly used. These entered the field of practical use soon after 1870. They were cocked at first by the movement of the lever to open the gun, but later by that of the barrels. The latter principle has prevailed and is now almost universal. Needham in the "fifties," Daw in the "sixties," and Murcott in 1870, produced hammerless actions; that of Gibbs and Pitt, perhaps the first really practical hammerless action, soon followed; the Anson and Deeley action, introduced by Westley Richards, was produced in 1875, and has, with various modifications of detail, been thoroughly successful. Other systems have been produced. The hammerless gun, like all other developments, at first met with much opposition and prejudiced criticism, but its inherent merits soon prevailed. It had at first its defects. No half-cock could well be provided, and arrangements for bolting the trigger did not fully ensure safety; but later the fitting of additional intercepting bolts, to prevent the hammer, if released by a jar, from reaching the striker, gave complete safety. Intercepting bolts on the same principle may be found fitted to flint-lock guns of a century ago. Hammerless guns are, in fact, safer than those with hammers. There is no longer the chance of the thumb slipping off the hammer in cocking or uncocking, nor that of an accidental discharge from the hammer being pulled back by a twig or other accidental projection. Exception was taken at first to the absence of hammers on the ground that these rendered easier a true alignment of the barrels. But, in fact, they served no such purpose as that of a backsight. The hammerless gun has been found to be more convenient in all ways, as well as safer and more elegant in appearance, than its predecessors; and guns with hammers, though many exist which have years of life in them yet, are slowly vanishing into the limbo from which ultimately emerge curious specimens for museums.

With the hammerless gun there came the automatic ejection of the fired cartridge case. This first appears in Needham's hammerless gun of 1874, which contained selective mechanism for ejecting either or both

PLATE XXXIX.

Series of guns by Purdey—continued.

1869.

Central-fire breech-loader, 12 bore. Damascus barrels; rebounding locks; hand safety grip; snap-action thumb lever fitted in front of trigger guard; double grip action.

5 1875.

Central-fire breech-loader, 12 bore, similar to preceding, but with top snap-action lever. The treble grip action to secure the barrels dates from just after this time; the fastening at the fore-end by a snap bolt is also of this period.

6

Present day.

Central-fire breech-loader, 12 bore; barrels of fluid compressed steel; hammerless locks; ejecting mechanism; snap fore-end. The lump is split, half being forged solid with each barrel.

SOME THE PARTY

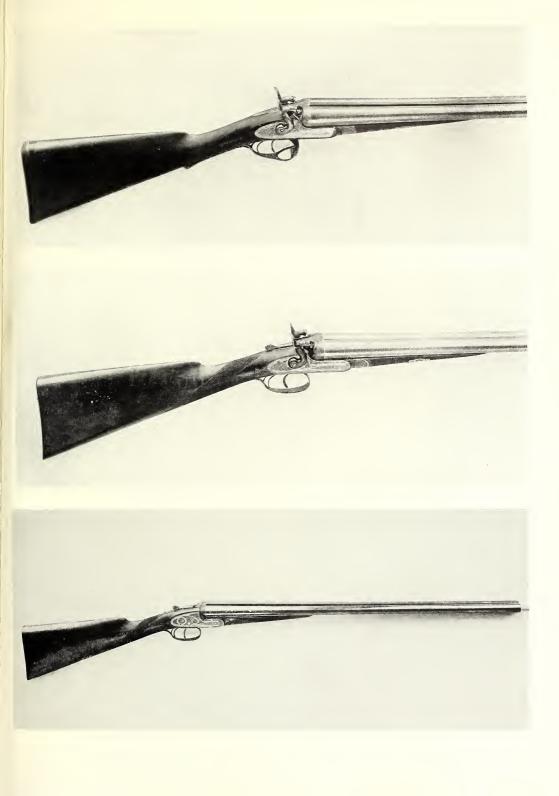
In the second of the second of

`

The control of the co

the state of the s

And the second of the second o





fired cartridges, the extractor being split for the purpose. Perkes, in 1878, and Deeley, in 1886, produced fresh devices to effect the same object, and were followed by many others. Ejecting mechanism might well have been condemned offhand as too complicated for everyday use; yet good workmanship, combined with really correct shaping of the chambers, and perfectly made cartridges, has overcome all difficulties, and the hammerless ejector is now in general use and gives general satisfaction. The excellent volume on shooting in the Badminton Library, 1887, treats the ejector as of little practical use, on the ground that if it add to the rapidity of fire, the gun must become so hot that no advantage is gained. Yet the ejector, like the hammerless lock, has this supreme merit, that it saves fumbling. Had it no other advantage, this alone would have carried it far.

A similar claim, but in a quite minor degree, may be advanced on behalf of the single-trigger mechanisms introduced for double guns in recent years. The single trigger, firing two locks in succession, dates back to the days of the wheel lock, and is therefore some 300 years old. The principle received much attention in the eighteenth century, and was the subject of a patent in 1789. The inventive Joseph Manton describes the firing of two locks by means of a single trigger, and several gunmakers made double pistols having but one trigger. A four-barrel pistol, introduced by Lancaster in more recent times, had a single trigger by which all four barrels were fired in succession. It was not till thirty years ago that serious efforts were made to apply the same principle to the modern gun. Baker, of Birmingham, led the way; and he was followed by a host of other inventors. The difficulty of applying one trigger to act selectively on two locks, and never to fail or give trouble in working, is necessarily great. Though it has been met with wonderful success, the result hardly offers sufficient advantage to wean most shooters from the guns and the habits to which they are accustomed.

One tribute is due to modern guns of high-class make. So well are their parts proportioned to the work which they have to do and the stresses they have to bear; so excellent are their materials, and so perfect their workmanship, that in lightness, balance, and handiness they compare favourably with muzzleloaders of the best period, which had no mechanism beyond lock, stock, and barrel; had no breech joints, lugs, levers, or ejecting locks, and were, by comparison, models of simplicity. Nor, though more complicated, are they more costly. Joe Manton charged from 55 to

65 guineas for his guns. Col. Thornton speaks of highly ornamented guns being made at the Versailles factory up to a value of £2,000, and saw one priced at 800 guineas. Indeed, he possessed a gun given him by Lord Rockingham which had cost £420.

The under and over gun is the latest attempt at the improvement of the sporting gun. It has already been mentioned that the earliest double barrels were arranged with one barrel above the other, and this method has been occasionally revived. With double-barrel breechloaders it offered special difficulties, owing to the need for opening the barrels to a much wider angle than is the case with the ordinary arrangement. Its one apparent advantage is in the narrower grip which it affords to the left hand. This would seem, in fact, to be quite a minor matter, and apart from any question of fashion, there seems no reason to suppose that the "under and over" offers any such advantage to the gunmaker's customer as will bring about a revolution in the methods of gun construction which have been so long in vogue.

To increase the rapidity of fire has always been a goal for inventors. Museums can show endless ancient attempts upon the problem. Pepys records in his diary how, in 1664, Lord Peterborough brought a newfashioned gun for trial, which was designed "to shoot off often, one after another, without trouble or danger"; and how, on another occasion, he saw "agunto discharge seventimes, ... very serviceable and not a bauble." A later inventor, in the following century, claimed to be able to increase the rate of fire of the troops from five shots in six minutes to five shots in one minute. This was to be done by some application of "magnetical electricity," which was also to increase the power of the charge in an enormous degree; but unfortunately no details are given, though the inventor refers to some trials which took place at the request of the Duke of Marlborough, in which he "fired much oftener and put three times as many Balls through a Target, in the space of three Minutes, at forty Paces Distance, than Colonel William Cunningham could do with three Men of the Foot-Guards."

The obscuration of view by the smoke of black powder told heavily against rapidity of fire; there were many occasions when it was necessary to wait for the smoke to clear. Thus, until smokeless powders came into general use, there was a difficulty in fully utilizing quick-loading devices. The self-cocking ejector gun gave increased rapidity in loading, and therefore in the rate of fire, and by the use of two or three such guns

with men to load them, a very rapid rate of fire can be maintained which meets all requirements for killing driven game in Europe. So far as the firing of two shots in rapid succession is concerned, the double-barrelled gun is supreme. But where the shooter, singlehanded, pursues his own game in a wild country, it is worth while to sacrifice extreme rapidity in firing the second shot in exchange for the power to fire a series of four or five shots without bringing the gun down from the shoulder. Hence the development in America of what is commonly called the "pump gun," a single barrelled weapon in which a simple movement of a handle in the fore-end, gripped by the left hand, performs in an instant all the operations of extraction and ejection, inserting a cartridge from a magazine under the barrel, and cocking the lock ready for the trigger to be pulled. Thus, after a little practice, four or five shots can be fired with almost no loss of time. Such guns are made by the Winchester, Remington, Stevens, and other companies, and sell in the States for 25 dollars; they can be produced in Belgium at a still cheaper rate, owing to the less cost there of labour. They require almost no hand finishing, and work well. They compete against cheap double guns, which are made in large quantities, for America supplies herself. But good for the money as cheap factory-made double guns may be, they lack the certainty, endurance and satisfaction in use which the best hand-made guns provide. The pump gun has never become popular in this country, where it is apt to be considered unfair to the game, but it meets a need in many parts of the world.

These weapons take us a long step on the road to the self-loading gun such as the Browning, in which, by the recoil of the barrel or otherwise, the reloading mechanism is actuated with no movement of the hand. These are convenient on occasion, and less clumsy than might have been expected, but they are not always to be relied on, and have not come into favour. They are being improved, however, every day, and cannot fail ultimately to become reliable. Their advent cannot but conduce ultimately to the diminution and extinction of game which is now proceeding apace in so many parts of the world. Nor is there any reason to suppose that the development of such means of destruction will end with the improvements now in view. The march of invention in such matters proceeds faster now than ever before, and while it is hard to anticipate, and dangerous to prophesy, its future, we may be sure of one thing, that, for better or for worse, its activity will remain unceasing.

