

3-06 M

FOR THE PEOPLE FOR EDVCATION FOR SCIENCE

LIBRARY

OF

THE AMERICAN MUSEUM

OF

NATURAL HISTORY





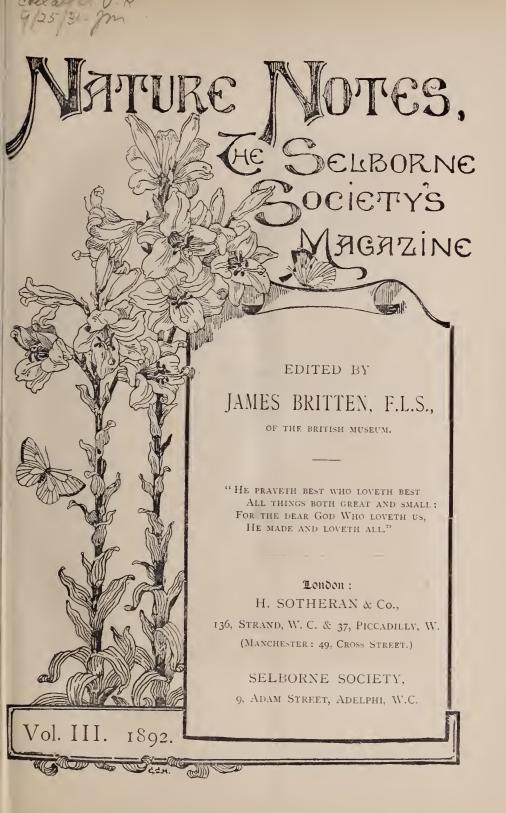








THE LATE LORD TENNYSON.
(From a photograph by Messrs. Barraud, 263, Oxford Street.)





31-121763-Sept 26

INDEX.

Abury, Avenues at, 220.
Access to Mountains Bill, 72.
Agriculture, Birds and, 166.
Annual Meeting, 118.
Antilles, In the, 24.
Ants in Ceylon, 86.
Aplin, O. V., Scarcity of Swallows, 18.
Ashley, F. W., Barbed Wire, 157;
Martins, 239.

Atkinson, J. C., The Sparrow, 49; his Moorland Parish, 14.

Australia, Preservation of Birds in, 57, 238.

Badgers, Extermination of, 114.
Barbed Wire, 136, 157, 217.
Bat in March, 99.
Bell, C. D., Breeding of the Bulbul, 59.
Bewick, Note on, 13.
Biological Station New, 131.

Birds: Lentils and, 18; Tame, 28; Water for, 36; Late, 38; their ways, 39; Notes of, 70; Wireworms and, 76; of Prey, 115, 136; Protection of, 136; Pleasance with, 161; at Bridlington, 195; and Agriculture, 166; Preservation of, in Australia, 57, 238; London, 228, 231; Books on, 231; How to Feed, 237.

Blackbird, Strange Freak of, 117; Egg of, 118.

Blue Tit, Nesting of, 98. Books about Wild Flowers, 152.

Books for Nature Lovers: Forty Years
in a Moorland Parish, Rev. J. C.
Atkinson, 14; Animal Sketches, C.
Lloyd Morgan, 52; Recollections of
a Happy Life, Marianne North, 92;
Rambles of a Dominie, F. A. Knight,
154; Annals of a Fishing Village,
and Within an Hour of London
Town, A Son of the Marshes, 154.

Books for Young Selbornians, 35. Books, Notices of, 15, 34, 55, 73, 95, 96, 112, 174, 192, 212, 232.

90, 112, 174, 192, 212, 232. Booth, H. B., The Sparrow, 46. Boyle, E. V., The Sparrow Again, 109. Bridlington, Sea Birds at, 195. Brightwen, E., Seedling Trees, 143.
Britten, J., Our Intentions, 1; Sport,
21; New Forest in Danger, 41;
Browning's "Three-leaved Bell,"
84; Ilints for the Holidays, 121;
Opening of Kew Gardens, 186;
Lord Tennyson, 221.

Brockley, Hilly Fields of, 6, 97, 178.
Browning, R., his "Three-leaved Bell,"
84; his "Sole Streak," 85, 114.
Buckhounds, Master of the, 181, 235.
Bulbul, Breeding the, 59.
Butterflies, British, 79.

Camburn, C. F., Bat in March, 99. Carrion Crow chasing Heron, 116. Carruthers, W., On Growth of Wheat, 171.

Cash, S., Rooks, 128.
Chiff-Chaff in Winter, 59.
Christmas Tree, A Novel, 222.
Clarke, A., Hilly Fields of Brockley, 6, 97; Open Space for Deptford, 50:
New Forest, 61, 138; Hackney Downs, 137; Master of the Buckhounds, 181; West Wickham Com-

Climbing Plants, 199.
Clouded Vellow, 199.
Collier, W. F., A Robin's Song, 38.
Commons Preservation Society, 98.
Compton, M., Tame Squirrel, 32.
Compton, T., Note on Bewick, 13.
Cone, H. G., The Tender Heart, 52.
98.

mon, 237.

Conybeare, E. F., "Jack," 90, 104; A Novel Christmas Tree, 222. Cooper, J. E., Largesse, 179. Cowl, M. E., A Sea Mouse, 79. Cuckoo, A Query, 159.

Daddy Longlegs, 179, 198.
Daubeny, G. A., Ducks' Nests, 169.
Death's Head Moth, 197.
Deptford, Open Space for, 50.
Dixon, A. M., Uprooting Ferns, 57.
Dixon's, C., Migration of Birds, 231.
Dog, Devoted, 97.
Drawing Room Meeting, A, 155.

ii Index.

Ducks' Nests, 169, 198, 219; Muscovy, 219.

Edelweiss, Protection of, 216. Edwards, A., The Sparrow, 47; Orleton Swifts, 117.

Edwards, C., The Sparrow, 46. Elephants and Ivory, 36.

Ellacombe, H. N., Old Field Names,

Eltham Park, Destruction of, 57.

English Garden, 196; Plant Names, 77. Esdaile, W. C. D., Ruddy Sheldrake, 116.

Example, A Good, 115, 158, 177. Extermination of Badgers, 114.

Ferns, Uprooting, 57, 113, 178. Field Class, A Botanical, 115. Fieldfares, 30. Field Names, 163, 198.

Flower Brigade, 158.

Fogo, E. L., Sparrow and Sawfly, 138. Footpath Preservation, 198.

Fowler, W. M. E., The Puckeridge, or Goatsucker, 33,

Fowler, W. Warde, Two new Bird Books, 231.

Foxwort, 179.

France, Selborne Teaching in, 177. Fry, I., The Sparrow, 12; Late Swallows,

17; Dead Larks, 56. Fry, P. A., A Helpful Toad, 159.

Fullwood, J., "Pother-wind," 219.

Fungi, Drawings of, 77.

Furlong, M., The Starling, 190.

Garden, An English, 196; Books on, 73, 95.

Gepp, A., A Winter Pursuit, 207.

Gibson, R. J. H., New Biological Station, 131.

Gifford, Death of Miss, 75.

Glastonbury Thorn, 38.

Gleaners' Queen, A, 141.

Goatsucker, 33.

Graham, J., Puss Moth Caterpillar, 158. Grasses, 37.

Gray's Inn Rooks, 135.

Green, G. C., Jackdaws, 79; A Good Example, 158.

Green, W. C., Domestication of Woodpigeons, 58.

Greenfinches, 138.

Greenwood, A., On Greenfinches, 138. Grove, E., Martins and Sparrows, 38. Grubb, S., Chiffchaff in Winter, 59.

Hackney Downs, 17; Marsh, 137. Halsey, J., A Protest, 235.

Harebells, Poems on, 130, 146.

Heath, F. G., Earlier Opening of Kew Gardens, 186.

Heron and Carrion Crow, 116.

Hiam, J., A Scheming Weasel, 37.

Hickey, E. H., Harebells. 130; A Gleaners' Queen, 141.

Hill, Octavia, Footpath Preservation,

Hill, R. H., The Sparrow, 12. Hilly Fields, The, 6, 97, 178.

Holidays, Hints for the, 121.

Holland, R., Marl Pits, 147.

Ibbs, A. M., To the South Downs, 108. Ivory, Substitute for, 17; Elephants and, 36; London Sales, 178. Ivy, 79.

Jackdaws, tamed by Jackdaws, 79; A Query, 79; A Tame, 90, 104.

Jefferies Memorial, 77, 87.

Jenison, Countess A., Tame Squirrels, 32.

Johnson, Lionel, The Poet Thomson, 202.

Kalm's Visit to England, 173.

Keats, J., Ode to Autumn, 170.

Kerr, J. A., Birds and Wireworms, 76: Wild Ducks' Nests, 198.

Kew Gardens, Earlier Opening of, 186, 215, 238.

King, W. E. M. Hamilton, Harebells,

Kingfisher, Strange Proceeding of, 18. Kirby, W. F., Oban, 236.

Knocker, K. E., The Sparrow, 11.

Kyrle Society, 115; Message from, 69.

Ladies, To, 217.

Landon, G., Field Names, 198.

Largesse, 179.

Larks, Dead, 56; Destruction of, 76.

Lentils, Birds and, 18. Liesching, W. F. E., Ants in Ceylon,

Lister, A., An Open Field, 2. London Birds, 228, 231.

Index.

Lothian, Lady, Nature Pictures, 236. Lubbock, P., Clouded Yellow, 199.

Macpherson, A. H., London Birds, 228. McMillan, R. F., Barbed Wire, 157. Major, F. C., Robin's Song, 58. Man-traps and Spring-guns, 135. "Marie's Heart," 159.

Marl Pits, 147.

Martin in January, 137; and Sparrows, 38, 219; at Felpham, 219; at Selsey, 239.

Maurice, C. E., To the Poor of London, 69.

May Day, Old, 81.

Moles Swimming, 117.

Monkeys, 31.

Morgan's Animal Sketches, 52.

Morley, R., Monkeys, 31.

Morris, F. O., The Sparrow, 9; British Butterflies, 79; A Devoted Dog, 97.

Mosses, Study of, 207.

Mummy Wheat, 56.

Mountain Ash Berries, 218.

Murray, G., In the Antilles, 24; Drawings of Fungi, 77; "Island Life," 112.

Murray, H. J., Wild Rabbit Tamed, 218.

Musgrave, G. A. and T., Miss North's Recollections, 92.

Myles Memorial Fund, 18, 40.

Nature Notes in the Magazines, 190; in Tennyson's Poetry, 125.

Nature Pictures, 236.

New Forest, 41, 61, 138, 177.

Nicholson, J. B., Elephants and Ivory, 36.

Nicholson, W. A., Protection of Birds, 136.

North's (Miss), Recollections, 92.

Notes and Queries, 17, 37, 58, 77, 98, 116, 138, 158, 179, 197, 218, 238.

Notes of Birds, 70.

Notices to Correspondents, 20, 40, 60, 100, 120, 140, 160, 180, 200, 220, 240.

Official Notices, 39, 59, 80, 100, 120, 139, 160, 190, 240.
Old May Day, 81.
Open Field, An, 2.

Open Space for Deptford, 50; Saved, 237.

Orleton Swifts, 117.

"Osprey," 136.

Ostrich Feathers, 217.

Our Intentions, 1.

Owls and Pigeons, 116.

Parmenter, M., The Sparrow, Against, 12.

Paul, C. Kegan, Nature Notes in Tennyson's Poetry, 125.

Payne, S. M., Our Scholars, 236.

Pearl, E., Spring Snowflake at Charmouth, 97.

Pets, Some, 99, 117, 159.

Petty, L., An Early Brood, 38.

Pictures for Schools, 115, 139.

Pigott's, T. D., London Birds, 231.

Pinner Branch, Selborne Society, 178. Plant Names, 77.

Pleasance with Birds, 161.

Poetry: Fieldfares, 30; Her Choice, 34; The Tender Heart, 52; The Poor of London, 69; The First Swallow, 92; To the South Downs, 108; Harebells, 130, 146; Ode to Autumn, 170; The Starling, 190.

Pole, T., Scilly Notes, 137; Swifts, 159. Post, Sending Living Creatures by, 76. "Pother-wind," 219.

Primrose, A Talk about the, 66; League wanted, 75.

Prizes for Rare Plants, 216.

Protest, A, 235.

Puckeridge or Goatsucker, 33.

Puss Moth Caterpillar, 158.

Queen Cow's Crown, 197.

Rare Plants, Prizes for, 216.

Ravens in Isle of Wight, 114.

Rawnsley, H. D., Field-fares, 30; Martin in January, 37; The First Swallow, 92; Our Scholars, 210.

Rawnsley, Mrs., A Pyramid Snail, 179.

Redfern, J. W., Ducks' Nests, 198. Remonstrance, A Gentle, 116.

Request, A Reasonable, 115.

Riley, W. R., Strange Proceeding of a Kingfisher, 18.

Robin's Song, 38, 58; Nest-building, 79; Two, 229.

Rogers, T., A Pyramid Snail, 218.

iv Index.

Rooks burying Food, 78, 99; Notes on, 128: at Gray's Inn, 135. Rope, G. T., Nesting of Blue Tit, 98; Extermination of Badgers, 114. Ruddy Sheldrake, 116. Rufous Sedge Warbler, 117. Samler, N. S. H., Late Swallows, 239. Sawyer, M., Climbing Plants, 199. Scholars, Our, 210, 237. Scilly Notes, 187. Sea Birds at Bridlington, 195. Sea Mouse, 79. Sedge Warbler, Rufous, 117. Seedling Trees, 143. Selborne, Wild Flowers of, 75. Selborne Society, 40, 100, 155, 180, 200, (and see Official Notices); Annual Meeting, 118. Selborne Teaching in France, 117. Selborniana, 17, 36, 56, 75, 97, 113, 135, 157, 177, 195, 215, 235. Selbornians, Hints for, 114; Young, 226. Sentence, An Exemplary, 113. Sharpe, R. B., "Osprey," 136. Sheldrake, Ruddy, 116. Shelley's "Tall Flower," 159. Silver, H., Late Birds, 38. Simpson, R., Martins, 219. Sirr, H., A Reasonable Request, 115. Smith, M. H., Late Swallows, 17. Snail, A Pyramid, 179, 218. Snowflake at Charmouth, 97. Sole Streak, 85, 114. Sparrow, For and Against, 8, 42, 98, 109, 183; and Sawfly, 138. Spider, A Swimming, 238; a Scented, 239. Sport, 21. Spreading the Light, 17. Squirrels, Tame, 32. Starling, The, 190.

Nest, 179.
Swede in England, A, 173.
Swifts, 79, 117, 159.
"Tall Flower," Shelley's, 159.
Tame Birds, 28; Squirrels, 32.

Swallows, Late, 17, 239; The First, 92;

Scarcity of, 18; in 1891, 78, 79;

Strawberry Festival, 197.

"Tall Flower," Shelley's, 159.
Tame Birds, 28; Squirrels, 32.
Teil, R. M. J., Some of my Pets, 99,
117, 159.

Tennyson, Lord, 221 (frontispiece); Vote of Condolence on Death of, 201. Tennyson's Poetry, Nature Notes in, 125. Tessions, F., Avenues at Abury, 220. "Three-leaved Bell," Browning's, 84. Thomson, 202; Proposed Memorial to, 215. Toad, A Helpful, 159. Too much Duty, 17. Towndrow, R. F., Browning's "Sole Streak," 114. Trees, Seedling, 143. Tuck, W. H., The Sparrow, 45: How to Feed the Birds, 237. Turle, Rose, Water for Birds, 36. Voss, J. M., A Swallow's Nest, 179. Wake, H., Muscovy Duck, 219. Wattson, R. M., Young Selbornians, 226. Weasel, A Scheming, 37. Weir, H., The Sparrow, 43. Weir, J. J., Destruction of Larks, 76; A Pleasance with Birds, 161. West Wickham Common, 237. Wheat, Growth of, 171, 198. Wheatcroft, W. G., Glastonbury Thorn, White, Gilbert, his Grave, 216; his House, 195. White, H. F., The Sparrow, For, 46. Whitely, L., Rooks, 128. Whiting, J. E., Birds and their Ways, 39: Man-traps, 135; Death's Head Moth, 197. Whitwell, W., Old May Day, 81. Wild Flowers, Protection of, 57, 76; Books on, 152. Wild Rabbit Tamed, 218. Wimbledon Common, 101. Winter Pursuit, 207. Wireworms, Birds and, 76. Wood, E. W., Her Choice, 34. Woodd, E. G., Owls and Pigeons, 116. Wood-pigeons, Domestication of, 58.