VI

The origin of the rifle has already been alluded to. As it emerges from the mists of its earlier days we find it established for sporting purposes, but incapable of being utilized for military purposes in spite of many attempts in the seventeenth and eighteenth centuries. The musket, if ineffective at any long distance, was well established, simple, rapid to load. With the rifle, the ball had to be spun by the spiral grooving, with which it had to be in effective contact. The area of contact of a sphere fitting in a cylinder is but a line; hence either the ball was in danger of "stripping," i.e., of escaping from the control of the grooving as it passed up the barrel, or it had to be forced down, being almost deformed so as to fit into the grooves. Such an operation became extremely difficult when the barrel became foul, as happened after firing a few shots. Thus, when the Rifle Brigade was organized in 1800, in the light of the success of the rifle in the American War of Independence, and armed with the Baker rifle, wooden mallets were issued to the men with which the ball was forced into the grooving at the muzzle before being rammed down. This procedure was ultimately condemned as too cumbrous and slow, but the rate of fire was always deliberate; if the rifle could shoot accurately to three times the distance of the musket, the latter could fire three shots to one of the former. But the Rifle Battalions in the Peninsula fully justified their creation. This was the first step in fulfilment of the remarkable prophecy made in 1742 by Robins, the first scientific investigator of the rifle, as to its future importance as a soldier's arm.

Hitherto, the rifle, developed as a sporting weapon, had been applied to use in war; thus, both Continental Jaegers and American backwoodsmen were men expert in the use of the sporting weapon. "The Field" published recently some trials made with a Baker rifle still in use on a deer forest in Scotland. With the successful adoption of the rifle for soldiers began an era of fresh developement. The Volunteers of the period used it, and military experts endeavoured to improve it. The substitution of a cylindro-conoidal bullet for the spherical ball was worked out in France, and Captain Minié's rifle produced in 1849 revolutionized the arms of all Europe. Thenceforth development on the new lines was rapid. The automatic expansion of the bullet into the grooves of the rifle was perfected, and the accuracy, rapidity and certainty of fire were soon immensely improved.

The sporting rifle reaped its full share of the benefit. For 300 years its progress had been slow. It was lacking both in range and in power. The usual weapon for deer was a 12 or 16 bore, carrying a round bullet. Long, and often vain chases after wounded stags were common enough in Scottish deer forests. The accurate pea-rifle of the European or American hunter, a long-barrelled weapon of small calibre, was capable of dealing with the game of both continents with the exception of some of the bears, the only dangerous game of large size. For the lions, tigers, elephants, and other big game of Asia and Africa, it was only a large ball at very close range that was adequate. Sir Samuel Baker's elephant rifle, designed by him in 1840, weighed 21 lbs., and fired a round ball weighing 3 oz. with a large charge of powder. This and a double 10 bore he found very effective on large game. The conical bullet gave a heavier projectile for the same bore with ample penetration, but this was not always an advantage. Mr G. P. Sanderson, who had a wide experience of elephant shooting in India in the "sixties" and "seventies," preferred to use for such large game a double smoothbore 4-bore, rather than a heavy 8-bore, rifle. He warned hunters against using the Express rifle of .500 or .450 bore, firing a high velocity charge with a hollow conical bullet, at such game as buffalo.

The Express rifle was first so named by Purdey, the term dating from 1856. It marked an era in developement, and much lengthened the distance at which a sure shot could be made in deerstalking. The high velocity, however, was found to give too great penetration with a solid bullet; hence to induce them to open or "mushroom," and to expend their whole energy on the animal struck, they were made hollow in front. At the same time they were made very light, so as to have a high starting velocity. But it was soon found that such bullets were ineffective on such animals as sambur or moose, for want of penetration. A .450, with a solid bullet of substantial weight, giving great penetration, was powerful enough in skilled hands to account for the largest game, as witness the experience of Mr F. C. Selous, who with a .461 single rifle, made by Gibbs, and firing (of course) a charge of black powder and such a bullet as was used for match shooting at long range at Wimbledon, killed many elephants, rhinoceroses, hippopotamuses, buffaloes, and giraffes, and on one occasion three lions with four shots. Such a record made with a rifle that could not give a knock-out blow to a big beast, as could a 4 bore, and had not even a second shot ready immediately to follow the first, testifies to the quality of the hunter quite as much as to that of the weapon. Admirable Express

313

rifles of '400 bore, excellent weapons for deer stalking, were evolved in succession to the '450 at the end of what we may call the black powder epoch. But the reduction of calibre did not end here.

Three improvements came to military rifles in the "eighties": the first being the attachment to them of a magazine holding several cartridges ready for rapid loading. The second, without which the magazine would not have been very effective, was the reduction of calibre from about ·450 to about ·300, which produced a smaller and lighter cartridge, of which a greater number could be carried by the soldier. The third improvement was the advent of smokeless powder, which removed one great obstacle to rapid fire, the cloud of smoke accompanying the discharge of black powder; and which at the same time, by its more concentrated power, enabled a powerful charge to be loaded into a cartridge of small dimensions. If the reduction of bore and of weight of bullet tended to diminish the wounding power of the new type of rifle as compared with the old, full compensation was given, for military purposes at least, by the flatter trajectory and increased velocity of the bullet. The .450 Martini Henry bullet had a velocity of about 1,300 feet per second; the '303 was designed for a speed of about 2,000 feet, much above that of black powder Express rifles. Smokeless powder was soon well established, and soon still smaller bores of 7 mm, and 6.5 mm, (.276 and .256) were adopted on the Continent. There was at first a very natural incredulity as to the power of bullets smaller than a lead pencil to kill or wound. Their striking area was but small, and by so much the probability of the ball touching some vital point seemed to be reduced. Experience soon showed that there was something in this contention, at all events when the bullet had travelled far enough to lose much of its original velocity. Hitherto bullets had been made of lead hardened by an alloy, and heavily lubricated or covered with a paper patch to save them from destructive friction against the bore of the rifle. With the increased velocity and friction of the new small bores, it was found necessary to encase the bullet in an envelope or thimble of copper and nickel, or of soft steel, to prevent it from being deformed or damaged in the bore. This made the bullet stiffer, and while adding to its power to penetrate, reduced its tendency to open or break up on striking. This was not of very vital importance in warfare among civilized nations, where a wounded man is a greater encumbrance to the enemy than a dead one. The same does not apply in shooting game. The leaden bullet of the Express had been made fatal for soft-skinned game by

PLATE XL.

1

Baker rifle, flint lock, 1803. The first arm of the Rifle Brigade. Heavy steel ramrod, 20 bore; round bullet; pitch of spiral one turn in 10 feet. In the Royal United Service Museum.

2

Mr F. C. Selous' '461 single sporting rifle by Gibbs, Farquharson action, Metford barrel, fitted with Lyman aperture back-sight. With this rifle, firing a solid bullet of 540 grs. with 1,300 f.s. velocity, Mr F. C. Selous killed in Africa numbers of elephants and all kinds of large and dangerous game. The stock is plated with iron to protect it from damage, and the butt has been largely spliced. The grooving has an increasing twist, giving one turn in 16 inches.

3

'256 high velocity magazine rifle, Mannlicher action, fitted with detachable telescopic sight. Fires a pointed bullet, with a velocity of 3,000 ft. per second. Pitch of spiral, one turn in 8 inches.





hollowing it more or less deeply at the point, and thus increasing its tendency to become deformed on striking, and forcing it to open and use all its power upon the tissues first encountered. The same principle was applied to the new description of bullet. The envelope was filed away at the tip, or a hole was bored in the nose of the bullet; and where this was judiciously done, the killing power of the bullet was found to be even greater than that of the larger bores had been. The force of a bullet depends even more upon its speed than upon its weight. The new rifles were more accurate; they would kill further; their flatter trajectory made a precise estimate of the distance much less material than before; the effect of wind on the flight of the bullet was much diminished; the recoil was very slight, whereas that of the black powder Express had been punishing; the reduced recoil made it easy to use a Lyman (aperture) backsight or a telescopic sight, which much assisted certainty of aim; the absence of smoke when a shot was fired often prevented the game from discovering the direction and source of danger; and finally, where a single-barrelled rifle was used, the magazine enabled it to be reloaded almost instantaneously. No wonder, then, that the old Express rifles speedily lost ground; they were outclassed for thin-skinned game such as deer and antelope.

The last few years have witnessed another remarkable advance in military weapons which has had its effect on sporting rifles. It was realized abroad that at high velocities it was well worth while to use a bullet with the head prolonged to a sharp point; and that such a bullet, if made light enough to enable a very high velocity to be given to it, had an extremely flat trajectory for the first few hundred yards of its flight. This gave a great advantage from the military point of view; for to increase the effectiveness of fire at the shorter ranges was well worth some sacrifice of striking power at much longer ones. Still greater was the advantage to the hunter. By the use of improved steel for the action and barrel, and of a cartridge of larger capacity, it is now possible to obtain velocities up to 3,000 feet, which, with a pointed bullet, give trajectories far flatter than used to be imagined possible. Thus, in "The Field" rifle trial of 1883, the height of trajectory in a flight of 150 yards with Messrs Holland and Holland's .400 bore was 41 inches, and that with their .450 bore not quite $4\frac{3}{4}$ inches, the velocity being for the former 1,875 feet per second and for the latter 1,777 feet. A rifle such as the 280 Ross of to-day, with a velocity of 3,000 feet per second, gives a height of trajectory not more

than one-third of the above. At the same time, its accuracy is greater. Rifles for deer and antelopes are thus far deadlier and more certain to-day than ever before.

One trouble only remains as regards pointed bullets. They have a remarkable disposition to turn on one side on striking a soft object, and so become, in a large measure, ineffective on striking. But it is not so easy to make them open out as in the case of bullets with the blunt head, and they are less consistent in their killing effect. Ingenuity is still needed to deal satisfactorily with this difficulty, but no doubt it will in due course be overcome.

Smokeless powders affect the barrel of the rifle differently from black powder. With the latter, the bore of the shot-gun was almost certain in course of time to suffer from rust in the form of pitting or "honeycombing" on its surface. With smokeless powders no such tendency appears, and barrels can be kept in admirable condition almost indefinitely. With rifles, in which much higher pressures are used, the case is reversed. The black powder rifle, if carefully looked after, would last for many thousands of shots without appreciable wear. But the heat, pressure, and friction of modern powders and bullets are very destructive to the bore of modern rifles. With high-pressure charges of cordite, a few hundred rounds will produce erosion of the barrel; and the surface of the steel shows minute cracks which have a great and most obstinate tendency to rust, almost defying the greatest care. To pour boiling water through the barrel as soon as possible after use would seem to be the most hopeful treatment where any large number of rounds is fired. It is evident that the improved metal of the barrel, strong as it is, must continue to suffer severely from the chemical and mechanical effects of firing.

When we pass from deer rifles to those of bigger game, we find that in them a corresponding reduction of bore has taken place. The black powder 4 bores and 8 bores have had their places taken by high-velocity cordite rifles of from '450 to '600 bore. These fire a heavy bullet with a velocity of 2,000 feet per second or more, and are proportionately effective. They have, in fact, ample power to deal with the larger game, and are for practical purposes as effective as the big bores of the last generation. Sir Samuel Baker's 4-bore rifle weighed 21 lbs. Mr Sanderson used for elephants a double 8 bore weighing 17 lbs. A very substantial saving on this weight is effected in the heavy Cordite rifles of to-day. Such a rifle of '450 bore, giving its bullet a velocity of over 2,000 feet per second,

has more than double the energy of the old Express rifles of small calibre. Within possible limits of weight, the modern rifle carries an enormous power of destruction. These rifles have developed on the lines of the ordinary double barrel with drop-down action, and it is much to the credit of the rifle makers that they should have applied the principle successfully to the very different conditions of pressure and strain which the rifle, as distinct from the shot-gun, entails. At the present time the production of powerful single-barrel rifles, with magazine to hold four or five cartridges, seems to be indicated, and for these, as being very practical weapons, much lower in price than double barrels, there should be much demand.

The "pump-gun" or repeating principle is applied to rifles by several American firms, and on that continent the hunter looks to being able to pour in a rapid succession of shots at his game. Such mechanism, however, has not been successfully applied to the heaviest charges. The self-loading rifle is in gradual process of development, and will add further facilities for the destruction of wild animals in far countries, now proceeding too rapidly. The multiplication and popularization of cheap magazine weapons is already going far towards the extermination of game in many parts of the world, and the outlook for the survival of large animals is gloomy indeed. The triumph of science over Nature is in this respect only too complete.

Added accuracy has of late years brought with it added refinements of sighting. Aperture sights have been used for hundreds of years, but we owe to America the production of a practical aperture sight for sporting purposes, the use of which has much increased in this country with the advent of the new types of weapons. The aperture sight is likely soon to be used by the soldier, a lesson taught him by the hunter. The use of the telescopic sight is also becoming more frequent, and though this costly appliance can have but a limited use, it enables full justice to be done to the accuracy of modern rifles of medium power in shooting on open ground. The difficulties of securing the rigid fixing of the telescope, and of rapidly attaching and detaching it, have been satisfactorily overcome, and the comfort and certainty of its use must be experienced to be fully understood.

With the Rifle Club movement evoked by the South African War, came a great popularization of the ·220 rifle, a miniature gallery rifle firing a rim-fire cartridge, which was a production of America dating from some

forty years back. Rifles of this type, as well as the ammunition for them, were produced in this country in response to the demand of recent years, and they are ideal weapons for stalking rabbits, or shooting young rooks, or for teaching boys to shoot. Their accuracy is really marvellous, and they provide the best possible introduction to serious rifle shooting.

VII

There remain a few threads to be picked up to complete the tale of firearms, in which the development of the types in most general use has hitherto been followed. Thus, the specially large guns for wildfowling have not so far been touched upon. For this purpose the use of shoulder guns of 10 bore, 8 bore, and even 4 bore, has been developed along lines similar to those of the 12 bore; these guns have reaped the full benefit of the perfecting of breechloading hammerless actions, and of chokeboring. They are invaluable to the man who specializes in wildfowl shooting, in which the capacity to use a charge of large shot numerous enough to give a fairly close pattern at any distance up to 100 yards is a great boon. The limit to the size of such guns is only the power of the user to carry them and to withstand the recoil. Though the number of wildfowl on our coasts and fens has diminished lamentably in the last 100 years, the keenness of the gunners is quite as great as ever it was.

If the light harquebus is the lineal ancestor of the ordinary gun, and the musket of the heavier pieces for killing wildfowl, the punt gun finds its early analogy in the wall-piece, which required two men to manipulate it, and was often mounted on a swivel, for convenience of handling on a rampart. The punt gun is usually a single-barrelled piece, weighing 100 lbs. more or less; it may have a bore of 1½ inches, and carry a charge of 1½ lbs. of shot. These powerful weapons, unlike the wall-piece, have to be taken to the birds; the proper mounting of them in a boat is therefore of the greatest importance. On land, it is unsportsmanlike to fire at birds which have not risen, or to shoot into the "brown" of a covey flying in close formation. All such rules have their limitations, and this one does not apply in shooting wildfowl. In their own haunts by the sea, birds once fired at cannot be followed, so that there is no second chance; while their custom of clustering together often offers no alternative to a "family shot," especially when they are pursued at night. Their shyness, too, makes the power of killing at a long distance essential. Hence the small

cannon, for this word best describes them, so widely used in the fascinating sport of the punt gunner. Colonel Hawker long ago developed and improved an art practised of old by dwellers on the coast, and his delightful book gives ample details of the guns and methods employed while yet Lymington and Poole harbour were the haunt of myriads of wildfowl, already changing their habits to meet the persecution inflicted on them. He laments both the diminished number and the increasing wildness of the birds in the fens. He considered the flint lock to be superior to the early detonator for punt guns, and his careful trials showed the importance of fitting some sort of buffer to take the recoil of the gun. He first used a rope breeching, and then a well-designed spring fitting, a precedent which has been followed ever since. Not all his devices were so successful. His big double punt gun, designed to do more execution than a single barrel, and the wheel carriage, disguised with boughs, on which the punt gun should be mounted to bring it within range of fowl on hard ground, have not survived their author. Yet Hawker was one of the most experienced and practical shooters that ever lived. From him we come by stages to the present day: Folkard in the "fifties" and Sir R. Payne Gallwey in more recent times have both dealt exhaustively with the wildfowler's art. But the drainage of fen lands and the multiplication of guns, as well as the increase of their deadliness with the march of improvement, have diminished more and more the opportunities of the fowler and the use of the big "scatter-gun" gradually follows suit.

Of the largest guns of all, used for the biggest of creatures, it is not in the present programme to discourse. Harpoon guns are widely used in modern whaling; they are, in fact, cannon for use at very short range. A modern form of whaling gun carries a harpoon with massive barbs, having also an explosive shell in its head. Such a projectile rapidly proves fatal to the giants among mammals.

To get equally good results out of the same weapon with shot and ball was long an object for ingenuity. The rifled barrel does not make a satisfactory pattern with shot, nor has more than a very partial degree of success rewarded endless endeavours to make a bullet fired from a smooth barrel rotate so as to maintain a steady flight through the air. The Paradox gun, invented by Colonel Fosbery, and produced by Messrs Holland in 1886, solved the problem by leaving what is practically a very tight choke in the muzzle of the gun, in which deep spiral grooves are rifled. These are enough to grip and spin a properly fitting ball, while they do not much

affect the distribution of a charge of small shot. Other devices for the same purpose, such as the cutting of extremely shallow grooving in the barrel, have since been developed by other makers. The result is, that the sportsman going abroad can provide himself with a double 12 bore, a little heavier perhaps than an ordinary gun, which will serve for the game of jungle and plain, from stag to snipe. This is in many cases a great convenience to the man who is not specializing in big game or antelope shooting.

Many were in old days the attempts to supersede gunpowder by some other means of projecting missiles. Thus, some sensation was created in the middle of the nineteenth century by Perkins's steam gun, which fired balls under pressure from steam. A number of shots could thus be fired in rapid succession so long as the supply of steam lasted, but their velocity and effect were by no means comparable to those given by gunpowder, and the want of portability of a generator for the steam was another fatal drawback. Compressed air has long been a favourite source of projectile power. The air gun is said to have been invented in Nuremberg so long ago as 1560. Of late years the air rifle, carrying a small slug or bullet, has been much improved, and is an excellent instructional weapon. In such rifles a fresh charge of air is compressed for each shot, by the process of opening the gun. In the eighteenth century air guns were often used, a copper reservoir underneath the gun being filled by means of a foot pump to a considerable pressure, and sufficing to fire perhaps twenty shots. Air guns, however, suffered from lack of power, and from restricted range, drawbacks inherent in the system. The absence of noise was in many cases an advantage. Colonel Thornton took with him on his sporting tour to France in 1802 his best guns, rifles, and pistols, as well as an air rifle; with this he made a great impression by killing a wild boar at 50 yards, and afterwards, from the saddle of a horse at a trot, putting a ball through Colonel Marigny's hat, placed in a tree 60 yards off. Following such feats, the killing with the air gun of a roe, and, at the manufactory of firearms at Versailles, shooting within an inch of the mark at 93 yards, verge on the commonplace. But with the rapid improvement of guns and rifles, the air gun soon disappeared, so far as its use in the field is concerned.