Wordsworth and his Birds, 95; Book

Worte, C., Wimbledon Common, 101.

Young, M. S., Swifts and Swallows, 79:

about, 134.

Ivy, 79.

Young Selbornians, 226.

Mature Motes:

The Selborne Society's Magazine.

No. 25.

JANUARY, 1892.

VOL. III.

OUR INTENTIONS.

HE aims and objects of NATURE NOTES have been so fully set forward in the introductions to each yearly issue that it is unnecessary to enter upon any detailed statement regarding them. But a few words of

New Year's greeting cannot be out of place, and these we

propose to offer.

The pleasant duty of thanking our very numerous friends and helpers stands first. To them, indeed, whatever success NATURE Notes may have attained is largely due to them, and to the goodness of the cause which they have banded themselves together to advance. We have no reason to fear any diminution in their kind interest and co-operation; rather we hope and expect that these will "grow from more to more," and that others will join their ranks.

This help and interest, which enabled Mr. Myles, even under the trying circumstances of his failing health, to discharge so satisfactorily his editorial duties, will not be less needed by the present editor, who is prevented from giving to the Selborne Society's Magazine as much time as was bestowed upon it by Mr. Myles, and who therefore claims in advance such indul-

gence as he may need.

We hope for a large increase in the short notes, which give so much variety and interest to a Magazine such as this. Every real observer can find something to record, and something which is worth recording. We shall also willingly obtain information on any point that comes within our scope for any reader who may require it.

We do not, however, propose to devote any of our limited space to the promulgation and discussion of theories connected with evolution and kindred subjects. Such matters can be more suitably dealt with in other periodicals. We want facts,

not theories; and the aim of the Selborne Society is rather to take folk out into the open, and to induce them to love and study Nature in her many aspects, than to develop and evolve theories, of many of which it may be said, "A breath can make

them as a breath has made.

We should like to extend the portion of our Magazine which is devoted to notices of books, for this is considered by many one of the most useful sides of our work; and we also wish to see the "Children's Column" a conspicuous feature in every number. Nothing more important can be undertaken by Selbornians than the education of the young, whether rich or poor, in the principles of the Selborne Society. By so doing we are laying foundations upon which the Society of the future will be raised to a height far beyond anything we can at present hope to attain.

We must not conclude without an expression of satisfaction at the way in which our members have responded to the appeal on behalf of Mrs. Myles. A full acknowledgment of the help

received will be found elsewhere.

Lastly, we beg our friends to remember that subscriptions of any kind, whether for the Selborne Society, or for NATURE NOTES, should NOT be sent to the Editor, but to the Secretary, at 9, Adam Street, Adelphi, W.C.

AN OPEN FIELD.



GOOD microscope, such as Beck's "Star" or Zeiss's cheap instrument, can now be bought at so moderate a price, that there are few persons with the leisure to study natural objects and a love for such investigation

who do not already possess one, or who could not easily supply themselves if they wished. It is, however, too often the case that this invaluable aid to prying into Nature's secrets is merely used as a plaything, and put aside when the first novelty has worn away, for want of some definite object to which it may

be applied.

Now there is one group of organisms within the reach of any one who is not confined to the flagstones of our great cities which offers an almost unworked field for investigation. While most branches of zoology and botany have been worried almost to their bare threads, the *Mycetozoa*—or *Myxomycetes*, as they were called before the illustrious de Bary pronounced that they were more animals than vegetables—seem to have been very much left out in the cold.

At almost any time of the year a little careful search will discover that at our very doors there are minute growths belonging to this group, possessing an exquisite beauty which only the microscope can reveal, and whose study would afford

an amount of enjoyment which very few are aware of.

There is no very perfect manual describing these organisms, because they have been so much neglected. Cooke's Myxomycetes of Great Britain is the best book we have on the subject; it is small and inexpensive, translated from the Polish of Rostafinski; the figures are excellent, and it is quite sufficient to set to work with.

If you look among old rotting stumps and fallen branches in damp woods or shaded gardens, you are almost sure to find groups of little yellow balls like small mustard seeds, on the parts of the wood most turned away from the drying winds. If you carry home some of these little balls and place one of them on a glass slide, and break it up in water with a couple of needles, you will find that it is filled with thousands of minute round yellow spores. Mixed up with these is a host of delicate yellow threads, pointed at each end, and with spiral bands wound round them from tip to tip, so that they look like threads of barley sugar, or as if you had come upon some fairy ropes. If you allow some of the little balls to stand on your table and become dry, you will see in a day or two that they have burst open of their own accord; the slender threads will stand out in a golden tuft, and the spores will be scattered all round. Place this tuft under your microscope, and gently breathe on it, and you will see the threads twist and writhe about like living snakes. little observation will show you that the spiral bands are very sensitive to moisture, and that this twisting movement is caused by their swelling and shrinking. This beautiful contrivance is designed to lift the spores out of their membranous case, so that the wind may blow them away and carry them to some suitable place, where they may germinate and start a fresh growth.

In Cooke's book you will find them described under the genus Trichia. While you are hunting for these Trichias you are very likely to meet with a little forest of slender stalks. At the top of each stalk is a little grey ball, about half the size of the smallest pin's head. If you prepare one of these on your glass slide, adding a drop of methylated spirit before you put the water to it to drive away the air, you will see that it is filled with purple spores. Among them are delicate branching threads like spun glass; these are attached to the walls and keep them from pressing down on the spores while they are drying. When the spores are quite ripe the delicate wall of the spore case breaks, and they are blown out as the finest dust to float in the winds to find another home. These you will find in Cooke's

book under the genus Physarum.

On the same damp rotting stumps you may find a regiment of little crimson clubs with short stalks, which form a charming object under a low power. While you watch them you may chance to see the membranous wall break up, and a marvellous tangled network of threads gradually expand to five times the size of the crimson clubs. As it rises, countless pink spores will be lifted out of their spore case, so that again the wind may blow them away. This beautiful thing is given the name of Arcyria.

These are only a few of the species of *Mycetozoa* which are easily to be found by any one with sharp eyes who cares to look

for them.

And now for a few words about these spores, and what becomes of them. They are beautiful objects, with a great variety of exquisite markings on their coloured walls, which are important characters in determining the species, and which will require a 1/6th object glass to make out. But their chief interest is in the way they behave when the winds have taken them to the suitable places for them to grow in. If you dust some spores on a glass slide, putting a very little drop of spirit to send out the air from among them, and then immediately add a drop of water, and place on the top a square cover slip, supported on one side by a strip of paper to prevent pressure, you may see in the course of a few hours that the spore wall will break, and out will creep a minute, transparent, living creature, which in a short time will push out a long cilium in front. In about a quarter of an hour it will give a few lashing movements with its cilium and swim away with a dancing motion to feed on bacteria, or take in nourishment in some other way, and live for a while an independent existence. After a time it will draw in the cilium, turn into a round ball, and divide itself in two; each half will then throw out a cilium again, and live as the parent did, and so they will keep on dividing and dividing. At last they will stop this work of division, and when the transparent bodies meet each other as they creep about, they will unite and coalesce. When scores have thus become united there will be set up a wonderful sort of circulation in the viscid substance, and it will continue to grow till it forms a plasmodium, as it is called, sometimes as broad as your hand. If you manage to make this plasmodium crawl on a glass slide—for it wanders about looking for food in a most remarkable manner—you will see under the microscope that it spreads out in a network of veins and a torrent of circulation streams through them. This current will go on for a minute and a half and then stop, and at once begin to stream in the opposite direction, and so this rhythmic flow will go on for hours, days or weeks, until at last the time comes for it to change into spores. Then, in the case of the Trichia, it forms itself into clusters of snow-white balls, and in a few hours these change to the yellow bodies like mustard seeds which you gathered on the stump, and the plasmodium will form into twisted threads and multitudes of fresh spores, and the round of changes comes to an end.

If this short sketch of the *Mycelozoa* should encourage any readers of NATURE NOTES to make themselves acquainted with their beauties, of which a half has not been told, it may be well to offer a few suggestions with regard to the way of proceeding.

In the first place the Mycetozoa are most easy to preserve in

collections, for though they are so fragile you may keep them (in a dry place) for twenty years, and they will be just as fit for examination at the end of that time as when first gathered; the colours of the spores and capillitium, as the threads are called, retain their brightness without any apparent change. But in collecting them there is one thing to be careful about—if you gather the sporangia, or spore cases, before they are quite ripe, they must be brought home with care, placed under a bell jar and kept moist until they are perfectly mature; many rare specimens which we see in collections are worthless from having been left to dry without this precaution. When they are fully developed the bit of leaf or wood on which they grow should be gummed or glued on a slip of stiff paper, with the ends turned up, so as just to fit into card boxes about three inches long; they will then be protected from injury, even if they should tumble on the floor, and at the same time they can be taken out of their boxes for examination whenever you wish. again, the capillitium and spores should be mounted in glycerine jelly, for they make most beautiful microscopic objects, as well as being valuable for comparison with other gatherings.

If you pursue the subject to this point, you will probably find it so attractive that you will keep a note-book, and make drawings of the different forms you meet with, so that you need not be always putting them under the microscope when you want to compare them. To insure accuracy, and to be able to measure the size of the spores, you will be obliged to use a camera lucida. With a little practice you will be able to make coloured drawings under this useful little instrument, perfectly correct in outline, which will be of the utmost value to you as

you continue your investigations.

If you set to work in earnest to hunt for these curious creatures, you will probably be encouraged from time to time in finding new species, or such as have only been known in far distant countries. If you study their life history you will find your microscope no mere plaything, but the means of securing the high privilege of adding to the store of human knowledge; for the marvellous attributes of the living beings that are hatched from the spores, and of the naked mass of protoplasm which constitutes the *plasmodium*, are associated with some of the most profound investigations which are exercising the minds of physiologists of the present day.

In conclusion, a word of caution. Do not expect too great things at first, and do not be discouraged if you meet with some difficulty in making out the life history of these organisms. You may try to obtain "swarm-cells," as the living things are called which come out of the spores, and place the spores of several species in water, carefully keeping your slide in a moist chamber" to prevent the water from drying up, for several

^{*} A couple of wet saucers placed one over the other answer the purpose very well. Place the slide between them with a wet watch glass over the cover slip.

days, and you may be disappointed to find that none of the little creatures hatch out of their eggs. You may try another gathering and find the field of your microscope swarming with hundreds of them, all dancing together, within a couple of hours after the spores have been wetted. If you have a high power and are fortunate, you may now watch them feeding on bacteria and conducting all sorts of strange performances. Again, you may patiently watch these swarm-cells till they all die, and none of them may unite to form a plasmodium, or if they do it may crawl for a week or two, but never change to spores. Indeed, it seems there is only one species as yet discovered that can be cultivated through all its stages from spore to sporangium with certainty of successful results. The sporangia of this can often be found looking like little specks of whitewash on dead leaves and decaying bundles of herbaceous stalks, and goes by the name of Chondrioderma difforme in Cooke's Myxomycetes. It seems unlikely that this is the only species that can be so reared, and we may feel sure that sooner or later others will be discovered which may supply us with further knowledge regarding the puzzling questions of variation and development in this remarkable group.

Leytonstone.

ARTHUR LISTER.

THE HILLY FIELDS OF BROCKLEY.

LONG the whole distance by train between London Bridge and New Cross, if the journey be taken by the line to Folkestone and Dover, the eye can range over little else but a dreary level, covered continuously by monotonous rows of small houses tenanted by a dense population. The rambling, crooked alleys and malodorous tanneries of Bermondsey are passed, yet the serried ranks of slate and brick continue with scarce a break, varied only by the tall chimneys of some factory, the blocks of model dwellings, or the ubiquitous Board School, which, like a giant in a crowd, more than head and shoulders above his fellows, towers aloft many a storey higher than the humble tenements around. Suddenly the houses cease for awhile, and the horizon now is bounded by an expanse of high green fields almost cliff-like in their character. Who does not know the charm of such an horizon, far away down in the country, when at close of day the sun casts his last beams upon the lofty meadows, and wakes up a warm emerald hue on the rose-coloured sky behind? But amid surroundings such as we have passed through, doubly welcome is the sight, and the contrast heightens the pleasure of gazing on it.

It needs a stiff climb to reach the top of these fields, but even in the fast-vanishing light of the autumn afternoon it is a

pleasant walk. The breeze is chill, but the air is pure, for the "Hilly Fields of Brockley," as they are called, cover one of the highest points of elevation in this part of the south-east of London. A few wind-swept trees are scattered over the summit and sides of the hill, and ancient hedges of thorn mark the divisions of the fields. Beneath an oak, at almost the very top, lies a little pool of water, into which the high winds of the past few days have driven the yellowing leaves of the elm hedge that skirts it. A quiet, lonely spot it seems; it might be miles out in the country, instead of being surrounded by a labyrinth of houses, streets, and railways, or at any rate closely bordering upon them. The river flood, or sea, that has burst its barriers, and sweeps over the plain, leaves the hills high and dry, but the all-devouring flood of villas and cottages, let loose by man over the woods and meadows of the suburbs, is bound by no laws of nature, and is creeping steadily up the sides of the Hilly Fields. To make this uphill submergence easier, a broad road, with steep cuttings, has been driven deep into the side of the hill from top to bottom, and is lined with flagstones on either side. Already one huge three-storied edifice looms out on the summit.

Such, briefly sketched, are the features of the Fields as they appeared to the writer one day this past autumn. Londoners are now in the position of winning or losing one of the finest and most health-giving breathing spaces the southern parts of the metropolis can afford. We build Eiffel Towers in our cities and on their outskirts, in the hope of gaining a pure, almost rarefied, atmosphere for the hundred or so individuals at a time who go up by liftsful, but the benefits of the hills, those towers of nature, whose ample summits can accommodate thousands at a time, are

too often forgotten and neglected.

So far from this being the first appeal that has been made on behalf of the Hilly Fields, letters have already appeared time after time in the daily papers, with the result that steps have lately been taken to secure the Fields for public enjoyment. The movement has been largely headed by the Metropolitan Gardens Association, and till recently it was hoped that funds would be forthcoming to ensure an early acquisition of as much as forty acres. But the Lewisham District Board of Works, whose jurisdiction embraces the area covered by the Fields, by their untoward action in refusing to contribute any sum whatever towards the much-to-be-desired purchase, have barred the course of progress. However, reverses such as this one have been known before, notably in the long struggle to secure the addition of Parliament Hill and Fields to Hampstead Heath. It has, consequently, been resolved to appeal to the London County Council for aid-aid, doubtless, that will be substantially forthcoming; for, whatever may be the weight of the criticism directed against that body from time to time in matters of politics or administration, few will deny that its members have proved themselves able and efficient friends of the Open Spaces movement. The geographical position of the Fields, it may be added, furnishes a good reason for enlisting the help of the Kent County

Council as well.

If ever there was a part of the suburbs where a large public park is needed, this is one. It is no exaggeration to say that the inhabitants of Peckham, Nunhead, Brockley, and Lewisham are far worse off in this respect than those who live round Regent's or Hyde Park. Time passes quickly, and the builders will not wait. But if the whole body of the Selborne Society in London rally to the support of those who are so earnestly desiring and endeavouring to place the Fields out of the grasp of those who would speedily destroy their beauty, with confident hope we may look forward to the time when their freshness and verdure shall give pleasure to all who visit them—a pleasure intensified by the satisfaction of knowing that, by the laws of the land, the Hilly Fields of Brockley will remain green for ever.

ARCHIBALD CLARKE.

THE SPARROW-FOR AND AGAINST.