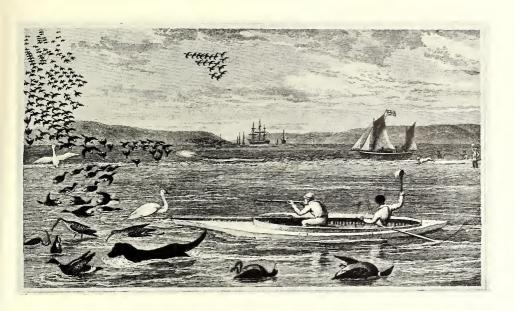
Here must be ended this survey of the development of sporting firearms, of necessity a brief and incomplete account of one of the most fascinating chapters in the story of the evolution of human arts. The interest of weapons is for some men due to the close contact with Nature which they can bring; for others, to the delight of adventurous wandering in the

PLATE XLI.

From Col. Peter Hawker's "Instructions to Young Sportsmen."

Punt-Gunning. Commencement of a Cripple Chase, after firing
2 lbs. of Shot into a skein of Brent Geese and two Wild Swans.

Col. Hawker's punt for his heavy double punt gun.







EVOLUTION OF GUNS AND RIFLES

wildest parts of distant lands, and the opportunity of meeting the fiercest and most powerful of creatures in single combat. To some, firearms appeal as a means by which pioneers of civilization are enabled to do their explorations in safety; others see them primarily in their aspect as weapons of war, becoming more powerful with each decade of time. From one point of view man's mastery over Nature is becoming only too complete; from another, there is yet unlimited scope for increase in the destructive power of weapons. For us of the present generation, it is but barren employment to speculate on the future. We may well be satisfied to delight in our tools at their present stage of perfection, and to recognize gratefully the skill and inventiveness of the past.

T. F. FREMANTLE.

N pursuance of the course adopted in the first volume of this work,* which treats of feathered game only, it is proposed to devote a few pages here to the consideration of the Game Laws as they affect Deer and Ground Game; in other words, hares and rabbits.

Doubtless the whole subject, according to precedent, might have been dealt with comprehensively in either volume, seeing that the word "game" includes "hares" as well as "birds of game"; but for the sake of clearness, and in order to confine attention to one group at a time, it has seemed better to divide the subject in the manner here proposed.

Although, strictly speaking, Deer do not come within the definition of "game," as laid down by section 2 of the principal Game Act (1 & 2 Will. IV, c. 32), a game licence is required for shooting them, under the provisions of an Act passed thirty years later, namely:

THE GAME LICENCES ACT, 1860 23 & 24 Vict., c. 90

Section 4 of this statute provides as follows: "Every person before he shall, in Great Britain, take, kill or pursue, or aid or assist in any manner in the taking, killing or pursuing, by any means whatever, or use any dog, gun, net or other engine for the purpose of taking, killing or pursuing any game, or any woodcock, snipe, quail or landrail, or any cony, or any deer, shall take out a proper licence to kill game under this Act, and pay the duty hereby made payable thereon; and if any person shall do any such act as hereinbefore mentioned, in Great Britain, without having duly taken out, and having in force, such licence as aforesaid, he shall forfeit the sum of twenty pounds."

To this, however, the following exceptions are made by section 5, which runs as follows:

- (1) The taking of woodcocks and snipes with nets or springes in Great Britain.
- (2) The taking or destroying of conies in Great Britain by the proprietor of any warren or of any inclosed ground whatever, or by the tenant of lands, either by himself or by his direction or permission.

- (3) The pursuing and killing of hares respectively by coursing with grey-hounds, or by hunting with beagles or other hounds.
 - (4) The pursuing and killing of deer by hunting with hounds.
- (5) The pursuing and killing of deer in any inclosed lands by the owner or occupier of such lands, or by his direction or permission.

The following exceptions also are made:

- (1) Any of the Royal Family.
- (2) Any person appointed a gamekeeper on behalf of His Majesty by the Commissioners of His Majesty's Woods, Forests, and Land Revenues, under the authority of any Act of Parliament relating to the land revenues of the Crown.
- (3) Any person aiding or assisting in the taking or killing of any game, or any woodcock, snipe, quail, landrail, or cony, or any deer in the company or presence, and for the use of another person who shall have duly obtained (according to the directions of this Act) and in his own right, a licence to kill game, and who shall, by virtue of such licence, then and there use his own dog, gun, net or other engine for the taking or killing of such game, woodcock, snipe, quail, landrail, cony, or deer, and who shall not act therein by virtue of any deputation or appointment.*
- (4) And as regards the killing of hares only, all persons who under the provisions of the two several Acts 11 & 12 Vict., c. 29 & 30 respectively, are authorized to kill hares in England and Scotland respectively without obtaining an annual game certificate.†

Subject, then, to the exception of owners and occupiers of inclosed lands, and persons having their direction or permission, anyone intending to kill deer must have a game licence under a penalty of £20. No excise licence, however, is required to sell deer.

When deer are found wild on inclosed land the tenant may kill them if the "sporting rights" have not been reserved by his landlord. Reservation of the "sporting rights" would include a right to kill deer, but a reservation of "game" would not; deer not being game. A tenant killing deer when reserved by his landlord is liable to an action for breach of covenant or agreement.

On the death of an owner of a deer forest, the deer being wild would, like game, pass to the heir; but it is otherwise with park deer, which, being reclaimed and kept within an inclosure, like cattle, are distrainable

(e.g., for rent, rates, or taxes) and pass to the executors on behalf of the personal representatives of the deceased owner.* For this reason the stealing of tame deer is larceny at common law under the following statute:

THE LARCENY ACT, 1861

24 & 25 Vict., c. 96

Under section 12 of this Act a penalty of £50 is imposed on any person who shall unlawfully and wilfully hunt, course, snare, carry away, kill or wound any deer in the uninclosed part of any forest, chase, or purlieu, and a second offence is deemed to be a felony, punishable by imprisonment, for a term not exceeding two years; and under section 13 a person committing any of these acts in the inclosed part of a forest, or in any inclosed land where deer are usually kept, shall be deemed guilty of felony and liable, on conviction, to imprisonment for a term not exceeding two years, with or without hard labour.

By section 14 any suspected person found in possession of venison and failing to satisfy the justice before whom he may be summoned that he came lawfully by the same, shall, on conviction, be liable to a fine of £20. A similar penalty is incurred under section 15 for setting any snare or other engine for taking deer or breaking down park fences.

In England there are no summary remedies by statute against trespassers in pursuit of wild deer, and recourse can only be had to an action at law for trespass.† It is otherwise, however, in Scotland, where, under section 5 of 2 & 3 Will. IV, c. 68,‡ any person entering upon land without leave of the proprietor in search or pursuit of game, or deer (or in search of woodcocks, snipes, quails, landrails, wild ducks, or conies) is liable to a penalty of 40s. and costs.

In Ireland, under the provisions of 10 Will. III, c. 8, section 5, no one may shoot a deer at any season of the year, except on his own ground, or (if a servant) on the ground of his employer, with a written warranty from him, under a penalty of £5, and, as in England, a game licence is required.

^{*}The cases which support this view are Morgan v. Lord Abergavenny, 8 C.B. 768; Ford v. Tynte, 31 L.J. Ch. 177; and Davies v. Powell, Willes's Rep. 46.

[†]Warry, Game Laws of England, 1896, p. 156.

^{‡&}quot;An Act for the more effectual prevention of Trespasses upon property by persons in pursuit of Game in that part of Great Britain called Scotland, 17 July, 1832." This is the corresponding Act to the English Game Act passed in 1831, namely 1 & 2 Will. IV, c. 32, and applies exclusively to Scotland. See Irvine, Treatise on the Game Laws of Scotland, 3rd ed., pp. 149-150.

[§] Connor, Game Laws of Ireland, p. 40; Farran, Game Laws of Ireland, 1907, p. 7.

A deer stealer, in the commission of the offence, may be arrested without a warrant, and his gun or dog seized. If a deer which has wandered from a forest, or escaped from a park, should take up its abode in another man's coverts, doing damage there, it may be killed by the owner of the covert, or his keeper or agent. From this it would follow that a farmer may kill an outlying deer doing damage to his crops. Yet we have a note of a prosecution of a farmer in Cheshire, at the Eddisbury Petty Sessions in April, 1895, for snaring an outlying deer from the park of Sir Philip Egerton, when, on the contention of the prosecutor that the animal was private property and was known to have escaped from the park, the magistrates convicted the defendant. How would the case stand if the farmer, instead of killing the deer on land in his own occupation, shot it on land belonging to the lord of the manor? This question is answered by a decision of Lords Justices Ridley and Bigham in Threlkeld v. Smith, in a case stated by justices for the county of Westmorland in June, 1901.* The facts were as follows: The justices at petty sessions had convicted the defendant and fined him £5 and costs under section 14 of the Larceny Act for shooting and carrying away a deer that had strayed from the uninclosed common and forest of Martindale, belonging to Mr Hasell, to land belonging to Lord Lonsdale, in the adjoining manor of Bampton. They consented, however, to state a case for the opinion of the Divisional Court of King's Bench as to whether he had been rightly convicted. It appeared that the defendant, a tenant of Lord Lonsdale, had shot the deer while it was standing in the River Lowther, and it was contended on his behalf before the justices that he ought not to be convicted for the following reasons: (1) That the deer, being wild and unreclaimed, was an animal feræ naturæ which anyone might kill or capture. (2) That sections 12 and 13 of the Larceny Act did not apply to the case, the animal, when killed, being neither in the inclosed or uninclosed part of the forest, chase or purlieu. (3) That Mr Hasell having no property in the deer at the place where it was killed, the defendant had committed no offence against either the common or statute law. The magistrates, however, convicted under section 14 of the Larceny Act, which enacts that: "If any deer . . . shall be found in the possession of any person who, being taken before a justice of the peace, shall not satisfy him that he came lawfully by such deer . . . he shall be liable to a fine." Mr Justice Ridley, in giving judgment, expressed the opinion that "if a man can show that the deer was killed outside

the boundaries of the forest he has come by it lawfully." Mr Justice Bigham was of the same opinion. He did not think that section 14 created a fresh offence, but intended that the person charged should escape if he satisfied the justices that he had not committed an offence under section 12. The defendant, he said, had killed a beast feræ naturæ; he was not trespassing, and was not committing any criminal act. Section 12 does not refer to any acts done outside the purlieu of the forest. The act must be done within the forest. For these reasons the Court held that the magistrates were wrong, and that the conviction must be quashed.

This is tantamount to a decision that the owner of a deer forest has only a qualified ownership in the deer so long as they remain within the forest or in the purlieu thereof. Just as with a pheasant or any other bird of game, so long as a man does not trespass in pursuit, but shoots it on land either in his own occupation or where he has a right or permission to be, he commits no offence so long as he is the holder of a game licence. In the above-mentioned case of deer, nothing was said as to shooting without a licence. Had it been proved that the defendant had no game licence as required by section 4 of the Game Licences Act, 1860, he would have been liable to a penalty of £20.

There is no close season for deer in England or Scotland; but in Ireland it is enacted by 10 Will. III., c. 8, section 6, that no person may hunt, course, or kill any male deer before June 10 unless it be in the park or proper ground of the person hunting, coursing, or killing the same; nor shall course, hunt, or kill any male fallow deer after Michaelmas in any year unless on the proper ground, as aforesaid, under a penalty of £5 for each offence.*

THE AGRICULTURAL HOLDINGS ACT, 1908

8 Edward VII, c. 28

By this statute a "holding" is defined as any parcel of land held by a tenant which is either wholly agricultural or wholly pastoral, or in part agricultural, and as to the residue pastoral, or in whole or in part cultivated as a market garden, and which is not let to the tenant during his continuance in any office, appointment, or employment held under the landlord.

By section 10 of this Act a tenant of such a holding is entitled to claim

compensation for damage to his crops caused by deer, pheasants, partridges, grouse and blackgame. There is no statutory right to compensation for damage caused by "ground game," presumably because the tenant has the means of preventing such damage in his own hands by the Ground Game Act, but he would have a right of action at common law in cases where the land is overstocked with hares and rabbits by a shooting tenant.*

The terms of section 10 are as follow:

- (1) Where a tenant of a holding has sustained damage to his crops from game, the right to kill and take which is vested neither in him nor in anyone claiming under him other than the landlord, and which the tenant has not permission in writing to kill, he shall be entitled to compensation from his landlord for such damage if it exceeds in amount the sum of one shilling per acre . . . and any agreement to the contrary shall be void.
- (2) The amount of compensation payable . . . in default of agreement shall be determined by arbitration, but no compensation shall be recoverable unless two notices, in writing, have been given to the landlord to the effect, first, that damage has been caused; and, secondly, that compensation is claimed. In all cases compensation is to be claimed from the landlord and not from the shooting tenant, but the landlord can recover the amount from the shooting tenant afterwards.†

In Scotland compensation for damage by game and deer, in the case of an agricultural holding, is regulated by section 9 of the Agricultural Holdings (Scotland) Act, 1908, 8 Edw. VII, c. 64. For the purpose of this section the expression "game" means deer, pheasants, partridges, grouse, and blackgame.

HARES.—The term "ground game," that is, hares and rabbits, was introduced by the Act passed in 1880 for the better protection of occupiers of land against injury to crops by these animals. But though it might seem reasonable to deal with these two animals under this one heading, it must be remembered that hares are "game" under all the statutes in England, Scotland and Ireland, while rabbits are not, although the latter are included in the Night Poaching Acts of 1828 and 1844, and in the Poaching Prevention Act, 1862, all of which apply to the whole of the United Kingdom, Before dealing, therefore, with the two animals collectively under

the term "ground game," it will be well to consider in what ways hares are affected by statutes which were passed prior to 1880 and which are still in force.

THE HARES ACT, 1848 11 & 12 Vict., c. 29

This is intituled "an Act to enable persons having a right to kill hares in England and Wales to do so by themselves, or by persons authorized by them, without being required to take out a game certificate," the object being to enable farmers to protect themselves from damage done to their crops by hares. It accordingly makes it lawful for any occupier of inclosed lands, or any owner having the right to kill game thereon, to kill any hare upon such lands without a game licence.* It also authorizes (section 4) the coursing of hares with greyhounds and hunting them with beagles or harriers without having a game licence. Provided always that no owner or occupier of land shall give authority to more than one person at a time to kill hares upon his land within any one parish, and shall deliver such authority, or a copy of it, to the clerk of the magistrates acting for the petty sessions division within which the lands are situate, who shall forthwith register the same with the date of registration in a book to be kept for the purpose.

Section 6, however, expressly provides that an authority to kill hares shall not extend to any tenant who is already bound by the terms of his agreement not to kill "game" on the land in his occupation.

THE HARES (SCOTLAND) ACT, 1848 11 & 12 Vict., c. 30

In Scotland, as in England, neither a landlord, nor a tenant who is entitled to the game, can use a dog or gun to take game or rabbits (with some exceptions) without first obtaining a game licence, under the Game Licences Act, 1860.

Section 1 of the Act now under notice enables anyone having a right to kill hares in Scotland, either by himself or by any person authorized by him in writing, without a game licence, provided that the hares are found and killed on his own land; and that no one authorized by him as afore-

^{*}It has already been noted (Vol. I, p. 428) that the word "licence" was substituted for "certificate" by the Game Licences Act, 1860.

said shall have power to authorize anyone else to kill a hare. By section 2 a person so authorized is not liable to any of the assessed taxes payable for a gamekeeper.

HARES' PRESERVATION ACT, 1892

55 & 56 Vict., c. 8

It seems strange that the legislature having passed an Act in 1880 giving occupiers the right to kill hares at any time on land in their occupation, should, twelve years later, pass another Act for their preservation. The fact is that the operation of the Ground Game Act during that interval caused a woeful decrease in the number of hares throughout the country, and in some places they became practically exterminated. It was necessary, therefore, to put some check upon their destruction without going so far as to repeal the Ground Game Act, and it was thought that the evil might be lessened by fixing a close time, during which it should be illegal to sell, or expose for sale, any hare or leveret in any part of Great Britain, Accordingly the Act of 1892 made it unlawful to sell hares during the months of March, April, May, June and July; but by omitting the word "kill" and allowing "foreign hares" to be sold at any time, the measure proved of very doubtful value. To have inserted the word "kill" would have counteracted the effect of the Ground Game Act so far as hares are concerned, while the omission of it leaves things much as they were. For it cannot be doubted that, under the guise of foreign hares, many an English one is sent to market. Just as in the case of English partridges, the excuse made in some quarters for selling them during the close time is that they are imported from abroad.

HARES' PRESERVATION (IRELAND) ACT, 1879 42 & 43 Vict., c. 23

The preamble to this Act states that "whereas hares form an important article of food and have of late years greatly decreased in number in Ireland by reason of their being inconsiderately slaughtered, and owing to their marketable value it is important to provide for their protection during the breeding season." Accordingly it is enacted that any person who shall kill, take, or have in his possession any hare or leveret between April 20 and August 12 shall forfeit and pay for every such hare, such a sum not

329

exceeding one pound, as to the justices shall seem meet, together with the costs of conviction.

On the application of the grand jury of any county, the Lord-Lieutenant may vary the close time and publish the order in a paper circulating in the said county, and in the "Dublin Gazette." More than thirty such orders have been made from time to time and a list of them will be found in Farran's "Game Laws of Ireland," 1907 (p. 116). In the majority of cases the close season has been extended by making it commence three weeks earlier, so as to be from April 1 to August 12.

The tracking of hares in the snow, and killing hares at night, or on Sunday, are all prohibited in Ireland by 27 Geo. III, c. 35, under a penalty not exceeding five pounds.

THE GROUND GAME ACT, 1880

43 and 44 Vict., c. 47

Having referred to the statutes which relate to hares and rabbits separately, we may now consider the Ground Game Act which deals with both these animals collectively. This is intituled "An Act for the better protection of occupiers of land against injury to their crops from ground game," and the preamble runs as follows: "Whereas it is expedient in the interests of good husbandry and for the better security for the capital and labour invested by the occupiers of land in the cultivation of the soil, that further provision should be made to enable such occupiers to protect their crops from injury from loss by ground game." Accordingly, under section 1, subject to certain conditions, presently to be mentioned, the tenant, or "occupier," as he is termed in the Act, is given a concurrent right with the landlord, or "owner," to kill or take ground game on land in his occupation, that is to say, in cases where hares and rabbits have been reserved by the landlord in his agreement. As at common law in the absence of any agreement between landlord and tenant with regard to ground game, hares and rabbits are the property of the tenant as occupier of the soil, it is necessary, in making agreements with tenants. that hares and rabbits should be mentioned and reserved, otherwise the landlord will have no right to kill them.