[As we fully expected, Mr. Aubrey Edwards's indictment has brought "Philip Sparrow's" friends to the rescue. Here are three warm defenders—types of others; and here also is a word or two on the other side. Looking to the future, we must remind our friends on both sides that our space is limited, and would beg of them not to forget that "brevity is the soul of

wit."—ED., N. N.]

I verily believe I have never seen so many incorrect statements—worse than incorrect—crowded into the same space as has been effected by your correspondent, Mr. A. Edwards. I dare not trust myself to deal with them as they deserve, but must ask you to let me give the necessary contradiction to some of them from the evidence taken before the "Birds' Protection Committee" of the House of Commons. I shall content myself—though I shall be very far from being contented—with the same space Mr. Edwards has taken up, and if he adds any more errors to his present ones. I shall wish to claim the right of reply on behalf of my humble client, as he cannot speak for himself.

I call him a handsome bird; the cock, when in full plumage, in the country, a very handsome bird. A jaundiced eye may look on him in a perverted and distorted light if it pleases.

Only, first, one word of my own as to the ridiculous notion of his driving other birds away. I have never in all my life

known him do so.

I have had for many years a good variety of birds here, though not near so many as there used to be, since the tremendous frost, ten degrees below zero, some years back, which killed the old ivy

on various trees which they used to roost and build in—so old, that I have before me now a block I cut from the bole of one of them six inches thick one way, and four the other. But never once have I known him interfere with one of those other birds, except in the case of a few martens' nests, and that only some three times in ten times three years and more—nor even then were these driven away, they only built other nests. If the said process of elimination was going on in all time, how, I should much like to know, were the martens saved from extermination all those thousands of years? I ask for a plain answer to this very plain question. And yet we are told martens being less in numbers than they used to be is all along of the sparrows! Why, they have always varied in numbers, more or fewer, in all past years. We may just as well be told that it is by them that fieldfares and redwings have been banished. Scarce one small flock to be seen now in a long winter, whereas they used to be with us in tens upon tens of thousands every year without fail.

Do not, however, take my word for it, though no one can state the contrary but in either gross or wilful ignorance. But what can be expected of anyone who believes in the farrago of fancy and fiction and forced facts of Messrs. Gurney, Coues & Co.?

Here is a very small portion of what I have at hand, referred to above.

EVIDENCE OF THE REV. J. G. WOOD.

We have had several discussions in this Committee lately on the subject of the sparrow, with regard to the amount of good and of harm that he does. Will you be kind enough to state to the Committee your opinion on that subject?—I have not done very much with the sparrow, but I have seen him in the very early morning doing nothing but eating insects or larvæ; picking them out of the grass; the daddy-longlegs especially, which is one of the most dangerous insects we have.

Have instances come under your observation in which those persons who have protected birds, like the sparrow, have derived advantage from it?—Yes; the late Dr. Hatton and myself, who lived on opposite sides of the road, used to grow peas against each other. One year he had to replant his peas three times; mine grew

Is there any other instance, which has come under your notice, in which sparrows have done good service?—Mr. Waterton told me that was so, but it is

not within my own observation.

Do you remember the observations which Mr. Waterton made to you?-Yes. He took me over his grounds the last time I was there, and showed me all his fruit; they were in splendid condition; he never allowed a bird to be killed; he said that nature could preserve her own balance.

Had he a large number of sparrows in his park?—Every bird imaginable in

shoals; they came there because they knew they were safe.

Have you been led to form an opinion that the sparrow displaces other birds of greater value than itself?-It never struck me that they did. Do you think that as the sparrow increased around your house you would be

likely to lose any of the soft-billed birds?—No; I think not.

You expressed an opinion that the sparrows were not to your knowledge detrimental to other birds?—I have not found them so practically.

Have you many martens around you?—Thousands. They build on your house, I suppose?—Yes.

Have you not found the sparrows very anxious to turn them out of their nests to lay their own eggs there? They try it sometimes, but I have never known them to succeed.

EVIDENCE OF MR. HARTING.

(h.) Under one sparrow's nest the rejected wing-cases of cockchafers were picked up; they numbered over 1,400. Thus one pair of sparrows had destroyed

more than 700 insects to feed a single brood.

(a.) In the vicinity of Baden a price was set on the head of the sparrow, and soon not a sparrow was to be found in the neighbourhood. It was subsequently discovered that this bird alone could successfully contend against the cockchafers and other winged insects, and the very men who had offered a price for his destruction, offered a still higher price to introduce him again into the country.

I do not advocate the "unchecked increase" of small birds; on the contrary,

I do not advocate the "unchecked increase" of small birds; on the contrary, I think we are perfectly justified in keeping down their numbers within reasonable limits. But I do advocate the abolition of sparrow clubs, and the protection of small birds generally between the months of April and August. During this period they are nesting, and the graminivorous as well as the insectivorous species feed their young almost exclusively on insects, as proved by a mass of evidence. There can be no question that, whatever depredations they may subsequently commit amongst grain and fruit, during this period at least they do an incalculable amount of good, and should be encouraged accordingly.

F. O. Morris.

One of the objects of our Selborne Society is "the protection from unnecessary destruction of wild birds," and surely the indiscriminate slaughter of sparrows which Mr. Edwards seems to advocate would be both unnecessary and cruel. The poor birds, in all they do, only act as instinct teaches them, and why should they be murdered for what is not their fault? Just as well murder the swallow for catching flies, only, as this does us

no harm, we do not mind it.

In an article in the Selborne Magazine for December, 1888, a writer says, "The cock sparrow is, I maintain, a really pretty bird, and there is no bird superior to this despised one as regards the extent to which tameness and affection can be developed in the character." I believe that if the cock sparrow were unknown in this country, and if he suddenly appeared amongst us, we should all admire him. I copy the following out of a pamphlet on "Bird Murder:"—" The sparrow is the bird who, probably, bears the worst character of all our common feathered friends, and is, consequently, the most persecuted. And yet he really is a most useful bird. Mr. Bradley, in his Treatise on Husbandry, reckoned that a pair of sparrows, during the time they are feeding their young ones, destroy every week 3,360 caterpillars! Most of the seed-eating birds feed their young chiefly on caterpillars and insect food (seeds being too hard for them in infancy), and thus they more than repay us for the grain they eat at other times; for it must be remembered that if the caterpillars and larvæ of insects which they destroy were not devoured by them, they would increase to such an extent as to destroy far more than birds do, both of our corn and garden crops." Again, Mr. Cundall, in his useful Natural History, quotes to us from a translation of Bechstein's Cage Birds as follows:—"The destruction of sparrows has been so great an evil in the countries where government had ordered it, that it has been found necessary

to rescind the order. The injury they do to the corn is something, certainly, but it may be exaggerated; besides, ought not these useful creatures to be paid?" and Mr. Cundall adds: "That they are highly useful no one can doubt who is in the least familiar with the habits of the bird. During the spring and summer months sparrows destroy many millions of noxious insects. We have watched their unwearied industry in this respect, and have thus long since tolerated the damage done for the good effected." In Robert Mudie's Feathered Tribes, he says:-" Sparrows do some harm to small seeds when newly sown, and to patches of grain when early ripe, and also, at certain seasons, to the buds of shrubs and trees; but, upon the whole, they do much more good, by the number of insects and caterpillars which they destroy. . . . But for them, the house flies would, in some situations, multiply to such an extent as to be intolerable; and were they not so incessant in the destruction of those prolific pests, the cabbage butterflies, it is doubtful whether one plant of the tribe could be reared in the market gardens."

Then, too, though sparrows "make havoc amongst our flower seeds, they do us an immensity of good by eating the seeds of numerous troublesome weeds, which, if allowed to seed, would not only choke and weaken the growth of our crops, but rob the soil of its strength and nutriment"—and surely our bulbs, &c., can be protected by nets. As to the house martins, I cannot think that they will disappear because the sparrows sometimes take possession of their nests; and, anyway, it seems to me to be against the principles of our Society to encourage man in a raid of any sort against any member of the bird family; for every bird, even if let alone by human beings, has enemies enough to contend with. Surely the "common" sparrow has as much claim upon our sympathy and protection as any other of our more

favoured feathered friends.

KATHLEEN E. KNOCKER.

Tunbridge Wells.

If Mr. Moody, late instructor in ornamental art to the South Kensington Art School, had, before writing that sentence in his Lectures and Lessons on Art which says that "a dead sparrow would enable us to arrange the marqueterie of a cabinet to perfection," been able to peruse Mr. Aubrey Edwards's article, he would doubtless have been covered with confusion at the erroneous ideals of beauty which he had set up in his mind; for Mr. Edwards tells us that the sparrow is not beautiful. He also tells us other strange things in disfavour of the sparrow. He says "there is no bird of his size that dares to attack him," which is certainly incorrect, for anyone observing the demeanour of a sparrow towards dear little cock robin, will notice a considerable tendency on the sparrow's part to "knuckle under" indeed, I have generally observed that where a common meal of crumbs and tit-bits is going on, even three or four sparrows will take a back seat until Mr. Robin has had his choice.

Again, is it not obviously shaky to account for the rapid decrease in house-martins by the not very common occurrence of sparrows taking the martins' nests. Were it not more reasonable to put it down to the enormous destruction of their nesting places in the shape of those old thatched and stone-tiled village houses and farms, which the martin so dearly loves; and the innovation of modern buildings with wooden spouts, which he rarely chooses as a support for his nest?

In one part of his article Mr. Edwards states that the "cry of the house-martins when the sparrows have turned them out is piteous to hear." Surely his feelings at that time must have been of a very different sort from those which enabled him to place bird lime at the mouth of a "nest which contained young

sparrows, thinking to catch the old ones."

Again, if we are to believe Mr. Edwards, the Creator of the sparrow was obviously at fault when He made that bird, for he says, "they [the sparrows] would do better to leave the cater-

pillars to the more skilful grub-hunters."

To sum up, I quite agree that sparrows are getting far too numerous for comfort, but it is also evident that the blame lies not with the bird itself, but with those foolish meddlers who, for no better reason than trivial personal convenience, or through arrant ignorance, foolishly destroy Nature's means of keeping the balance—e.g., our birds of prey. Man has more than once proved himself unable to cope with a disturbance in this balance, a case in point being that mentioned by Mr. W. R. Riley, with regard to the Cheshire sparrow-killers.

Halifax. Rowland H. Hill.

I entirely agree with Mr. Riley that we have probably the game-keepers to blame, in great measure, for the increase of sparrows, and I should always advocate the sparing of sparrow-hawks, even though they may be inconvenient to those who take pleasure in game-preserves; but I cannot think that the present increase of sparrows is entirely due to such a cause. What the additional reason is I am quite at a loss to understand. If it could be ascertained we might have the satisfaction of trying to reform the culprits, but till this can be done I think we are rather in the dark.

The Rev. Aubrey Edwards seems to have very conclusively proved that sparrows come under the Society's ban, for they are evidently violent anti-Selbornians, and I am afraid there is no chance of their conversion. My experience, limited as it is, has been very similar to his. Where I used to hear and see white-throats, chaffinches and tits, I now only hear the sparrows' monotonous chirp, and see their graceless, heavy motions. I hardly feel prepared to advocate shooting the bold fellows, but I think to pull down their nests, before they have hatched, is quite justifiable.

Bayswater. Isabel Fry.

I am pleased to see Mr. Edwards's "Indictment" in NATURE Notes this month. A pair of spotted flycatchers have bullt their nest in the lattice over my window for three years, but the sparrows will not allow them to bring up their young. At first the sparrows were contented with smashing the flycatchers' eggs, but this year the sparrows waited until the eggs were hatched, and—when the old birds had gone in search of food—attacked the little ones and killed them. I am in perfect sympathy with Mr. Edwards's verdict, "Let the sparrows be destroyed."

Braintree.

MABEL PARMENTER.

A NOTE ON THE LIFE OF THOMAS BEWICK.

NY reminiscences of Bewick are interesting, and especially so to old folk, whose early recollections of the charms of rural life are associated with the famous woodcuts in Bewick's Birds. A short passage in the

life of Adam Sedgwick once more brings the grand old woodcutter to mind, in connection with another remarkable man,

Robert Foster, of Hebblethwaite Hall.

It was in 1821 that Sedgwick met Foster in Newcastle, and went with him to see a friend whom he described as "a man of genius and a great humorist." It was "Bewick, the wellinformed naturalist and celebrated engraver upon wood, and we had," says Sedgwick, "a long and delightful interview with that great artist."* Thirteen years earlier, in 1808, Bewick was visited by another enthusiastic naturalist, Charles Fothergill, the author of a small volume on The Philosophy of Natural History, and of a more important work on British Zoology which has never been published. In a private letter to his uncle, William Fothergill, also a naturalist of some note (they are both mentioned by Yarrell, as well as Bewick), Charles Fothergill tells him that he met Bewick at his printing office door, and was at once taken "into his little study. He showed me the very spots where many of the living birds stood or ran, whilst he engraved their portraits. He said he was preparing another edition of his Birds, and was extremely desirous of filling up the gaps, as he termed them. I found, as I had often suspected, that those engravings which are inferior had been done from dried or badly stuffed specimens. The tailpieces he had sketched by his fireside during the long evenings of winter, and not in tours made for the purpose, as I had been told. He said he loved birds too well to kill them, and had only shot one in all his life, and of that shot he had often

^{*} Life of Adam Sedgwick, vol. 1, p. 233.

repented. We had some ornithological talk, though far too little, as the room where we sat was nearly filled with vacant travellers, who sometimes chattered nonsense and sometimes gazed in stupid amazement."

The foregoing particulars I have taken the liberty to extract from some letters lent me some years ago by one of the Fothergill family, with which I am connected by the marriage of

Charles Fothergill with my mother's sister.

Bewick's Birds have never been surpassed, if equalled, in truth of form and feather, and the tail-pieces are full of quiet humour and keen relish for rural things. They often "point a moral," and are never chargeable with anything worse than occasional instances of the coarseness of the last century. Bewick's intense enjoyment of his skill in depicting the minute in Nature sometimes made him forget that some things necessary, and therefore orderly and innocent, may be unseemly for public exhibition. Some of the truths of Nature are not to be spoken at all times, and Bewick's inimitable skill in telling them does not save some of his cuts from obliteration; but his morals are always sound.

THEODORE COMPTON.

A BOOK FOR NATURE LOVERS.

Forty Years in a Moorland Parish: Reminiscences and Researches in Danby in Cleveland, by the Rev. J. C. Atkinson, D.C.L., incumbent of the parish.

(London: Macmillan, Ss. 6d. net.)

From time to time the thought must have occurred to many, What sort of a book would Gilbert White have written had he lived a hundred years later? Such a view implies no depreciation of the classical Natural History of Selborne, but it is certain that in many respects our knowledge is greatly in advance of his,

but it is certain that in many respects our knowledge is greatly in advance of his, and indeed it would be strange if such were not the case.

The qualifications for such a task would, however, be in no way confined to the mere increase of knowledge. "Knowledge," indeed, has grown "from more to more," but we cannot deal rightly with a history involving constant reference to the past unless as a complement "more of reverence in us dwell." This reminder is indeed probably less necessary in this last decade of the century than it was some forty years since. The importance of folk-lore and tradition is now recognised, and the study of the former takes rank with the sciences, and it is certain that no one could hope to occupy the place left vacant by Gilbert White who had not even more than his toleration (which, to say truth, is somewhat apploacetically manifested in Selbaryae) for the superstitions of bygone ages. apologetically manifested in Selborne) for the superstitions of bygone ages.

The mantle of White, as it seems to us, has fallen upon the genial recorder of the observations of Forty Years in a Moorland Parish, and with it a double portion of his spirit. Dr. Atkinson has given us in this delightful book a comprehensive record of his experience of a life-time passed in the Yorkshire dales: his Cleveland Glossary took rank as a standard authority on its publication in 1868. In the present volume he gives us a picture, minute in its details and graphic in its comprehensiveness, of the men and manners past and present, of the early history and recent developments, of the folk-lore, traditions and customs, and of the history and natural history of the parish which has been fortunate in possessing him as its incumbent for forty years. The casual wanderer, who can find in a trip of some few weeks or months materials for a record of his travels,

may wonder at so small a corner of the earth's surface yielding material for a forty years' study; but he will confess that Dr. Atkinson's volume does not contain a page too much, but gives evidence of a careful repression of any

tendency to padding or garrulity.

It would not be possible in our limited space to give any fuller indication of the contents of this volume, which, in addition to its other good points, possesses an excellent index. But it may be well to guard against the impression that its interest is purely, or even mainly, local. The value of White's Selborne has been and is recognised by thousands who have never set foot in Hampshire, and are not likely to visit the little parish thus immortalised; and in the same way readers far distant from Cleveland will find, in this history of a moorland parish, material of the deepest interest conveyed in a most attractive manner. Dr. Atkinson's book had to be reprinted within a month of its issue, and is now in its second edition. We hope that the time is not far distant when it will be re-issued in a cheaper form, when it cannot fail to obtain a yet wider circle of readers.

SHORT NOTICES OF BOOKS.

MR. FISHER UNWIN has added to his dainty Cameo Series a charming little volume of poems by many authors Concerning Cats, selected by Mrs. Graham R. Tomson, and illustrated by Arthur Tomson. The poets laid under contribution include Gray, Cowper, Gay, Prior, Wordsworth, Keats and Shelley; and of more modern writers, Calverley, Dr. Garrett, Mr. Cosmo Monkhouse, "Matthew Browne," and others. Mrs. Tomson herself contributes more than one poem—the "Dedication" is particularly charming—and an interesting "Fore-word." In "The Children's Cats" we have some popular nursery rhymes, and a selection of French cat poems closes the book. Mr. Arthur Tomson's illustrations are those of a student, as well as a lover, of cats and their ways. The book well deserves, and indeed is sure of, a large sale.



In Home Life on an Ostrich Farm (George Philip & Son, price 3s. 6d.) we have a second and cheaper edition of a book which has already received favourable notices from the press. Mrs. Martin left England in 1881 to take part in the management of an ostrich farm. Her book, however, is by no means devoted to the subject of ostriches, for it abounds with sketches of strange and amusing pets, of

plants and insects, of colonists and Boers, and of the manners and customs of both. It is, in fact, a brightly-written record of "several busy and most enjoyable years," chiefly, but by no means wholly, devoted to ostrich-farming. Readers of NATURE NOTES have long since been set at rest as to the occurrence of cruelty in connection with the obtaining of ostrich feathers;* and it is satisfactory to learn from Mrs. Martin that cruelty is not only unnecessary, but does not pay—a consideration which will weigh with many who are not influenced by higher motives. The stumps of the feathers which have been plucked can be pulled out when mature without hurting the bird. "Some farmers, anxious to hurry on the next crop of feathers, are cruel enough to draw the stumps before they are ripe; but Nature, as usual, resents the interference with her laws, and the feathers of the birds which have been thus treated soon deteriorate." The accompanying cut of "ostrich chicks" is one of several with which the volume is adorned.

Mr. John Watson's Nature and Woodcraft (Walter Smith and Innes) ought to have been noticed before. It is one of the many books which, if they do not owe their existence to Richard Jefferies, at any rate belong to the same class of literature. We do not complain of their abundance. The field of Nature is inexhaustibly wide, and as long as authors will write down what they actually observe, they are as little likely to become tedious or monotonous as is Nature herself; for no two observers see exactly the same thing. Mr. Watson's observations have been made for the most part in Cumberland; he tells us of the "statesmen" of a hundred years back, and of their modern representatives; of the gamekeeper and his museum, which, as usual, contains many a bird which should have been allowed to live; of birds and beasts, and insects and trees, and of local manners and customs. Here and there—as in the one on "Autumn Berries"—we come across chapters which suggest a less intimate knowledge of the objects described than is found in the best books of this class; but the volume is an interesting one, and cannot fail to give pleasure. There are excellent illustrations.

Mr. Charles Dixon has added another to the series of bird-books with which his name is associated, in *The Birds of our Rambles* (Chapman and Hall, 7s. 6d.); and it says much for his knowledge of his subject that he is thus able to multiply books without exposing himself to the charge of either repetition or book-making. The present volume, which is illustrated by Mr. A. T. Elwes, is intended as "an introduction to the study of Field Ornithology." Various habitats are visited in turn, beginning "round about the homesteads," and so through the garden and shrubbery, along the lanes, across the fields, through the woods and so through other bird-haunted spots until we end "by sandy shores," among plovers and sandpipers. It is an interesting as well as an instructive book; but we are sorry that Mr. Dixon feels is necessary to denounce so violently a reviewer who criticised one of his former works unfavourably. We hope he will not deal with us in like manner if we point out that, good and useful as his book is, its usefulness would be greatly increased by the presence of an index.

Messrs. Gay and Bird send us a very pretty book from across the Atlantic, entitled Our Common Birds and how to know Them, by Mr. J. B. Grant (6s.) Its oblong octavo form has at any rate the charm of novelty; the typography is excellent, and the sixty-four plates are from "photographs of specimens mounted by an expert taxidermist." They are good and useful, but they shout out "Stuffed!" with, as it seems to us, unnecessary clearness. Many Selbornians will be glad in this way to make acquaintance with the "common birds" of their transatlantic cousins; and to see at any rate the portraits of those with whose names they are familiarised by American literature, such as the "sapsucker," whom we meet with in the pages of Uncle Remus. The book is very cheap, and will, we hope, find a hearty welcome in this country.

We have received the volume for 1891 of our contemporary *The Field Club* (Elliot Stock, 4s. 6d.), the serial issue of which has more than once been noticed in NATURE NOTES. Such magazines deserve all support, and the volume before us contains much interesting matter. We do not, however, think it was worth while to reprint T. F. Forster's monthly calendar; and the pages on poisonous plants are not very carefully compiled.

^{*} See Nature Notes for March, 1890.

Several other books stand over for notice. Puhlishers will confer a favour upon our readers if they will always state the *price* of any volumes they may send, 'in order that it may be quoted in the notice. This addition is much appreciated by our readers, and is desirable in the interest of the volumes themselves.

SELBORNIANA.

A Substitute for Ivory.—I trust the letter of M. V. M. in Nature Notes for October may receive the attention it deserves. It is appalling to read in the boastful advertisements of billiard ball makers of the wholesale destruction of elephants for the manufacture of billiard balls alone; and the suggestion that Selbornians, at least, should keep their consciences clear in the matter by abstaining from the purchase of ivory is one that I hope many will act on. As, however, it is always well to have an idea of what to do, as well as of what not to do, will you allow me to say that for most purposes xylonite offers an admirable substitute for ivory? The British Xylonite Company, 124, High Street, Homerton, N.E., besides having a large choice of articles usually made in ivory, are always ready to make to order any article required in a material which, in tint, texture, elasticity and translucency, is hardly to be distinguished from ivory. It answers well for carving, and I have seen a lovely portrait medallion carved in this substance. A paper-knife which inhabits a pocket also tenanted by scissors, keys, knife, &c., &c., remains as little spoiled or scratched as an ivory one would do. The effect that would be produced on the slave trade by a diminution in the demand for ivory is too large a subject for me to touch on.

Hackney Downs.—The Hon. Sccretary of the Clapton Branch has received the following from the clerk of the London County Council:—"Referring to your letter of the 4th ultimo, suggesting that the shrubs on Hackney Downs should not be so closely pruned this season, and that brambles and field roses should be planted in the shrubberies, I have to inform you that the Parks and Open Spaces Committee has decided to adopt your suggestion."

"Spreading the Light."—No doubt Mr. W. J. Franklin is doing his best to promote the interests of the Selborne Society, but posting notices "on gate posts, telegraph poles, outhouses, or any convenient place" is, to me, very objectionable. The whole beauty of a hedgerow may be spoiled because a gate in its midst is plastered over with advertisements—it matters little if they be of our Society or of a new soap; the appearance is the same. I would recommend Mr. Franklin to confine his bill-sticking to the neighbourhood of railway stations, or have neatly mounted notices as issued by the Clapton Branch for hanging in public rooms, schools, &c.

R. M. W.

[We entirely agree with R. M. W.'s remarks.—ED., N. N.]

"Too much Duty."—The Secretary of the Clapton Branch writes:—
"You recommend in the December number the half-crown series of Astural History Rambles published by the S.P.C.K., and mention that the illustrations in have done much duty." I have one of the series, Lakes and Rivers, in which the figures do too much duty, standing for one bird in this and for another in Johns British Birds in their Haunts.

NATURAL HISTORY NOTES AND QUERIES.

Late Swallows.—Your readers may be interested to know that swallows were seen on November 15th at Shortlands, near Bromley, Kent. The latest date mentioned in White's Selborne is November 7th.

M. HORACE SMITH.

Walking on the cliffs to the east of Brighton, on November 21st, I was surprised to see several martins flying about close to the chiff-edge. The latest date which Bewick mentions for these birds having been seen is November 6th. It would be interesting to know whether this year they have been noticed in other parts of England also as late as this, or whether my observation of them is a

solitary exception to the ordinary rule. I should add that the birds I saw showed no signs of immediate departure, and I have little doubt that the date of their actual disappearance was even later than the date which I have mentioned above.

ISABEL FRY. Scarcity of Swallows and Martins in Summer of 1891.—Some idea of the scarcity of house martins may be gathered from the fact that on the 19th July I was only able to see two or three new nests under the eaves of a large old-fashioned barn, which in the previous summer supported between twenty and thirty used nests; none of the old nests had been repaired, or were in use this season. The unusual scarcity of both species was undoubtedly the consequence of the cold and wet weather in May. With snow on the 16th, 17th, and 18th. -laying three or four inches deep on the morning of the 18th-followed by a cruel frost which did much damage in the gardens, and thirteen consecutive days with rain or snow from the 15th onwards, it is really a wonder that all, instead of a part of, our swallows and martins did not die of starvation. They arrived in considerable numbers; indeed, upon the 18th April I saw a larger number of swallows together than I ever remember to have noticed before so early in the spring. But I must confess that I am one of those who believe that swallows and martins visit us now in diminished numbers as compared with years no longer ago even than when I began to notice birds.

Bloxham, Oxon. O. V. APLIN.

Strange Proceeding of a Kingfisher.—A short time since, while one of the railway porters was walking down the line (at about 7.30 p.m.) near Malton, Yorkshire, he was surprised to hear a great flapping of wings against the engineshed window. On nearing, he found that it was a kingfisher struggling to get to the bright light within. He soon managed to catch it, and I am sorry to say that it was shortly after exhibited in a lady's bonnet. W. Is V. J. W. (Edgworthstown).—It is the Great Tit (Parus major). W. R. RILEY.

Birds and Lentils.—What birds would eat lentils? Put outside a window, in trays, the sparrows, robins, and tits will not touch them; but during one morning a trayful was eaten by some bird.

[Dr. Bowdler Sharpe, to whom we have referred your query, says: "The only way will be to watch and find out. There must be dozens of birds who

would eat them—pigeons for choice."]

F. A. F.—The nearest Field Club would probably supply what you require, or you might join the British Ornithologists' Union.

MYLES MEMORIAL FUND. THE

We have great pleasure in reporting that the Fund has reached the sum of £429 7s. 6d., which will be invested in an annuity for Mrs. Myles. The Rev. G. Henslow sends us the following list of subscribers to the Fund:—

Contributions from the Branches of the Selborne Society: -Atalanta. - Misses Gimson and Parmenter, 5s.; Mrs. B. Smith, 2s. 6d. Bath.—Rev. L. Blomefield, £1; W. T. Braikenridge, Esq., £1 ts.; Miss Patterson, 2s.; Miss Punnett, 2s. 6d.; Miss L. Sandford, 5s.; Mrs. E. A. Walker, £1; E. H. Wiggett, Esq., £1. Bayswater.—Lord Justice Fry, £5; Misses Fry, 10s.; Miss M. Lindley, 2s. 6d. Birmingham and Midland.—Miss Archer, 10s.; Mrs. E. Carter, 10s.; Mrs. J. A. Birmingham and Midland.—Miss Archer, 10s.; Mrs. E. Carter, 10s.; Mrs. J. A. Chatwin, 10s. 6d.; Miss Dadley, 10s.; B. Gibbins, Esq., £1; Miss Gibbins, 10s. 6d.; Mrs. Gibbins, £1; Mrs. W. Gibbins, £1; Mrs. W. Gibbins, £1; Mrs. W. Gibbins, £1; Mrs. W. Gibbins, £2; Mrs. W. Gibbins, £2; Mrs. W. Gibbins, £2; Mrs. W. Gibbins, £2; Mrs. W. Hopkins, Esq., £2; Mrs. Nettlefold, £1; Mrs. Peyton, £3; Miss E. Russell, 10s.; W. H. Ryland, Esq., £1; Is.; Mrs. Ryland, 10s.; Mr. and Mrs. A. Smith, £2; Mrs. H. Smith, £1; Is.; P. Smith, Esq., 10s. 6d.; Miss I. Southall, 10s.; S. D. Williams, Esq., £1; Is.; J. Willis, Esq., 10s. 6d.; Mr. and Mrs. A. W. Wills, £2; Prof. Windle, M.D., £1; Bolton-le-Moors Branch.—Miss Hardcastle, 5s.; E. Grove, Esq., 10s.; Mrs. Kempson, £1; Dr. McKellar, 5s.; Mrs. Tayor, 2s. 6d.; Mrs. Wooldridge, 3s. Clapton son, £1; Dr. McKellar, 5s.; Mrs. Tayor, 2s. 6d.; Mrs. Wooldridge, 3s. Clapton