Sub-section 1 provides that the occupier himself and one other person authorized by him in writing shall be the only persons entitled to kill ground game with firearms, and that one person must be either a member

of the household resident on the land, a person in his ordinary service on the land, or a person bona fide employed by him for reward in taking ground game. Every such person is bound to produce his authority on demand by anyone authorized to require its production, and, in default of production, shall be deemed to be an unauthorized person.

A landlord in occupation of his own land has been held to be not an occupier within the meaning of the Act.* But an outgoing tenant who "holds over" for the purpose of getting in his crops has been decided to be an occupier so as to maintain or resist an action for trespass.† So also persons permitted by the tenant to use small pieces of ground for the purpose of growing potatoes have been held to be occupiers.‡

When a tenant sublets his land he ceases to be an occupier for the purposes of the Ground Game Act.

The term "occupier" is not defined by the Act, but may be taken to mean the person for the time being lawfully entitled to, and exercising, the exclusive possession of land. Certain persons are expressly declared (section 1, sub-section 2) not to be occupiers; for example, a person having merely a right of common, and a person occupying land for grazing purposes for a period not exceeding nine months. The term "occupier" will include joint tenants; their powers of appointment of persons to kill or take ground game can only be jointly exercised in writing, but whether (as is probably the case) each could exercise the rights of an occupier in killing ground game by himself is a point which, so far as we are aware, has not been judicially determined.

As to what constitutes "a resident on the land," the word reside has been held to mean "eat, drink and sleep," and therefore, although a person merely spending the day would not be a resident, a guest for a week end or a few days presumably might be. In the case of Stuart v. Murray (1894) the Court of Justiciary in Scotland decided that a person bona fide invited to stay for a week was, for the time being, a member of the household resident on the land.

The question what constitutes a "professional rabbit killer" is also one that often arises. According to sub-section 1 (b), he must be a person bona fide employed for reward, and only one such person can be authorized at a time. This definition does not cover the case of a friend coming for a

^{*} Smith v. Hunt, 54 Law Times Reports, 422. † Borasion v. Green, 16 East., 71; and Griffiths v. Puleston, 13 M. & W., 358. ‡ Greenslade v. Tapscott, 3 L.J. Ex., 328. § Regina v. North Curry, 4 B. & C., 959.

day's shooting, even if he receive a nominal sum for his services, or a present of rabbits, although the fact of the shooter being a friend of the occupier would not necessarily invalidate the authority.

The form of authority to be given in writing not being provided by the Act, the following may be suggested as sufficient for the purpose:

In pursuance of the provisions of the Ground Game Act 1880 I A.B. of (give address) hereby authorize C.D. (a member of my household, in my service, or resident on the land in my occupation as the case may be) to kill or take ground game for me on any part of the land in my occupation in any lawful manner* except by shooting.

Dated this day of 1913.

(Signed) A. B.

If the occupier intends to authorize shooting, the form may be varied thus: "to kill or take ground game by shooting, in the daytime only."

This authority, when given, must be produced by the holder at any time when demanded by any person authorized to require its production.

Sub-section 3 relates to moorlands as follows: In the case of moorlands, and uninclosed lands (not being arable lands), the occupier and the persons authorized by him shall exercise the rights conferred by this section only from the 11th day of December in one year until the 31st day of March in the next year, both inclusive—that is, from the end of grouse shooting until the beginning of the nesting season—but this provision shall not apply to detached portions of moorlands or uninclosed lands adjoining arable lands, where such detached portions are less than twenty-five acres in extent. In other words, on small outlying patches of moorland holding rabbits which might do damage on adjoining arable land, the "occupier" is empowered to kill ground game all the year round. This right of occupiers of moorlands has since been extended by the Ground Game Amendment Act, 1906, to which allusion will be made a little later (p. 337).

Section 2 of this Act provides that an occupier who is entitled to kill ground game on land in his occupation cannot divest himself wholly of such right. If he holds under a lease dated prior to September, 1880, and the game has not been reserved to the owner, he has an exclusive right to game both furred and feathered, and can let that exclusive right to anyone he pleases. But if his tenancy has been created since that date, without any reservation of the game, he cannot let such right in its entirety, but

only a right to the feathered game, with a partial right to the ground game; for as "occupier" he is bound (under this section of the Act) not to divest himself wholly of his right to kill the hares and rabbits, however willing he may be to do so. All he can do is to refrain from exercising this inalienable right.

Section 3 of the Act accordingly provides that any agreement in contravention of the occupier's right to kill ground game would be void; that is to say, that no such agreement could be enforced in a court of law if either of the parties happened to change his mind and refused to fulfil his contract.*

In the case of Morgan v. Jackson, where an occupier brought an action to recover rent from a shooting tenant to whom he had let his right to the ground game, and who pleaded in defence that the contract was void under section 3 of the Act, it was held, on appeal to the Divisional Court of Queen's Bench, by Mr Justice Day and Mr Justice Wright, that section 3 was intended only to prevent a tenant and landlord from combining together to defeat the Act. There was nothing in that section (they said) to prevent the tenant-who was entitled otherwise than in pursuance of the Act to kill and take ground game-being just as free as he would have been before the Act, and in their opinion section 3 did not apply, since it merely prevented a tenant from surrendering his right to his landlord. Although this interpretation is contrary to the expressed intention of the legislature (as may be seen on reference to the Parliamentary report of the debate when the Bill was in Committee), the position seems to be that an occupier of lands owning the exclusive right to the ground game (as when a landlord in letting has not reserved the game and rabbits) may let the sporting rights, and recover the rent, if his tenant is not his landlord. If his shooting tenant were also his landlord, the Court might possibly hold the contract void and the rent irrecoverable. But in either case an "occupier" who is exclusive owner of sporting rights, cannot divest himself of his concurrent right to kill the ground game, and while nominally letting the exclusive right, he, literally speaking, lets only the concurrent right so far as the ground game is concerned.

An application for leave to appeal (which had been refused by the Divisional Court) was made in the Court of Appeal before the Master of the Rolls and Lord Justices Day and A. L. Smith (in July, 1895), and was again refused. Accordingly the position of the occupier as above explained

remains unaltered. In other words, as settled by the Divisional Court, an occupier under the Ground Game Act, although unable to divest himself of his right to kill ground game in favour of his landlord, may do so for money value, or rent, in favour of any other person, and an agreement in writing to that effect would not be void under the third section of the Act.

Section 4 provides that a game licence is not required for killing ground game under this Act, but that in pursuance of the Gun Licence Act, 1870,* a ten-shilling "gun licence" must be taken out by every one who intends to kill ground game with firearms-unless, of course, he is already provided with a game licence. It may be asked what is the position, as regards a licence, of a person who is neither "owner" nor "occupier," but who is, for example, an invited guest, or has permission to go over land by himself for the purpose of shooting rabbits only. Is he bound to take out a game licence (though not intending to shoot feathered game or hares) or will a ten-shilling gun licence suffice? To answer this question it is necessary to study the principal Game Act (section 23), the Game Licences Act (section 4), the Gun Licence Act of 1870 and the Ground Game Act (section 4). From the combined result of these statutes it appears that while the holder of a game licence may kill any kind of game, as well as rabbits, woodcock, snipe, quail, and landrail, a person who intends to confine his attention to rabbits may shoot them if holding a ten-shilling licence only. But if he joins a party of "guns" who are shooting game he must have a game certificate, though intending to fire only at the rabbits. Woolrych, in his "Game Laws," cites the case of an appellant who went out to shoot rabbits with a gun and beagles. Game was shot by others in his company, and the surveyor of taxes contended that he was aiding and assisting. The Commissioners of Inland Revenue held him liable, and on his appealing, the judges affirmed the decision.† A shooter in such circumstances has also to remember when he goes out for a little "rough shooting" that although he may not intend to fire at game, and a ten-shilling gun licence will suffice for rabbits, he must have a game licence if he intends to shoot snipe or woodcock, quail, or landrail, in accordance with the provisions of the Game Licences Act, 1860 (section 4).

An important question arising on the interpretation of section 7 of

^{*}See Vol. I, p. 430. Both owners and occupiers may kill hares without a licence under the provisions of the Hares Act, 1848, and Hares (Scotland) Act, 1848, and may authorize others to do so for them.—Vide ante, p. 328.

[†]See Woolrych, Game Laws, p. 77; Assessed Taxes Appeal 2436, and Appeals 2166 and 2364, cited by the Surveyor of Taxes.

the Gun Licence Act, 1870, has direct reference to rabbits. That section. which imposes a penalty for using or carrying a gun without a licence, exempts (amongst others) any occupier of lands, or his authorized agent. from penalty if using a gun for the purpose only of scaring birds or killing vermin on such lands. A Scottish farmer who, from an agriculturist's point of view, regarded rabbits as "vermin," resisted payment of the gun licence on the ground that he came within the exemption. He was summoned before the Sheriff at Cupar, who after hearing the case argued, decided that rabbits were not vermin. From this decision the farmer appealed, and in February, 1898, Lord Stormonth-Darling, considering himself bound by precedent (Gosling v. Brown, 1878, 5 R. 755), though against his better judgment, reversed the Sheriff's finding, and decided that rabbits were "vermin," and that the farmer was accordingly exempt from taxation. This verdict was once more challenged, and the full Court of Appeal in Edinburgh, a month later, reversed Lord Stormonth-Darling's decision, and, supporting the Sheriff's opinion, held that rabbits were not vermin. It is now, therefore, conclusively settled that rabbits are not "vermin" within the meaning of the Gun Licence Act, 1870, and that a ten-shilling licence is required for shooting them.

Section 5 enacts that an "occupier" cannot exercise his concurrent right to the ground game if the right to kill or take it has been already vested in someone else by lease dated prior to the passing of this Act.*

By the same section it is further enacted that "nothing in this Act shall affect any special right of killing or taking ground game to which any person other than the landlord, lessor, or occupier may have become entitled before the passing of this Act by virtue of any franchise, charter, or Act of Parliament." This is a very important provision, since it defeats the right of an occupier to kill ground game if the land in his occupation happens to be land over which a right of "free warren" is claimed. By way of illustration it may be stated that in the case of Lord Carnarvon v. Clarkson, where the plaintiff claimed a right of free warren over lands in the occupation of the defendant, it was held that the latter was not entitled to kill rabbits on the land in question as he would otherwise be at liberty to do were no such franchise claimed by the lord of the manor.

Section 6 prohibits the shooting of ground game by night, setting spring traps anywhere in rabbit-holes, and employing poison.

^{*}See a decision by Mr Justice Chitty in Allhusen v. Brooking, 51 Law Times Reports, N.S. 57, and Hassard v. Clark, 13 L. Rep., Irish Chancery Division, 391.

Spring traps must not be set in front of a rabbit-hole, but within it, that is, under the roof of it.* Nor may they be set in a hole under a wire netting, for that is not a burrow.†

The question has arisen whether this prohibition—especially as to spring traps—applies to owners in occupation of their own land, and it has been decided in the case of *Smith v. Hunt*, tried before Justices Mathew and Smith in the Queen's Bench Division in November, 1885, that section 6 of the Act does not apply to owners occupying their own land. This construction is not in accordance with the expressed intention of the Government, as stated by Sir William Harcourt, but the decision has been followed in the case of *McMahon v. Hannen*, which came before the Exchequer Division, Dublin, in May, 1888, by way of appeal on a case stated by the justices of the co. Clare sitting at Dunas. The Lord Chief Baron and Mr Justice Andrews were of opinion that the section did not apply to owners in occupation. Baron Dowse dissented.

On the other hand, in the Scottish Court of Session, four out of five judges were of opinion that the restrictions in section 6 apply to every one whether landlords in occupation, shooting tenants, or anyone who has the right of killing ground game.

And that this was the original intention of the legislature may be gleaned from the report of the debates which took place when the Bill was in Committee.

In Anderson v. Vicary, 1900 (2 Q.B., 287), it was decided that an owner in occupation who has let the sporting rights over his land retains the concurrent right given by the Ground Game Act to kill and take ground game. This is not unreasonable; for an owner farming his own land, while letting the shooting, requires no less protection for his crops from damage by ground game than does a tenant farmer.

Section 7 empowers a shooting tenant to institute legal proceedings against offenders with as much authority as if he were exclusive owner; without prejudice to the right of the occupier.

Section 8 defines the words "ground game" to mean hares and rabbits.

Section 9 provides that a person acting in conformity with this statute shall not thereby be subject to any proceedings or penalties in pursuance of any other statute. For example, if under this Act he were to take out a

*Brown v. Thomson, 1882, 9 R., 1183. † Fraser v. Lawson, 1882, 10 R., 396. ‡Fraser v. Lawson, 1882, 10 Court of Session Cases, 396.

ten-shilling gun licence and proceed to shoot rabbits, he could not be prosecuted under the Gun Licences Act, 1860, for shooting rabbits without a game licence.

Section 10 has reference to the killing of ground game on days on which, under other statutes, the killing of game is prohibited (as, for example, on a Sunday or on Christmas Day, or at night), and is to be read in harmony with such statutes.

If a snare be set on a Saturday, and game be caught on Sunday, it is deemed to be used on Sunday within the meaning of the Act, and the person setting it is liable to a penalty, though he may not have been on the land on Sunday.*

Section 11, the last, gives the short title of the Act thus: This Act may be cited for all purposes as the Ground Game Act 1880.

The question sometimes arises whether an "owner" has the right to ferret rabbits on land which he has let to the "occupier." There can be no doubt that he has, for an "occupier" has no monopoly of any particular method of capture conferred upon him by the Ground Game Act. He has merely a concurrent right to kill the hares and rabbits on the land in his occupation, and the landlord retains a similar right. Both may employ dogs, ferrets, traps, nets and snares; in fact, whatever method is legal to the one is legal to the other, the Act not stating otherwise. The fact that no mention of "ferreting" is made in the Act shows that the right remains unaltered; for if the landlord had been deprived of such right, the Act would have stated it in express terms.

THE GROUND GAME AMENDMENT ACT, 1906 6 Edward 7, c. 21

This Act, which is a very short one, provides an extension of the period during which occupiers may kill ground game on moorlands. Under the Act of 1880 occupiers and persons authorized by them could only exercise the right of killing from December 11 to March 31 except on detached portions of moorland adjoining arable lands less than twenty-five acres in extent. Now by the Amendment Act, 1906, they may kill and take ground game otherwise than by firearms between September 1 and December 10, both inclusive, and with firearms from December 11 to March 31, that is, from the end of the grouse-shooting season until just before the commencement of the nesting season.

In bringing to a conclusion these remarks on the law relating to deer and ground game—having dealt with feathered game in Vol. I—it is well to explain that, within the limited space at disposal, it has been impossible to do more than give a general outline of the statutes affecting the subject; at the same time commenting upon the more important provisions, as well as on the interpretations put upon particular sections in cases which have called for the decisions of magistrates, or judges of the superior courts in the event of appeal. With this information it is hoped that country gentlemen who are fond of shooting will find themselves in possession of the most material points of law which in the course of their experience will be likely to engage their attention.

J. E. HARTING.

INDEX

Accidents, 173, 199, 200 Agreement, Voidance of, 333-334 Agricultural Holdings Act, 1908, 326-327 Air-guns, 320 Aldridges, Sales at, 218, 238 Asafectida for Rabbiting, 214 Authority under Ground Game Act, 332

Beaters, 172, 199, 213
Belgian Hare, 190, 191
Big Bags, 198, 215
Bores and Charges, 289, 293-300
Breaking Dogs for the Gun, 277
Bullets, 314-316
Burton, Lord, 20 pointer, 32
Bushing the fields, 214

Cartridges, Gas-tight, 305 ,, Pinfire, 305 Charges for Guns, 289 Close Season for Deer, 326 ,, ,, for Hares, 329 Compensation, 327 Conies, see Rabbits

Deer, Licence to Kill, 323 ,, Property in, on death of owner, 323 ,, in Ireland, 324, 326 ., Deer-stealer, Arrest of, 325 Trespassing, damage faisant, 325, 327 ,, Close Season for, 326 Deer, Fallow, Distribution, 147 in Northern Europe, 148 in Epping Forest, 148, 152 Black variety of, 149 in Petworth Park, 150 in the New Forest, 150, 152 Shooting, 150, 156 in Hyde Park, 151 in Cowdray Park, 151 in the Forest of Dean, 152 in Scotland, 153 ,, in Ireland, 153 Habits of, 153-156 Catching, 155 Deer, Red, Distribution, 1 ,, Early Hunting, 2 Traps for, 3 ,, Weapons used, 4

" Parks for, 5-7

Deer, Red, Wild, in England, 7-13 ,, in Scotland, 13-18 " Habits of, 18-31 ,, Food of, 21 ,, Roaring, 24 " Fighting, 25-26 ,, Attacked by Eagles, 30 ,, Parasitic Flies, 30-31 " Lord Burton's 20-pointer, 32 ,, Malformed Heads, 32 ,, Deer Coursing, 34 ,, " White Harts, 34 ,, Weights and Antlers, 35-42 ,, Park Stags, 43 Semi-feral Deer, 44-47 " Measurements of Shed Horns, 47 ,, English Wild Stags, 48-49 ,, Irish ditto, 50-51 ,, Scottish ditto, 51-53 Shooting Statistics, 54-57 ,, Scottish ditto, 57-59 ,, Dentition, 60 ,, Evolution of Stalking, 61-71 ,, Cost of Stalking, 72 ,, Deer Forest Returns, 73-76 ,, List of Forests, 76-81 ,, " Scottish Deer-stalking, 82-95 ,, Odd Days in various Forests, 96-132 ,, The Big Stag, 112-132 " Hints on Stalking, 132-146 Deer, Roe, Distribution, 157 ,, in England, 157-159 ,, in Wales, 157 ,, Habits, 160 ,, Three-horned, 163 ,, Four-horned, 163 ,, Abnormal Heads, 164 ,, ,, Measurements, 165 ,, Shooting, 165-173 Dentition of Deer, 60 Dog-breaking, 277-280

Ejectors, 308 Evolution of Guns and Rifles, 281-321

Fallow Deer, see Deer, Fallow Ferreting, 214, 215 Firearms, Earliest, 282 ,, Killing Ground Game with, 330, 331 Flat-coated Retrievers, 256-263 Flint and Steel, 287 Foreign Field Trials, 220 ,, Gun-makers, 288, 291, 292 Forests, List of, 76-81 Form of Authority under Ground Game Act, 332 Forsyth, Rev. A. J., 298 Free-Warren, 335 Fuses for Rabbiting, 214