Branch.-£1 1s; "Some Members," £1 1s. Dorking.-Per Sec., £1 12s. Forth. Branch.—£1 is; "Some Members," £1 is. Dorking.—Per Sec., £1 izs. Forth.
—Miss E. Angus, 10s.; Miss E. B. Brand, 10s.; Miss Dewar, 1s. 6d.; G. Smith, Esq., 10s.; Miss Waterston, 2s. 6d. Haslemere.—W. Borrer, £sq., 10s. 6d.; J. B. Buckton, Esq., F.R.S., 15s.; Misses Buckton, 6s.; Dr. Evans, F.R.S., £1; Mrs. Mort, 2s. 6d.; C. Pratt, Esq., 5s.; Miss Sidebottom, 2s. 6d.; E. Stable, Esq., 5s.; Rev. John Wallace, £1 is. Kensington.—Miss Batten, 10s.; Mrs. Bullock, 2s.; Dr. Coates, £1 is.: "D. D.," 10s. 6d.; G. Goldsmid, Esq., 10s.; T. Grey, Esq., 5s.; Mrs. Harrison, 7s. 6d.; Miss Hope, 5s.; Miss H. Hope, 5s.; Miss M. Hope, 10s.; Miss Mutrie, 5s.; Mrs. Needham, £1 is.; W. Penfold, Esq., 10s.; Miss Perks, 10s.; Mrs. M. Sumner, £1 is.; Mrs. Thomas, 3s.; Misses Urlin, 2s.; Miss White, 10s. Kent (North).—Per Sec., 12s. 6d.; Mrs. Wallace, 10s. Kent (Weall of).—Dr. Abbott, 5s.; Mrs. Anderson, 5s.; Mrs. Gardner, 2s.; I. Iones. (Weald of).—Dr. Abbott, 5s.; Mrs. Anderson, 5s.; Mrs. Gardner, 2s.; J. Jones, Esq., 2s. 6d.; Miss K. Knocker, 2s. 6d.; F. G. Smart, Esq., 1os. Lakes.—Per Sec., 5s. Liverpool.—Mrs. Crosfield, £1; Mrs. Hill, 1os.; Mrs. Rendall, 2s. 6d.; N. Tate, Esq., £1 is.; Miss Waterhouse. Ios. Lower Thames Valley (Ealing 58. Liverpool.—Mrs. Crosheld, £1; Mrs. Hill, 108.; Mrs. Rendall, 28. 6d.; N. Tate, Esq., £1 is.; Miss Waterhouse. 108. Lower Thames Valley (Ealing Division).—Miss M. Armstrong, £1; Miss Bayley, 108.; Mrs. Bazett, £1 is.; A. Belt, Esq., £1 is.; H. Bonus, Esq., £2 28.; Miss Dangar, £5 58.; W. R. G. Elwell, Esq., 108.; A. A. George, Esq., £5 58.; R. Gordon, Esq., £1 is.; W. H. Harris, Esq., £5; Miss Hill, £1; E. Hopkins, 28. 6d.; H. B. Hyde, Esq., £2 28.; J. Ladds, Esq., £3 38.; F. W. Lawrence, Esq., £1 is.; Mrs. Matthews, £5 58.; W. Miller, Esq., 58.; Mrs. Phillips, £1 is.; Miss Rioden, 158.; "Selbornian," 58.; Mrs. Way, 58.; W. Whitwell, Esq., £2 28.; W. D. Wickes, Esq., £1 is. Lower Thames Valley (Richmond Divison).—G. Cave, Esq., £1 is.; W. F. A. Clarke, Esq., £1 is.; Rev. A. Cooper, 28. 6d.; Rev. C. F. Coutts, 28. 6d.; Miss Dicker, 108.; Sir M. E. Grant Duff, £1; Lady Grant Duff, £1; Sir J. W. Ellis, 108. 6d.; Lady Ellis, 108. 6d.; Dr. Francis, £2 28.; E. Hawes, Esq., 108. 6d.; J. B. Hilditch, Esq., £1 is.; Miss Hill, 108.; R. Hunter, Esq., 108. 6d.; J. B. Hilditch, Esq., £1 is.; Miss Hill, 108.; R. Hunter, Esq., 108. 6d.; E. King, Esq., £1; Sir F. Leighton, £2 28.; Lady Lindsay, £1; Miss C. R. Little, £1. Lower Thames Valley Branch.—£5 58.; R. B. Marston, Esq., £1; J. H. Master, Esq., £1; Miss Mead, 28. 6d.; J. L. Pring, Esq., 28. 6d.; Dowager Countess Russell, £1; H. Senior Esq., 108. 6d.; Mrs. Skewes-Cox, £1 is.; M. H. Spielmann, Esq., 108; H. Stock, Esq., £1 is.; Mrs. Wallis, 28. 6d.; Miss Wallis, £1. Northern Heights (Hampstead and Highgate) Branch.—£2 128. 6d.; Misses Gould, 108.; J. Horniman, Esq., £1 is.; A. H. McPherson, Esq., 108.; F. Martelli, Esq., £1; Mrs. Martelli, £2; Members, 108.; Ch. Tomlinson, Esq., F. R. S., £5. Rape of Lewes.—Mrs. Cave-Browne-Cave, £1; Miss A. M. Strange, 28. 6d.; Mrs. F. Taylor, 58.; Rev. T. G. Wyatt, 58. Rother Valley (Chichester Division).—Mrs. Tyachne, 108.; Rev. T. G. Wyatt, 58. Rother Falley Valley (Nidhnrst Division).—Per Sec., £158. Rother Valley (Petersfield Divi Strange, 2s. 6d.; Mrs. F. Taylor, 5s.; Rev. T. G. Wyatt, 5s. Rother Valley (Chichester Division).—Mrs. Tyachne, 10s.; Rev. J. Fraser, 3s. 6d. Rother Valley (Midhurst Division).—Per Sec., £1 5s. Rother Valley (Petersfield Division).—"A. T.," 5s. Selborne and Liphook (Gilbert White Branch).—Sir H. Cotton, £5; Rev. A. H. Courthorpe, 5s.; Miss W. M. E. Fowler, 2s. 6d.; Rev. J. F. Fowler, £1 1s.; A. McMillan, Esq., 2s. 6d.; Miss Mellersh, 10s.; Gen. Parr, £1. Southampton and Bournemouth.—Mrs. Bank, 2s. 6d.; Rev. G. W. Minns, 5s.; Rev. O. M. Ridley, 10s.; J. K. Sampson, Esq., 10s. 6d. Tudor.—J. J. Ogle, Esq., 2s. 6d.; J. R. Ross, Esq., 2s. 6d. Weybridge.—Dr. and Mrs. L. Beale, £1 1s.; Mrs. Bowman, £1; Sir W. and Lady Bowman, £1; Mrs. A. B. Kempe, 10s.; Mrs. D. Powell, £1 1s.; Mrs. Silver, 10s.; Mrs. Yorl, 10s. Wimbledon.—C. H. Goodman, Esq., 2s. 6d. Wensleydale.—Miss A. Barber, 2s. 6d.; T. Bradley, Esq., 10s.; Miss E. Dundas, 2s. 6d.; Miss M. Dundas, 2s. 6d.; Miss Hildyard, 5s.; Mrs. J. Michell, £1; Miss 11. Squire, 2s.; Mrs. W. II. Wharton, 10s. Unattached Members.—Per Sec., Anonymous, 2s. 6d.; Mrs. G. F. Armitage, 5s.; W. Baxter, Esq., 5s.; Dr. G. Bird, 5s.; Miss M. C. Budd, 1s.; C. H. C., 5s.; Dr. Cheadle, £1 1s.; Two Members, 5s.; Miss C. L. Clark, 2s. 6d.; Mrs. M. H. Clarke, £1; Miss M. Cooper, 2s. 6d.; Mrs. Cox, £1 1s.; Miss Ewart, £1; W. W. Fowler, Esq., £1; Mrs. M. Geoghegan, 2s. 6d.; Rev. II. S. Gladstone, 2s. 6d.; Mrs. M. A. Hayne, 10s.; Mrs. C. Hutchinson, 5s.; Mrs. Jones, 5s.; Miss Manson, £1 1s.; Lady Miller, £1; Bishop Mitchinson, £1 1s.; C. G. Oates, Esq., £2; Miss Patterson, 10s.; F. L. Rawlins, Esq., 5s.; Rev. E. A. Tickell, £1; Miss M. J. Watson, 10s. Other Subscribers to the Memorial Fund:—Miss Armstrong, £1; C. Baker, Esq., £2:, Major-General Battersby, £1 is.: Mrs. Beeching, £1; R. H. Blades, Esq., £1 is.; W. A. Boodle, Esq., 10s.; Mrs. Bowerbank, £2; Very Rev. Dean Bradley, 5s.; Mrs. Brightwen, £21; J. Britten, Esq., £1 is.; J. A. Brown, Esq., £1 is.; W. Carruthers, Esq., £. Is.; Major-General Collinson, £10; T. Cotton, Esq., £1 is.; F. Crisp, Esq., £1 is.; Mrs. Currey, £5 5s.; F. Dangar, Esq., £10; R. Dawes, Esq., £10; F. R. Dillon, Esq., 10s. 6d.; Mrs. Downman, £1 is.; Mrs. Drummond, £1 is.; "Friend," £1 is.; Ditto, £25; Mrs. Graham, £1 is.; M. Hanley, Esq., £1 is.; J. R. Harris, Esq., £1 is.; Mrs. Hemsley, £2 2s.; J. Henderson, Esq., £3 3s.; Mrs. Henderson, £1 is.; Mrs. Hemsley, £2 2s.; J. Henderson, Esq., £1 is.; Rev. Hogg, Esq., £1 is.; Per Rev. J. Jackson, £10; Ditto, £5; Ditto, £5; F. Justen, Esq., £1; Mrs. "L.," £5 5s.; Miss Leycester, 5s.; Rev. A. Lofts, 7s. 6d; Sir John Lubbock, £1 is.; Rev. E. McClure, £1; — McDonald. Esq., £1 is.; Rev. H. Macklin, 5s.; Miss Malleson, 5s.; F. R. Mallet, Esq., £2 2s.; Dr. M. T. Masters, £1 is.; R. Melvil, Esq., £3 3s.; F. D. Mocatta, Esq., £7: Jos. Moore, Esq., £5; G. Murray, Esq., £1 is.; G. A. Musgrave, Esq., £5 5s.; Mrs. Musgrave, £5; G. Murray, Esq., £1 is.; G. A. Musgrave, Esq., £5; S.; El. M. Nelson, Esq., £1 is.; G. J. Rope, Esq., £1; Mrs. Oliphant, £1: F. Pascoe, Esq., £1 is.; Mrs. Phillips, £1 is.; Dr. Prior. £1 is.; "Subscriber." 10s.; Miss Summerhayes, £5; R. T. Swain, Esq., £5; Misses Toplis, £3; Rev. J. Turner, £1 is.; Miss Vivian, £3 3s.; T. E. Way, Esq., £5; H. C. White, Esq., £1 is.; R. Woollcombe, Esq., £5. Esq.. £5.

THE SELBORNE SOCIETY.

THE object of the Selbornc Society is to unite lovers of Nature for the following purposes :--

The Protection from unnecessary destruction of Wild Birds, Animals and

Plants;

The Protection of places and objects of Antiquarian Interest or Natural Beauty;

The Promotion of the Study of Natural History.

The minimum Annual Subscription (which entitles the subscriber to a monthly copy of the Society's Magazine) is 2s. 6d.

All particulars as to membership may be obtained from the Secretary of the Selborne Society, 9, Adam Street, Adelphi.

NOTICE TO CORRESPONDENTS.

In future, NATURE NOTES will appear on the 1st of each month, with the other magazines.

Contributions for any number should reach the Editor, JAMES BRITTEN, F.L.S., 18, West Square, London, S.E., not later than the 15th of the

When it is particularly requested, MSS, not accepted will be returned, if stamps sufficient to pay the postage are sent for that purpose.

Queries on any points connected with Botany or Zoology will be answered if

possible, and advice will be given as to the best books for students in any department of Natural Science; but all questions must be accompanied by the names and addresses of the writers, not for publication, if this is not desired.

Specimens sent for identification will be named, if sent carefully packed and in good condition, but we cannot undertake to return any specimens.

It is particularly requested that subscriptions and letters connected with business may not be forwarded to the Editor, but to the Secretary of the Selborne Society, 9, Adam Street, Adelphi. Editorial communications should be addressed to Mr. Britten, as above.

Mature Motes:

The Selborne Society's Magazine.

No. 26.

FEBRUARY, 1892.

Vol. III.

"SPORT."

ROM time to time the public mind is shocked by some revelation of brutality exercised against either human beings or animals, and its virtuous indignation is wonderful — while it lasts. It may even be said, strange as it may seem, that our sympathy with animals is stronger than our affection for our own race; for the Society for

stronger than our affection for our own race; for the Society for the Prevention of Cruelty to Animals was established long before that for the Prevention of Cruelty to Children; while sarcastic folk have more than once pointed out the want of proportion between the horror expressed at cutting off cows' tails, and that which was aroused by the revelations of famine as affecting a country side. But of course that was in Ireland.

Just recently people have been horrified—and with reason—at the revelations of rabbit-coursing, as practised about Newcastle-on-Tyne, made by Col. Coulson in *The Animal's Guardian* for December last. This "sport" is indulged in by thousands, "nearly every day in the week, especially on Saturdays," and sometimes on Sundays: it has been condoned by no less important a personage than the Right Honourable James Lowther, at a meeting of the Gimcrack Club, York, in 1890, who spoke of it in terms of semi-admiration, and alluded to the protests made against it as "canting lies." We have neither desire nor space to reproduce the sickening account in full, the following extracts from Col. Coulson's letter will suffice:

"At the end of the course where stood the crowd, two dogs, yelping and barking in an excited manner, were being held by handkerchiefs round their necks. Close beside the dogs was a sack containing rabbits. At a distance of twenty-five yards from this was a peg, marked by a bit of newspaper. This peg is named 'the twenty-five yards law!' A rabbit was taken from the sack and dangled in front of each dog's nose. The look of agony on each poor rabbit's countenance whilst that was being done was truly piteous to witness. . . . After the dangling process had gone on for a short time the man ran out with the rabbit to the

'twenty-five yards law' peg, and at a given signal let go the rabbit. As he did so the dogs were loosed. . . . The wretched rabbit, unable in most instances to do little more than crawl, was quickly seized by the dogs. In every case one dog had hold of the hind quarters of the rabbit, the other the fore part. They raced round the ground in this fashion, pulling and tugging at the unfortunate creature, and all the while bets, oaths, hideous laughter, and clapping of hands from the crowd filled the air. Mingled with it all the piteous cries of the poor rabbits rose now and then above the hellish din. . . . One rabbit did manage to run the gauntlet of the cowardly mob, and jumped into the river Tyne. . . Bravely did the poor little creature attempt to gain the opposite shore, but stones were hurled at it, and being exhausted, it was swept into an eddy and brought ashore, too weak and too little life in it to even move. At my entreaty its misery was terminated."

This is very horrible, and Selbornians will agree with Col. Coulson that "effort must again and again be made to induce the Home Secretary to pass a Bill making such fearful barbarisms offences against the law. Till this be done we have no right to

call ourselves a civilised or a righteous people."

But there is another aspect of the question, which must not be overlooked. Mr. Waugh has pointed out that in some of the worst cases which come under the notice of the Society for the Prevention of Cruelty to Children, the criminals are not of what are called "the lower classes," but occupy a respectable position in society. Col. Coulson says that one man asked him "was it worse than 'throwing a fox to the hounds?" It is not to the credit of dukes, lords, gentlemen, and, alas! ladies, that their amusements should be classed with such low, cruel blackguardism, but, to my sorrow, I had to acknowledge that it was not worse."

Is not the example set by the so-called "upper classes" to a great extent responsible for these exhibitions of brutality among working men? Who were the patrons of pigeon-shooting at Hurlingham? In the preceding number of *The Animal's Guardian*, the Colonel, who is fully alive to this aspect of the case, gives an account of "otter worrying," in the same county as that in which the rabbit-coursing took place.

"During the past summer a gentleman, who evidently finds an immense pleasure in taking the lives of otters, brought his hounds into the county of Northumberland, and according to his wont, hunted the beautiful river Coquet for his selected victims. He was not disappointed. The prey was found, and for six consecutive hours did he, in the presence of a large assemblage of gentlemen, and, sad to relate, ladies, hunt one unfortunate otter. At last the wretched creature was worried to death. When the 'gallant master,' as he was called in a local paper (it is difficult to conceive where the gallant comes in), went to pick up the worried otter he was loudly cheered. . . . What an example this for the 'lower orders,' as the rich too often contemptuously call the poor; what a slur upon our supposed advance in civilisation, refinement, and humanity; what a parody on our culture and religion. Here were a number of our educated classes calmly watching and enjoying for hours the struggles and agony of a defenceless creature. There was no need for their presence, they had come because they were idlers, and had the instinct of cruelty within them. They had nothing else to do and so they must take life. But what an example! It is, I much fear, not from the so-called upper and educated classes that excellence in conduct can be learned. It is worse than a farce to speak of this country as one loving religion and aspiring to civilisation. Let us have no more canting nonsense about the working man not attending church, when we can point to ladies and gentlemen finding pleasure and recreation in such a detestable fashion.'

Worse still remains to be told. Not only do the titled classes countenance brutalising sport, but in one of its meanest and most contemptible manifestations it can boast the sanction and approval of Royalty itself! A pamphlet written by the Rev. J. Stratton, and just issued by the Humanitarian League,* calls attention in a simple but forcible manner to the brutalities perpetrated by Her Majesty's Buckhounds, and a petition praying for the abolition of this scandal has been prepared, and may be obtained from 32, Sackville Street. This "sport" is carried on not only with the approval of Royalty, but at the expense of the nation. The "Master of the Buckhounds" receives a salary of £1,500 a year, and other payments are made out of the Civil List. "Is it right," asks Mr. Stratton, "that such money, voted by the representatives of the nation for a necessary purpose, should be spent on the organised torture of tame stags?"

Space will not allow us to enter at length upon this question, but we should fail in our duty if we did not call the attention of Selbornians to it, now that public attention is being directed towards a remedying of this abuse. These unfortunate stags are, to all intents and purposes, tame animals. They are deprived of their antlers, their natural weapons of defence, and are turned loose in a country they do not know. Even those who consider the hunting of wild animals for sport legitimate, must surely be revolted when they read such an account as the following, contributed by "An Old Sportsman," to the *Standard* of November

14th, 1889:-

"The above pack met at Uxbridge Common to-day (November 13). The moment the poor stag was let out it was surrounded by a howling mob of men and boys. After a short run, and when dead beat, it stopped in the road, where—and I think all sportsmen will agree with me—it ought to have been roped and put into the cart; instead of which it was driven on again, and in jumping a wire fence it tore a small place in its near side. The huntsman then attempted to rope it; the poor brute was very frightened, and in trying to jump a garden fence it tore its stomach completely open, and its entrails rolled out. There were cries from the field—
"Kill it! kill it! Cut its throat!" The huntsman followed it to the back of the house, and with the help of some men caught it and killed it. Will you believe it when I tell you that four women rode up to gaze on the dying agonies of the unfortunate animal? And people call this sport! I call it inhuman butchery. The sooner the stag hounds are abolished, the better it will be for all parties."

We heartily endorse Mr. Stratton's remarks when he says:--

"It is not right to punish working men for inhumanity, when the same deeds go unpunished in the nobility and gentry. It is a flagrant act of injustice to prosecute a person who sets a dog at a cat, or beats a horse or donkey, while high people are allowed to treat harmless, sensitive deer with unrestrained cruelty. This inequality in administering the laws ought to be rectified without delay."

The wealthier classes are bound to set an example to those below them in social position, and it must be the part of every Selbornian to inculcate and emphasise the teaching of the poet—

"Never to blend our pleasure or our pride With sorrow of the meanest thing that feels."

^{*} Royal Stort: some facts concerning the Queen's Buckhounds. Recves, 185, Fleet Street. 2d.

IN THE ANTILLES.

HERE is one point which this hut has in common with the houses of the ancient Romans—it has a large and efficient "impluvium" in the centre, besides several subsidiary ones of less regularity in action. Their operations have driven me to a constant moving about of the furniture, which is no great task any way except that it has to be done at all hours. It would have occurred to anyone else. no doubt, to mend the roof, even without ulterior designs of a claim for "betterment" against the landlord. Suppose it were mended, the great question of smoke abatement would then be with me face to face—the construction of a chimney, and who knows where such modern improvements would lead one? But in this tropical country, why not do your cooking out of doors? —I think I hear someone say. Why not?—because it has rained since I came until this morning, in that particular kind of way that does not tempt anyone to do his cooking or anything else out of doors. However, the sun has come out "regardless," and is doing his cooking at all events, to judge by the volumes of steam and other vapours rolling from the land round the bay and wrapping the headlands in thin shreds of mist through which the rock gleams in places like the blazing shield of sea. A boat has come for me from H.M.S. Bloater, and while the jars, bottles, and dredging tackle are being packed up, the men converse outside. The subject is a dispute that has been engrossing the ship's company and creating faction among them-What kind of an animal is a turtle? and I gather it is going to be referred to me for settlement. There are three views, it appears, each of which has engaged a considerable body of adherents. The first view is daring enough—viz., that the turtle is a kind of bird, and this idea is supported by the argument that it lays eggs; and that, since the whale, though it lives in the sea, is not a fish, so likewise the turtle's zoological character is not to be prejudiced by this habit. The second view is simple, and has proved a favourite. The turtle, according to this theory, has a shell and lives in the sea, and is therefore plainly a shellfish. The third school says that it is "a beast like any other beast" (meaning a mammal), since "you can cut it up and take steaks out of it." I foresaw certain trouble, and all morning I have been dreading having the arguments laid before me. At last it comes upon me when I light my pipe in an interval of dredging, and I am asked, "What kind of crittur, in a manner of speaking," a turtle is. "A turtle," I said, "is a reptile." They were the most astonished sailors I ever saw, and I

They were the most astonished sailors I ever saw, and I knew that presently I should be in for it. The objections to my view break out at intervals all afternoon, but I fancy they are finally convinced. I contrive to dispose of the bird theory by reminding them that serpents lay eggs. Whereupon I am told it has got legs—and of course the alligator and lizards

answer that. The alligator and the sea serpents, that one of the men who had served on the Australian station had seen, were of use in disposing of the objection that it lived in the sea, but my hardest trouble came with the shell. In the end they took the idea that the crocodile and alligator had very tough skins, and that if the turtle hadn't a shell to distinguish it by, it would be only a poor sort of crocodile. One of them helped me much by suggesting that the *Bloater* was not less a ship because she

had iron plates on her sides!

There is one point about the coral reefs that forces itself upon my notice, and especially to-day—the very large amount of the material of their composition due to encrusted marine vegetation, particularly the coralline seaweeds. Many of these grow with a stout encrustation of carbonate of lime (nullipores) and thus form great masses which in some reefs seem to nearly rival the true corals in bulk. This has an interesting bearing on the great coral-reef controversy, since species of coralline seaweeds live at greater depths than corals, and thus may be efficient in laying the foundations of coral islands at depths beneath the zone of coral life. This is a matter which calls for an exhaustive inquiry into the range in depth of coralline life, and the answer cannot fail to affect the general question, since the gigantic operations of these vegetable reef-builders have

been almost wholly left out of the discussion.

The topsy-turvydom in Nature's ways in this place is an exacting accompaniment of life. When a fisherman goes up a hill to gather crabs for bait, one feels he may as well catch his fish in the air—not that flying fish are unknown. It amounts to a wound to the feelings when it is discovered that the very sharks are harmless. They are said to be extremely abundant here, literally jostling each other on the bottom, and they are not difficult to catch, but they never rise at negro, and are believed to prefer white man or pig, especially the latter. bathes with impunity anyhow, and since pigs do not abound in these waters, I fancy the sharks must gain an honest living by eating each other. There was a shark once hooked from on board one of Her Majesty's ships, a frigate, and the line made fast. That shark towed the frigate and she dragged her anchors. One does not like to tamper with a story like this, embedded in the general faith in our first line of defence, but the truth about the navy must be told by someone—who is not a marine.

When Mister William comes this way I feel something is going to happen—he is by no means suggestive of the stormy petrel, but rather he is an omen of gloom and ruin. The first time he came I gave him a small coin and some tobacco, and I heard the tale of his woes: how he had never even a chance given him of getting work or doing anything, though he had spent weeks in a mountain solitude in the expectation of some one seeking him out and rewarding his merit. He then burned a hole in the cooking-pot and went on his way. He passed two

days ago and leant on the table which took Matthew and me an hour and more to rig again with the help of a bucket and stone When I get home this evening he is hanging jar after all. about—standing off and on. Mister William extorts interest. He is the living image in black of the Editor of the Erechtheum —so black that it would be a waste of ink to pour it over him. One cannot resist a certain deference to Mister William as well as interest in him. The untutored Matthew, of course, does not share this feeling, and thinks only of the table. The aimlessness of Mister William is exhibited in his raiment. His braces are of elaborate construction and great strength, being composed of numerous strings arranged like the shrouds of a ship, and where they are attached to the trousers, rove through bone deadeyes in place of buttons. They are utterly disproportionate to their function, like those organs in the animal economy which so distress the subjective naturalist at home. If they held up anything to speak of one might not wonder at this exhibition of ingenuity and durability. One feels that the trousers have decayed away from the braces—and one trembles for the future. There is one big patch anyhow, though it shows signs of exfoliating from the rest—so big is it, relatively, that Mister William must have had a narrow escape from having a new pair when it was sewn on. The men showed a disposition to make game of Mister William while I was indoors, and I heard fragmentary entertaining things as to his rig. When they were gone he appeared with some plantains and a chicken, for the sale of which he was evidently the agent of someone else. This business settled, it was plain he had something on his mind. While Matthew was cooking the chicken, Mister William confided to me that a man near Grand Ance had "set strong Obeah" for him, and that was the cause of all his woes. This was the first and last time I ever heard personally of the business from a negro, though it was at all times easy to discover traces of this potent hidden devilry. I told him that the Chief of Police had a short way with Obeah men, and advised him to go to him—but this was of no use. He saw in me the kind of fellow who could produce a rival spell of the right sort from among my collections. As he looked at me I almost told the Editor of the Erechtheum that the Royal Society alone had control of my duplicates. It was as clear as maybe that Mister William thought my object in putting so many snakes, lizards, and the like into bottles, was the working of magic and spells. Mister William took away with him a "strong Obeah" (in point of smell), and if he drew the cork from it anywhere near the Grand Ance man, I do not doubt as to its efficacy. It was "white" magic in one sense, at all events.

In the great forest behind us there are many jumbles or ghosts incarnate in birds, reptiles, and other animals. Such are sacred, and no black man, woman or boy would either touch or be a party to the ill-treatment of one of them. Matthew, who

is an intelligent fellow and an ardent collector of sea things, affects to despise jumbies—"niggah nonsense, sah." But even Matthew can hardly be prevailed upon to go out of doors after dark. He is then very tired, owing to the diving or the effects of the sun; or there is a risk of fever, or a complaint of an actual attack. But for the noise of crickets and the like, there is an impressive silence in the great forest day and night. Now and then at night, however, we have heard (probably from some bird), an appalling scream that would curdle the blood of a grenadier. At such times Matthew feels a desire for society, and if awakened from sleep has a short conversation on indifferent topics. Not all the screams of all the jumbies, and their name is legion, are half so annoying as the crickets. One must live in such a place as this to understand how "the grasshopper is a burden" and a real one. Matthew told me the other night, during an exercise in "part" chirping, that they did it till they burst. At first I put this opinion down to the paternity of his wishes, but there proved to be a foundation for his remark. He showed me one of these "burst" crickets to prove his case, and an examination of it disclosed the fact that it had been attacked by a fungus-disease like that which fills our common house flies with a white powdery mass of spores. These are scattered around

it and give it the appearance of having exploded. The worst point about the animal kingdom here is that specimens come in search of one. Who can be always in the humour for collecting? And then duplicates are the worst sort —they wake one up in "the dead waste and middle of the night." A brother naturalist, whose preparations for an expedition were inspired by the immortal Tartarin, took with him a copious supply of a certain "insect powder," and he didn't write a testimonial to its powers when he returned. Animals that can bite you through an inverted sugar-boiler do not stop for trifles of that sort. Philanthropists now search among the hard conditions of life for the cause of brutality in civilised communities. Cannibalism is said, without much plausibility, to be caused by the absence of grazing animals, and I can quite believe that the bloodthirsty old Caribs of these parts were goaded into their atrocities by the presence of crickets and mosquitoes. Again, piracy reached its finest development here after the Caribs lost the whip hand, and after the pirates came the slave-dealers. The present one is a meek generation, and we are inheriting the earth; but the old Adam breaks out in one now and then under stimulus of these causes. When Matthew says, "I go burn a candle, sah," meaning devotional exercises at the chapel near the rum shop six miles away, I used to think the methylated spirit was beginning to pall on his taste—but I believe in his devotions now, after hearing him curse the Invertebrata generally the other night. Not an installation of the electric light would wipe away his stains.

GEORGE MURRAY.

TAME BIRDS.

HY should we not all have native tame birds? By this I do not mean our feathered songsters imprisoned in a cage, but tame birds in our parks and gardens; many people might have them, if they really loved them, and took care of them in the winter. I will give you my experience, which has added much pleasure to my life.

Some years ago when we were living at Nazing Park, in Essex, on the borders of Hertfordshire, I first began to tame them. I carried bread-crumbs with me when I went out and threw them about in the garden; I was always talking to them, and many of the birds never seemed afraid of me. The robins in particular were very tame—not only with me but with anyone about the place, even the gardeners. For two or three years running, some robins built their nests in some holes (meant for pots) at the back of our conservatory, and when the little ones began to fly about they and their parents would come and pick the bread-crumbs off the tips of our boots and the hem of our dresses when we were sitting in the conservatory. One winter, towards the end of November, a robin took up its quarters altogether in the house, and lived generally in the dining-room. When we were at late dinner it would fly round the table, perching on the back of our chairs, and hopping on the table would pick up the crumbs. What became of this bird we never knew, as we went abroad for six months just before Christmas, and it did not seem to care for the house after the family left. Some of the robins were equally tame in the summer. When I went into the garden with my flower-basket in my hand, they would come and perch on the handle, and look knowingly at me; and when the gooseberries were ripe, if I squeezed the seeds out upon my finger they would come and pick them off. I have seen them do this even with one of the gardeners.

And now I must tell you my experience in feeding birds from my bedroom window sill. At Nazing, my window was over a portico, and the birds had a nice place to assemble upon before they flew on to my window sill; here I had all kinds of dainties arranged for them—bread-crumbs and bird seed, hemp and canary for the robins, chaffinch, sparrows, &c., besides a hunk of suet hanging on a nail close to the glass, just outside the window, for the tit family, and nuts for the nuthatch. Early in the morning, as soon as it was getting light, I could hear the little tits at the suet, tap, tap, tap; and after I was called and the blind drawn up, it pleased me while in bed to watch

them at their breakfast, which they thoroughly enjoyed.

In very cold weather I put the bread-crumbs, &c., out over night, otherwise I preferred giving the food in the morning, and watching them afterwards. Of course I put the food out several

times in the day besides. With the window open I could watch them, standing quite close to the window. At first any one trying to do this must keep very still and their arms down. All wild animals, I believe, have great fear of the human arms if

they are moving.

I do not think many people have any idea how beautiful many of our little birds are; the blue-tits and cole-tits are the sweetest little birds, and towards nesting time the cock birds look so spick and span and perky, having donned their best clothes to please their mates. The nuthatch will take the nut out of its shell if it is slightly broken. Often, on a cold winter's day, when entering my room, and the food was all gone, the birds have come immediately, and tapped the window with their beaks, and have continued tapping till I threw out their food and supplied their wants. At Nazing Park the sparrows were not numerous, and were always kept in order by the other birds, the robins, chaffinches, &c., never allowing them to feed with them.

When first we went to our new Hertfordshire home the birds were rather wild, and there were not many of them; but now we have many more, and they are much tamer. The first winter we were here I began to strew bread-crumbs in the garden and also to try window-sill feeding; but the great difficulty was, how to get the birds to my bedroom window-sill. The sill is so narrow and so difficult for a bird, not only to see the food placed on the sill, but also to fly and perch upon it. I hung up my suet and spread my delicacies, but all in vain; days passed, but no birds came. I was in despair, but I did not mean to be beaten, so I got a long piece of string, fastened one end on the nail upon which the suet hung, and on every few inches I tied on a piece of meat, or bread, and dropped it to the ground. After a few days, to my great delight the birds found it, and little by little came up to my window sill, and now the birds come in numbers, and of all kinds; but here the sparrows are numerous and try to drive off the other birds.

If it is very cold weather, and the ponds are icebound, a saucer of water placed for the birds is a great boon, as they suffer much from thirst in cold weather. I am sure any invalid confined to the house would derive much pleasure from feeding birds from a window-sill. The thrushes and blackbirds seem to like to feed on the window sills of the sitting rooms best, but if much driven for food they will come up higher. The only objection to the lower window-sills is, that the cats may be watching for the birds, but on the higher sills they are quite

safe from these, their natural enemies.

M. A. H.

FIELD-FARES.

How blue above our head the sky!

How brown below the path we tread
By silent carpet overspread
From sombre larches standing by,
The berries in the hedge are red,
On which the birds should sure have fed,
Alas! they long ago have fled,
Who feel the frost and die.

But hark! a foreign note I hear,
Along the fell, behind the wall,
A language I must needs recall,
Old talk made new with every year!
O'er northern seas, thro' sleet and squall,
These birds have come for festival,
And on the coral berries fall
To keep their Christmas cheer.

With "tsak-tsak" high and "tsak-tsak" low—While perched far off their pickets stand—These wandering birds possess the land Our Norseman fathers used to know,
In voice, half quarrel, half command,
They wrangle on, the robber band—Swift-winged Vikings from the strand Of ice and winter snow.

I clap my hands, away they speed!
What matters where they rest to-night,
Beyond this vale are berries bright
And good where'er they wish to feed!
They know no law of tenant-right,
They only know they love the light,
One law alone can guide their flight—
The law of Nature's need.

Ye red-backed rangers over sea,
Ye grey-winged rovers of the field,
Who from what English roses yield
Find life from lea to lea!
Those hearts must sure be hard and steeled
Who have no founts of faith unsealed
By your wild carelessness revealed
This winter morn to me.