INDEX

```
Game-Laws, 322-338
Game Licences Act, 1860, 322-324
Game, Reservation of, 323
Grazing Tenants, 331
Ground Game Act, 1880, 330-337
        ,, Amendment Act, 1906, 337
Gun Licence Act, 1870, 334
Gunpowder, History of, 281, 298
           Smokeless, 310, 311, 314, 316
Guns and Rifles, History of Gunpowder, 281, 298
                Evolution of, 281-321
                Earliest Firearms, 282
  ,,
                From Crossbow to Wheel-lock, 285
 ,,
                Matchlock Gunner, 285
                Invention of Rifling, 286
 ..
           ..
                First mentioned by Sir Hugh Plat, 1594, 287
                Flint and Steel, 287
                Snap-haunce, 287
                Sporting Guns, 1515, 288
               Foreign makers, 288, 291, 292
                Charges, 289
                Legislative Restrictions, 290
                Proof of Guns, 291
                Prices in Eighteenth Century, 292
                Old Books on Shooting, 293-294
                Shooting Flying, 294
                Material for Gun-barrels, 294-296
                Improvements by Nock, 297
                              Manton, 297, 298, 309
                     ,,
                              Forsyth, 298
                              Col. Hawker, 299
           ,,
                Lengths and Bores, 293-300
                Perfection of Muzzle-loader, 300
                Introduction of Breech-loading, 301, 302
                Lefaucheux Pinfire Gun, 303, 306
                Gas-tight ditto, 305
                Pinfire Cartridges, 305
                Steel Barrels, 307
                Ejectors, 308
                Hammerless Guns, 308
                Improved Lock Mechanism, 308
                Single Trigger Gun, 309
                Under and Over Barrels, 310
                Smokeless Powders, 310-311, 314, 316
                Repeating Guns and Rifles, 311, 317
                Sporting Rifles, 312
                Bullets, 314-316
                Wildfowl and Punt Guns, 318
                Whaling Guns, 319
                Air Guns, 320
Hammerless Guns, 308
Hare, Common, In Olden Times, 174
```

Treatises on Hunting, 174-176

Comparison with Mountain Hare, 176-179

Description and Colour, 179 ,, ,,

Varieties, 180 ,, ,,

White Hares, 180

Hare, Common, Black Hares, 181 Weight, 181-182 Habits, 182 ,, Breeding, 182-183 ,, Voice, 183 ,, Hare-pipes, 184 Poaching, 184 Preservation, 185 Nets, 194 Shooting, 194-200 Coursing, 196 Warrens, 196 Free Warren, 196-197 Big Bags, 198 ,, Driving, 199 Mountain, Scottish, 186 Irish, 187 •• ,, Habits, 188 Hybrids, 188-189 Interbreeding, 190 Belgian Hare, 190-191 Leporines, 190-191 Darwin's views, 191 ,, Legends concerning, 191 Chewing the cud, 191-192 Tame Hares, 192 Sleeping, 192-193 Big Bags, 198 Driving, 198-199 Shooting, 199 Hares Act, 1848, 328 Hares Preservation Act, 1892, 329 Hares Preservation (Ireland) Act, 1879, 329-330 Hares (Scotland) Act, 1848, 328-329 Hares, Legends concerning, 191 Licence to Kill, 323 Authority to Kill, 328 Close time for, in Ireland, 330 Killing at Night Prohibited, 330 Tracking in Snow Illegal, 330 Harvest Time, Rabbits in, 212 "Holding" defined, 326

"Idstone" (Rev. W. Pearce), 240 Improvements, 297-299 Inventions in Guns, 286-298

Labrador Retrievers, 264-276

" White, 267 Yellow, 267 Landlord in Occupation, 331 Larceny Act, 1861, 324-326 Lefaucheux Guns, 303, 306 Legends concerning Hares, 191 Leporines, 190-191 Lock Mechanism, 308

Malformed Deer Heads, 32, 163, 164 Management of Rabbits, 215-216

INDEX

Manton, Joseph, 297, 298, 309 Matchlock, 285 Moorlands, Ground Game on, 332 Rights of Occupiers, 332 Extended in 1906, 337

Newfoundland Retrievers, 264

"Occupier" defined, 331 Authorizing Shooting, 332 Outgoing Tenant, 331 Owner in Occupation, 331

Paraffin, 214

Pointer, Less popular than formerly, 218

Noted Breeders, 218 Sales at Aldridges, 218

Famous Trial at Blandford, 218, 220

Antiquity of the breed, 220 Continental Trials, 220

Fox Hound Cross, 220 Mr Arkwright's Monograph, 220

Standard of Points, 221-222 Powder, Invention of, 281, 298

Smokeless, 310, 311, 314, 316

Prices of Dogs, 238 ,, of Guns, 292

Rabbit, Natural History of the, 203

Structural Difference from Hare, 203-204

Condition of Young at Birth, 204

Habits, 204

Mode of Feeding, 204 Breeding above Ground, 205

Duration of Life, 205 Period of Gestation, 205 Defence of Young, 207

White and Black Ones, 207

Speed, 207-208 Food of, 208 Good for Turf, 208

Swimming, 208 Distasteful Shrubs for, 209

Natural Enemies of, 210 Persecuted by Rats, 210 Utility of Stoats, 210

Rats checked by Owls, 210-211

Rabbit Killer, Professional, 331

Rabbit Shooting, In Hedgerows with Spaniels, 212

In the Reaping Field, 212 On the Common, 212 In the Woods, 213 Outside Covert, 213 "Stopping Out," 213

The knack of killing them, 213 Asafœtida, 214

Bushing the fields, 214 Fuses, 214 Pegs and Paraffin, 214 ,,

Rabbit Shooting, Extraordinary Bags, 215 Method employed at Bradgate, 215 ,, On the Sandhills, 216 With a Rifle, 217 Rabbits, Taking in a Warren, 322 ,, Licence for Shooting, 334 not "Vermin," 335 Red Deer, see Deer, Red "Resident on the Land" Defined, 331 Retrievers, Evelyn Shirley's Kennel, 256 Mr Shuter's "Darenth," 256 Flat-coated, 256-263 Points of, 259 ,, "Horton Rector," 257 ,, Other Famous Dogs, 257-263 Earl of Malmesbury, 264 Introduced in 1835, from Newfoundland, 264 Labrador, 264-276 Points of, 267 Duke of Buccleuch, 265 MacKenzie, Austin, 267 White Labradors, 267 Yellow Labradors, 267 Capt. C. E. Radelyffe, 267, 268 Earl of Lonsdale, 267, 268 Crossing of Flat-coated and Labrador, 269 Prize-Winners, 270 "Peter of Faskally's" Pedigree, 271 Record, 272 Classes for Labradors, 272 Curly-coated, 273-276 Golden-coloured, 274 Hon. L. Harcourt, 274 Marjoribanks and Ilchester Trackers, 275 Col. Le Poer Trench, 275-276 Rifles, for Rabbits, 216-217 ,, Evolution of, 281-321 Rifling, Invention of, 286 Roe Deer, see Deer, Roe Setter, Antiquity of the breed, 223 Dobson's Essay on Breaking, 223 Related to Spaniel, 223 Sir Walter Scott's remark, 224 Used with a net in 1535, 224 Laverack Setters, 224, 230-231, 234 Cornish breed, 225 Gibbs of Bristol, 225 English Types, 225-232 Barclay Field, 226 Commander Venner, R.N., 226 Prince Albert's Kennel, 226 Vincent Calmady, 226 Cheviots, 226-227 Edward Armstrong, 227 Fault of the old breeds, 227 Marquess of Breadalbane, 227 Sir Vincent Corbet, 227 William Lort, 227

INDEX

Setter, Welsh Dogs, 227-228 General Hutchinson, 228 Joseph Lang, 228 Russian breed, 228-229 Harrison of Carlisle, 230 Inbreeding, 230 Sir Richard Garth's, 232 Mr Purcell Llewellyn's dogs, 232, 233-238 Mr Walsh's type, 234, 235 Sales to America, 237 Big Prices, 238 Gordons, 239, 241, 242 Idstone's "Kent," 240 Hely Hutchinson (Sixty-one), 242 Red Irish, an old breed, 243 Mentioned in 1803, 243 Black ones in Ireland, 245 Cooper's Kennel, 244 R. O. Callaghan, 244 Cumming Macdona, 244, 245 Col. Whyte of Sligo, 245 De Freyne's Breed at Frenchpark, 246 Purcell Llewellyn's Winners, 247 Shooting, Old Books on, 293, 294 Shrubs, Rabbit-proof, 209 Single Triggers, 309 "Sixty-one" (Hely Hutchinson), 242 Snap-haunce, 287 Snipe, Game Licence to Kill, 322 " Taking with Springes, 322 Sporting Rights, Reservation of, 323 Sporting Springers, 248-249 Spaniels, 248-255 Irish Water Spaniels, 249 Clumbers, 251 King Edward's Kennel, 251 Field Spaniels, 252 Welsh Springers, 252 Col. Claude Cane's, 253 Sussex Spaniels, 253 Cockers, 254 Spring-traps, 335-336 Stalking, 61-71, 132-146 Cost of, 72 Steel Barrels, 307 Stoats, useful in killing Rats, 210 Stopping out Rabbits, 213 Tracking Hares in snow illegal, 330 Traps for Deer, 3 Trapping Rabbits in the open, 335-336 Under and Over Barrels, 310 Venison, Unlawful Possession of, 324 Warrens, 322 ,, for Hares, 196 Weasel, 210 Woodcock, Game Licence to Kill, 322 ,, Taking with Springes, 322