H. D. RAWNSLEY.

MONKEYS.

OW often one hears the remark, "I don't like monkeys; they are so horribly human!" Surely that is a reason why we should study them with more than ordinary interest, and see how far they resemble us inwardly as a contrarely as a contrarely of L may be allowed to hint at an automate.

well as outwardly—if I may be allowed to hint at an external resemblance. To a casual observer fun and frolic seems to be the idea of monkey life, and the monkey-house at the Zoological Gardens rings with laughter as one after another goes through some grotesque performance with his fellows. But as in human life it is not always those people who appear constantly cheerful who are really the happiest—there is often a hidden sadness which rarely shows itself; so it is, I venture to think, with

monkeys.

To my mind there is something very sad about their little wrinkled faces—a look that suggests a longing to be once again free to play amongst the branches of the forest trees and to feel the warmth of the tropical sunshine. They are savage at times, but how strong is the affection they show! It is touching to see the tender and constant care which a mother monkey shows to her infant; her watchful eyes are never off it, and if any one approaches, the tender look gives place to one of intense rage, and she sets her teeth to frighten away, if possible, the intruder. I have noticed, too, how readily she will practise self-denial and think first of her offspring; if given a nut she will not eat it herself, but crack it and then give it to her young one. So strong is their conjugal affection that if a pair of monkeys be separated they will refuse food, pine away and die. The following will serve as a slight illustration of their strong affection.

A friend of mine, a native of India, was sitting in his garden, admiring the ripe fruit that hung from the trees, when a loud chattering announced the arrival of a large party of monkeys, who forthwith proceeded to make a meal off his fruits. Fearing the loss of his entire crop he fetched his fowling-piece, and, to frighten them away, fired it off, as he thought, over the heads of the chattering crew. They all fled away, but he noticed, left behind upon a bough, what looked like one fallen asleep with its head resting upon its arms. As it did not move he sent a servant up the tree, who found that it was quite dead, having been shot through the heart. Grieved at what he had done he had it fetched down and buried beneath the tree, but his sorrowwas increased when on the morrow he saw, sitting upon the little mound, overwhelmed with grief, the mate of the dead one; and there it sat for several days bewaiting its sad loss. Surely there is something almost human in this love! Perhaps I may appear to be attributing higher faculties to the monkey tribe than are found in other animals, but that is not my wish. I believe that the more closely we study the animal life that is around us, approaching it, not with the desire to destroy, but

with the love we should bear to fellow creatures, we shall find that God has not given to us alone qualities which we are too liable to consider ours almost exclusively.

ROBERT MORLEY.

TAME SQUIRRELS.

OUNTESS ANNA JENISON, a subscriber to NATURE NOTES, having read Miss Martyn's account of her squirrel (NATURE NOTES, 1891, p. 169), takes exception to her statement that these pretty little animals cannot

be kept as pets except when confined in cages. She writes

from Heidelberg:-

"I should like to tell Miss Martyn that not only I, but some of my Sunday school boys and a clergyman in the Odenwald, and many other people, have kept squirrels quite loose, not in cages at all, and that they ran and climbed about freely in the woods, and came back of their own accord. Mine at Paggein (in Austria) used often to stay away two or three days, but if heavy rain came on, he used to come home drenched, and would lie quite still while I rubbed him dry. I think they are charming pets to have, and I would always encourage children to keep them; from April, when they are just at the right age, until the autumn when the nuts are ripe, and then to let them run away if they like. If you take one out of the nest when quite tiny and let your cat nurse it (if she happens to have kittens at the time), it will become as domesticated as a cat, and, what is worth more, will be safe from her; otherwise it is rather dangerous to keep squirrels loose where there is a cat. One of our cats here has several times brought us in young squirrels which he had killed, and very proud he was of himself. I could send you pages about my different squirrels and their adventures. I have kept them for several years, but I usually set them at liberty when the nuts are ripe. I remember spending sleepless nights thinking whether the poor little thing felt very lonely out in the woods all alone for the first time, after being accustomed to a warm bed. The last one that I let out here on the Heiligenberg came back to me next morning when I went up and called him. He took a nut from me and rushed up a tree with As he would not let me catch him I was satisfied that he preferred liberty. At Darmstadt, when I was a girl, I put a plank across from the window to a tree, and my squirrel went every morning for some time to amuse himself on the tree after his breakfast, and then came back of his own accord. Once at a school concert, when I was to play the piano in Haydn's Toy Symphony, I had to get up and walk across to my father, and transfer the squirrel to his pocket, as the noise frightened it. When skating on the ice I often had him in my muff, and in summer he sometimes sat on the top of my parasol." Winscombe, Somerset. MARIAN E. COMPTON.

THE PUCKERIDGE OR GOATSUCKER.

N spite of the good done by this bird, it has, on account of its curious habits and uncanny appearance, become regarded by our villagers as wicked and dangerous. Many stories are told of it, and in some parts it is believed capable of almost any crime. In different countries it is known by different names, the commonest of which are goatsucker, screech-owl, churnowl, fern-owl, devilling, puckbird, puckeridge, wheelbird, spinner, razor-grinder, scissor-grinder, night-jar, night-hawk, night-crow, night-swallow, dar-hawk, moth-hawk, gnat-hawk, goatchaffer, gabble ratchet, and lichfowl. A Hampshire villager, when walking across a common where they are very plentiful, pointed one out to a stranger, saying, "Puckridge is a ill-meanin' bird, it be that, it hez sich a lot of poison about it; not 'at it'll attack anyone 'at leaves it alone, bud if a body goes near it' nest it'll fly at their eyes, an' if it draws blood it'll venom them." On being questioned further he continued: "It's a sort o' hawk, an' makes a noise like door-latch rattlin' up an' down. When it flies from tree to tree of a evenin', an' makes a great row, folks does say as it's a sign of fine hot weather, bud it's a ill-meanin' thing." In some parts these birds are supposed to be the souls of unbaptized infants. Their nocturnal habits certainly are very curious, and the large bristly mouths being particularly adapted for catching and retaining the insects on which they feed, give them a very strange appearance. A puckeridge always frequents the same place, never flying far from home, but noiselessly circling round one object and continually uttering a weird cry which does resemble "door-latch rattlin" up an' down" as much as anything else. The bird builds no nest, but lays its two dirty-looking grey eggs on the bare ground. These eggs, I am told, should never be blown or even touched, as they also are very poisonous.

Like many other of our feathered friends it is shy, and easily disturbed when nesting, and there is a report, which is no doubt true, that if disturbed it will remove its eggs or young to a place of safety. It is commonly supposed to suck goats, and even cows—lience one of the popular names, "goatsucker." It is also said to lose no opportunity of flying round and round the heads of children and young cattle, endeavouring to beat them with its wings; should it succeed in so doing, that child or animal "will never grow no more." These, however, are not the worst crimes it is capable of, for half the calves that are taken ill or die have been venomed by a touch from its feathers. The goatsucker is very plentiful in many parts of the country, which fact is no doubt greatly owing to its nocturnal habits, and the superstitious awe and dread which prevent rustics from taking the eggs or destroying the birds, as they otherwise would

certainly do.

HER CHOICE.

(Dedicated to the Atalanta Branch of the Selborne Society.)

"O GENTLE maiden, come out awhile, In the woodland paths to stray, To wander where sloping meadows smile And the birds make holiday.

"O come and lie in the long, cool grass, The joy of their songs to hear; In shades where travellers seldom pass Their notes are unchecked by fear.

"Faith, hope and love tune the songs of birds, And many a hidden truth That never could be contained in words

They bring to the heart of youth. "There's music down by the reed-fringed pool, And up in the whispering beech;

Come, then, and study in Nature's school While Nature is willing to teach."

But what cared she for the wild birds' song, Or the breath of pure free air? She chose the town with its heedless throng, And a little dead bird to wear.

ELIZABETH W. WOOD.*

NOTICES OF BOOKS.

Tenants of an Old Farm; Leaves from the Notebook of a Naturalist, by Henry C. McCook, D.D., illustrated from Nature. Sixth edition, 8vo., pp. ix., 46o. (London: Hodder & Stoughton. 6s.) We are glad to welcome a new and cheaper edition of Dr. McCook's delightful book. It is well written and illustrated, and beautifully printed on good paper, and is indeed an example of what can be done when everyone (with the possible exception of the binder) combines to produce a thoroughly satisfactory result. "The purpose of this book," says the author, "is to present a series of exact truths from Natural History in a popular form." As everyone who has tried it knows, this purpose is by no means easy of fulfilment; when the truths are enunciated with exactness they are not always popular; when they are popular they are not always truths. Dr. McCook, however, as Sir John Lubbock points out in his short introduction, is fully qualified to speak with authority as a scientific man, and his style at once attracts by its clearness and simplicity. The illustrations demand a special word of praise; they are fresh and unhackneyed in style, and the "comical adaptations" are really funny and original.

The "tenants," whose histories, or portions of them, form the subject-matter of this volume, are the insects of divers kinds, with the spiders, to which, and the ants, the greater part of the book is devoted. The enthusiastic spirit in which Ir. McCook has anyrocached and executed his work way he gathered

in which Dr. McCook has approached and executed his work may be gathered from a sentence which he puts into the mouth of one of his characters, who says of the supposed narrator: "He lived like an Indian, worked like a negro, spent no one knows how much money for travelling, outfit, wages, &c., then fell to

^{*} From Atalanta.

work and wrote and published his book at his own expense, all for the sake of one miserable little ant that stings like a wasp, and is a nuisance in Texas harvest fields." We regret that the demands on our space will not allow us to notice this excellent book at greater length, but we cordially recommend it to all nature-lovers.

The Religious Tract Society is not behind the S.P.C.K., some of whose books we noticed last year (p. 231), in its anxiety to provide suitable literature for lovers of Nature. We have received a parcel of publications from this body which contains the Rev. J. G. Wood's The Brook and its Banks, and Dr. W. T. Greene's Birds in my Garden, already referred to in Nature Notes (1890, p. 60), and three others, two of which we notice elsewhere. In The Honey Bee, its Nature, Houses, and Products, Mr. W. H. Harris gives an excellent account of this most interesting insect, beginning with an historic sketch, in which the bee is traced in the Holy Scriptures, the Koran, and the Vedas, and through the classics to Shakespeare; then going through its natural history, with chapters on bee-keeping, and ending with a chapter on bees in relation to flowers, a somewhat inadequate account of the superstitions connected with bees, and a thoroughly practical statement of the financial profits of bee-keeping. The volume is carefully compiled, and well printed and illustrated. Its price is 5s.

A Cyclopædia of Nature Teachings, with an Introduction by Hugh Macmillan, LL.D. (Elliot Stock, 1892, 8vo, pp. xvi., 552.) This is a compact work, well printed in double columns, containing numerous quotations from well-known authors, and more numerous ones from writers whose names are less familiar to us, and with whom, judging from these extracts, we have no wish to become better acquainted. Among the well-known writers whom we are glad to encounter, even in fragments, may be named Ruskin, Carlyle and Jefferies; but there are others, such as H. W. Beecher, whose absence would be an advantage. Dr. Macmillan himself has contributed no small share, especially if we are to hold him responsible for the anonymous matter, and for the terribly didactic headings to the extracts. The heading, "The Woodruff (a Vernal Grass)," shows that the editor does not know our common wild flowers; he apparently accepts as accurate (see pp. 179, 245) the exploded myth as to the growth of wheat from Egyptian tombs; and there are numerous misprints in the Latin names quoted. According to the Rev. James Neil, M.A., the Purple Orchis, by its mode of increase, is "steadily travelling to the bright home of this family of flowers in the tropics," as the "new bulb, or tubercule," is "always on the side towards the south." Mr. Ward Beecher asks, "What do the flowers say to the night? They wave their bells and exhale their choicest odours, as if they would bribe it to bestow upon them some new charm." Now this is sheer unmitigated nonsense, and there is a great deal more of the same kind in this queer collection of scraps.

From the same publisher we have a fourth edition of Mr. H. W. S. Worsley-Benison's Nature's Fairyland, which contains "rambles by woodland, meadow, stream and shore." The fact that three editions have been exhausted shows that this book has been well received, but it is in no way better, although it is (save for one chapter) no worse, than the majority of the large class to which it belongs. Those who like their natural history interspersed with pious, if somewhat obvious, reflections, will enjoy this little volume. "The House-fly's Story"—the chapter referred to above, in which the insect referred to quotes "Mr. Linneus," and various poets, and discourses playfully as to its history and habits—is interesting as an example of the rubbish it is possible to write under the pretext of advancing the study of Nature. This should certainly be omitted from future editions.

BOOKS FOR YOUNG SELBORNIANS.

The Last of the Giant Killers, or the Exploits of Sir Jack of Danby Dale, by the Rev. J. C. Atkinson, D.C.L. (Macmillan & Co., 4s. 6d.). Dr. Atkinson, in a kind note which we have received from him regarding our review of his Moorland Parish (p. 14), says that he asked one of his oldest parishioners whether he had read The Last of the Giant Killers. "Ay," he said, "right through, and many parts twice over, ay, and a lot three times." The young Selbornians who were fortunate enough to receive the book as a Christmas box will probably give a

similar verdict, and those who have not yet read it have a pleasure to come. In the form of a right good children's story, the author has given us a series of legends as graphic as any of those immortalised by Grimm, and indeed resembling them in their strength of incident; while the mode of narration in places reminds us pleasantly of Kingsley's delightful Water Babies. The legends have a special local interest, but are none the less attractive to the general reader. How Jack came by his names, and his various magical possessions; how he mastered the Woeful Worm and the Eldritch Erne, overcame the Church-Grim Goat, and restored its head to the Headless Hart, our young readers must learn from Dr. Atkinson's own pages; and in so learning they will gather no small knowledge of legend and folk-lore.

The Religious Tract Society sends us two tales of somewhat original kind, by Darley Dale, the first of which (price Is. 6d.) is called *The Great Auk's Eggs;* the second (price 2s. 6d.), *The Glory of the Sea*—the beautiful cone-shell known as *Conus Gloria-maris*. It is not always easy to convey scientific information in the form of a story, and at the same time to keep up the interest of the ordinary reader, but this seems to have been done in both of these tales, which, moreover, are adorned with excellent illustrations. These volumes will prove welcome additions to the school library.

SELBORNIANA.

The Sparrow.—We are almost overwhelmed with communications about the sparrow, pro and con. Whether he is or is not driving out of the land birds more charming than himself is a matter upon which we do not editorially venture an opinion. What concerns us more nearly is the danger that he will drive communications other than those relating to himself out of our pages, and this we are bound to prevent. The sparrow has occupied so much space in our two last numbers that we feel bound to exclude him from this; next month, however, we propose to publish a selection from the numcrous communications we have received about him.

Elephants and Ivory.—Mr. J. B. Nicholson sends us the following extract from Schweinfurth's Heart of Africa, vol. i., p. 207:—"The destruction is carried on by wholesale. Thousands of huntsmen and drivers are gathered together from far and wide by means of signals sounded on the huge wooden drums. Everyone who is capable of bearing arms at all is converted into a huntsman; just as everyone becomes a soldier when national need demands. No resource is left for escape for the poor brutes. Driven by the flames into masses, they huddle together, young and old; they cover their bodies with grass, on which they pump water from their trunks as long as they can, but all in vain. They are ultimately either suffocated by clouds of smoke, or overpowered by the heat, and at last, and ere long, they succumb to the cruel fate that has been designed for them by ungrateful man. The coup-de-grâce may now and then be given them by the blow of some ready lance, but, too often, as may be seen by the tusks that are bought, the miserable beasts must have perished in the agonies of a death by fire. A war of annihilation is this, in which neither young nor old, neither female nor male is spared, and in its indiscriminate slaughter compels us to ask and answer the question 'Cui boto !' No reply seems possible but what is given by our billiard balls, our pianoforte keys, our combs and fans, and other unimportant articles of this kind. No wonder, therefore, if this noble creature, whose services might be so invaluable to man, should even, perhaps during our own generation, become as extinct as the ure-ox, the sea-cow, or the dodo."

Water for Birds.—More than once, a plea for placing pans of water about our gardens has been urged in NATURE NOTES. It may be interesting to some to know how very much this boon is appreciated by our birds here. We have large earthenware saucers which we keep filled with water in view of our windows, and they are in constant use both for drinking and washing by all sorts and conditions of birds—robins and thrushes seeming the most cleanly of all. While I am writing this, one of the latter has been having a good tubbing, and we have often

remarked that they seem to enjoy their tub while it is raining more than at other times. I have hardly ever seen a tomtit wash, though they much appreciate the cocoanuts we hang up for them. I think the pans of water keep birds from taking fruit. We had lots of strawberries last year, which we do not net, and we did not find the birds took them, though we would willingly have allowed them a share.

Horsell Vicarage, Woking.

ROSE TURLE.

"A Bachelor's Christmas Day."—Miss Anderson, who wrote in October, 1890, for a copy of "A Bachelor's Christmas Day," will oblige by sending her address to the Editor. It has been mislaid.

Grasses.—"Consider what we owe merely to the meadow grass, to the covering of the dark ground by that glorious enamel, by the companies of those soft, and countless, and peaceful spears. The fields! Follow forth but for a little time the thoughts of all that we ought to recognise in these words. All spring and summer is in them—the walks by silent, scented paths, the rests in noonday heat, the joy of herds and flocks, the power of all shepherd life and meditation, the life of sunlight upon the world falling in emerald streaks, and falling in soft blue shadows where else it would have struck upon the dark mould, or scorching dust. . . . Go out in the spring-time among the meadows that slope from the shores of the Swiss lakes to the roots of their lower mountains. There, mingled with the taller gentians, and the white narcissus, the grass grows deep and free, and as you follow the winding mountain path, beneath arching boughs all veiled with blossom—paths that for ever droop and rise over green banks and mounds sweeping down in scented undulation steep to the blue water, studded here and there with new-mown heaps, filling all the air with fainter sweetness—look up towards the higher hills, where the waves of everlasting green roll silently into their long inlets among the shadows of the pines, and we may perhaps at last know the meaning of those quiet words of the 147th Psalm, 'He maketh grass to grow upon the mountains.'"—Russkin's "Moiern Painters."

NATURAL HISTORY NOTES AND QUERIES.

A Scheming Weasel .- A deep snow affords great interest to a winter's walk, as one is able to track the various wild animals and to notice the difference in the foot-prints, as also the methods of locomotion, such as walking, jumping, and cantering. It also enables one to see what amount of vermin a locality contains. A practised eye will be able to note the difference in the following: foxes, liares, rabbits, hedgehogs, stoats, weasels, rats, moles, mice of various kinds, shrews, and frogs. A few days ago I was out in the fields in the snow when I came across the track of a weasel, and following it up a short distance, I was much interested to find a piece of scheming worthy of the higher animalman. The fox has a reputation for cunning devices to enable it to procure food, but in all my experience I have never been able to find a case of a definite character to compare with this weasel. Following the trail from a hedge into the open field, I noticed it had suddenly disappeared under the snow, and after looking about I found it had reappeared some yards off, only for an instant, then under the surface a longer distance—probably eight or ten yords; then up again until I came across the calculating schemer's reason for this. It had evidently got aware that a bird-probably a woodpecker-was pecking for food in the ground, and while busily engaged in the snow the weasel had tried to take advantage by burrowing instead of approaching on the surface, but it missed its prey by about fifteen inches. Having missed the bird it went back to the hedge on the surface of the snow.

Astroood Bank. J. HIAM.

A Martin in January.—It may interest your readers to hear that a martin was seen in the Keswick Vale on Monday last, January 11th. I have closely interrogated the lads who saw it, and am somewhat unwillingly obliged to think that it was a case of disturbed hibernation, if martins do hibernate. But I send you the note of the fact, so far as I can make head or tail of it, and must add that the boys were not skilled observers—indeed, one of them asserted he thought

it was a swallow at first. That it was of the "swallow" tribe it seems pretty clear. The bird was weak, and could with difficulty rise from the ground on which it settled by the side of the river Grata, and this enabled the lads to get close to it.

H. B. RAWNSLEY.

An Early Brood.—In the *Ulverston News* of January 9th appears the following as denoting the mildness of the season in this portion of Westmoreland. The postman at Arnside (Mr. Thompson) whilst on his round on December 31st "found a nest of young starlings in full vigour." These are really early broad.

Late Birds.—At page 17 it is said that martins were seen flying about the cliffs to the east of Brighton as late this last autumn as November 21st. Twenty years ago I saw some there myself in the first week of December. It may be that they always linger in that neighbourhood a little longer than at Hastings, where I saw them in great numbers last Novemher, but not after the first week. If Selbornians who live along our southern coast would yearly keep a list of their feathered visitors, and carefully record the dates of their arrival and departure, perhaps we might learn somewhat of the system of migration, upon which we are at present not a little in the dark.

HENRY SILVER.

Martins and Sparrows.—In confirmation of the statement by Miss Isabel Fry (p. 17), I can say that on the 23rd November, a cold foggy day, I saw several sand martins hawking up and down in the High Street of Lewes. As regards the persecution and driving away of the colonies of house martins by sparrows, I may add that this is certainly the case here, and was so at Saltburn-by-the-Sea in the North Riding, where I formerly lived. Whether this is tending to the house martins becoming scarcer in England or no, remains to he seen; but there can be no doubt that it is driving them away from "the busy hum of men," and it is mentioned as a fact by Mr. Howard Saunders in his British Birds. It may lead them to build more than they now do in cliffs and overhanging banks; but those of us who live near towns will lose the pleasure of watching their pretty ways.

E. GROVE.

The Robin's Song.—Some of your readers have doubtless noticed the two entirely different songs of the robin; we are all well acquainted with his ordinary song, a plaintive melody sung from the tops of trees or bushes all through the winter, with a dying fall. But there is his special love song also, much sweeter, not so loudly proclaimed, and very soft. I was sitting quietly in my garden in the spring and saw a robin pitch very near his mate, who was perched on the back of a chair. He went close up to her, his bill nearly touching hers, and he poured cut the prettiest love song I ever heard, quite different from his usual every-day warble. On another occasion a very tame robin came into the window of the drawing room, and alighted on a chiffonier which had looking-glass at the back. He saw his reflection in the glass, gently went close up to it, and sang this very same love song in the sweetest way possible. All the songs of birds are love songs or calls; this was not a call, but a wooing of the gentlest and most persuasive kind. It is not likely to be heard or noticed often, when the ordinary song of the robin is so well known and so loud.

W. F. COLLIER.

The Glastonbury Thorn (Crategus Oxycantha, var. precox).—Christmas has arrived, and as I promised in Nature Notes for 1891, p. 156, to observe and report on the behaviour of the Bath specimen of this plant at this season, I proceed to do so. The tree to which I referred in my former note is in flower now, and as the best proof of this is a view of the same or a portion thereof, I send you with this part of a branch bearing both flowers and fruit. The fruit, I need scarcely add, is the result of the spring flowering. Mr. Milburn, the superintendent of the Broome Botanical Garden, has supplied me with the specimen enclosed, as I did not like to interfere with the tree. For the information of those who would like to view the tree, I may add that it grows nearly opposite the band stand, on the north side of the avenue in Victoria Park. There are two more examples of this plant in other parts of the park (not so easily found), which Mr. Milburn has informed me are also flowering at the present time.

Bath, 24th Dec., 1891.

Birds and their Ways.—An amusing incident was witnessed by a friend, who, like myself, is interested in anything relating to natural history. Whilst working at a house called the Manor Farm, Worksop, Notts, during last summer, he observed a noise and great commotion amongst the swallows in the stable yard, and thought he would try and find out the reason of the commotion, when he observed a jackdaw trying to plunder the nests of some swallows, but was apparently compelled to abandon the project, for all the swallows flew around him, as they may be often seen doing at anything which they dislike, such as a cat, hawk, or owl, buffeting him about until he appeared to have had enough, and flew away with all the swallows after him. No sooner had he done so when another jackdaw (his mate, no doubt) watching from an adjacent tree, came quickly and perched itself upon one of the dormer windows, popped down, took a young bird out of the nest, and before the swallows had time to molest him was gone. The same dodge was attempted and partly carried out the following day, but some men coming into the yard with a horse-mowing machine, they were frustrated in the attempt. It seems very much as if it was a "planned job" between the jackdaws, who were a pair, and had young close by. This incident recalls to my remembrance a scene which I saw when I was not more than between nine and ten years old, at Steeple Claydon, Bucks. In the gable end of an old thatched cottage in the village some sparrows had hatched and reared their young, when one day I observed a fine and beautiful jay (not a common thing to see a bird of this species in a village), which seemed to be lurking ahout as if after no good. After a short time some sparrows flew round him, which appeared to frighten him. This went on for a few minutes, when quick as thought he flew back to the gable end of the house, and before the sparrows could collect their senses, took from under the eaves of the thatched house a young and fledged sparrow (the young bird crying piteously) in his claws, flying away in the direction of the large woods less than three miles distant.

Hampstead, N.W. JAMES E. WHITING.

OFFICIAL NOTICES: WORK OF BRANCHES, &c.

OUR VOLUMES.—We desire to call the special attention of our readers to the volumes of NATURE NOTES for 1890 and 1891, which may be obtained at the offices of the Society, 9, Adam Street, Adelphi, W.C., at the cost of three shillings each, or by post, three shillings and fivepence. By the variety and interest of their contents these volumes are admirably adapted for the school or parish library, and we would urge upon our readers not to neglect so excellent a means for advancing the interests which they have at heart. Cases for binding the numbers for 1890 and 1891 may be obtained from the Secretary at the above address, price is, each; or the numbers will be bound and the case supplied by Messrs. Bale & Sons, 87, Great Titchfield Street, W., at the cost of 1s. 3d., or with gilt edges, The name and address of the sender, with stamps to the above amount, is. iod. should be forwarded with the magazines in order to prevent mistakes or delay.

Miss H. C. Manson writes:—"It has occurred to me that the numbers for

1891 might be liked in some country parish for the lending library. If you know of any clergyman who would care to have them, I will have them bound in a case and forward them to any given address." In this case the Secretary should be communicated with.

Miss M. C. Huish, of Torquay, regularly returns her back numbers for redistribution.

Such good examples might be imitated with advantage.

We have received the report of the second annual meeting of the Birmingham and Midland Branch, held in the Midland Institute, on the 16th of October last, and regret that we can do no more than refer to it. The meeting was very successful and well attended. Mr. Lawson Tait offered to the Society a donation of £10, to be used in distributing literature to children of the Board Schools—an example which might well be followed on a smaller scale by many branches, although there is no reason why Selbornian teaching should be restricted to Board Mrs. W. A. Smith has resigned the hon, sccretaryship of this Branch, and is succeeded by Mrs. Dixon, 99, Harborne Road, Edgbaston.

Members of the Kensington Branch are requested to send their subscriptions

for 1892 to Thomas T. Greg, Esq., 15, Clifford's Inn, London, E.C.

A meeting of the Forth Branch was held on December 2nd, at 45, Inverleith Row, Edinburgh, the house of the Hon. Secretary, Miss Waterston. Interesting papers were read by Miss M. M. Black on "An Autumn Posy," and by Miss Miller on "Nature in Browning's Poetry."

At the Council meeting, held on December 2nd, letters of resignation were received from Meeting, held on December 2nd, letters of resignation were

received from Miss Wallis, hon. sec. Lower Thames Valley Branch; Miss Harrison, hon. sec. North Kent Branch; and Miss Rawson, hon. sec. Lakes Branch; and the thanks of the Council were voted for the services these ladies had rendered to the Society. The Council would be glad to hear of anyone willing to undertake the duties of hon, sec. of the North Kent Branch.

THE SELBORNE SOCIETY.

THE object of the Selborne Society is to unite lovers of Nature for the following purposes :--

The Protection from unnecessary destruction of Wild Birds, Animals and

The Protection of places and objects of Antiquarian Interest or Natural Beauty; The Promotion of the Study of Natural History.

The minimum Annual Subscription (which entitles the subscriber to a monthly copy of the Society's Magazine) is 2s. 6d.

All particulars as to membership may be obtained from the Secretary of the Selborne Society, 9, Adam Street, Adelphi.

THE MYLES MEMORIAL FUND.

Mrs. Percy Myles desires to express her sincere gratitude for the many very kind letters of condolence she has received from members of the Selborne Society, and also for the practical sympathy so generously shown by the large sum contributed by Selbornians to the "Myles Memorial Fund."

NOTICE TO CORRESPONDENTS.

Contributions for any number should reach the Editor, JAMES BRITTEN, F.L.S., 18, West Square, London, S.E., not later than the 15th of the month.

When it is particularly requested, MSS, not accepted will be returned, if

stamps sufficient to pay the postage are sent for that purpose. Queries on any points connected with Botany or Zoology will be answered if possible, and advice will be given as to the best books for students in any department of Natural Science; but all questions must be accompanied by the names and addresses of the writers, not for publication, if this is not desired.

Specimens sent for identification will be named, if sent carefully packed and in good condition, but we cannot undertake to return any specimens.

Several books stand over for notice. Publishers will confer a favour upon our readers if they will always state the *price* of any volumes they may send, in order that it may be quoted in the notice. This addition is much appreciated by our readers, and is desirable in the interest of the volumes themselves.

It is particularly requested that subscriptions and letters connected with business should not be forwarded to the Editor, but to the Secretary of the Selborne Society, 9, Adam Street, Adelphi. Editorial communications and books for re-

view should be addressed to Mr. Britten, as above.

Mature Motes:

The Selborne Society's Magazine.

No. 27.

MARCH, 1892.

Vol. III.

THE NEW FOREST IN DANGER.

URING the past month the nature-loving public has been deeply stirred by the proposal on the part of the War Office to seize a portion of the New Forest for the purpose of constructing a new rifle range, and for military purposes generally. Mr. Herbert Goss, Secretary of the Entomological Society, has at once set to work to elicit the opinion of leading men of science and art, politicians of all schools, influential persons in various positions, and of nature-lovers of all kinds, and his protest has been signed by a very large number of representatives of all these classes.

The decision of the matter is still pending, and we reserve until our next issue a summary of the facts of the case. Meanwhile, we would urge upon every Selbornian the absolute duty of watchfulness, not only in large matters like this, but in small ones. The amount of grabbing of foot-paths and roadside strips, of waste and common land, that has been allowed to go on unchecked, and without even a protest, during the last hundred years is enough to bring down upon the nation the curse pronounced of old upon those who remove their neighbour's landmark; and the robbery is still going on. Every country Selbornian should regard it as an imperative duty to be on the look-out for malpractices of this kind. The cry of "The land for the people," may be regarded as the shibboleth of a certain class of politicians; but there can be no difference of opinion among thinking persons as to the desirability that the people should cling to what is already theirs.

We have received the Report of the National Footpath Society, of which space compels us to defer a notice. But we would call upon our country readers to watch with jealous eyes any attempt at interference with public rights in the matter either of common land or public paths. There may, of course,

be cases where both the public and the private owner of land may gain by the diversion of a foot-path, or by the substitution of a new for an old right of way. But even in such cases the concession, if allowed, should not be lightly made, and in very many cases it should not be made at all.

THE SPARROW-FOR AND AGAINST.

[In accordance with our note on p. 36 we now publish a selection from the communications we have received on this subject. Miss Isabel Fry could have little anticipated that her short note on the sparrow would have stirred up such violent feelings, expressed in some instances with equal—and, we think, regrettable—violence.

We have no intention of expressing an editorial opinion one way or other, but we must be allowed to point out that the line taken by some is incapable of logical defence. Thus one lady

writes:-

"My idea of the Selborne Society is that it especially advocates respect and reverence for Nature; but surely no true reverence is shown by picking and choosing as to what shall, or shall not, be deemed worthy of admiration—or of death! All true lovers of Nature find something to admire in every one of her works; it is only when their perfection is spoiled by art (so-called) and over-cultivation, that any of them cease to be

pleasing."

Now it is obvious that if this line of argument were carried into practice, life would not only not be worth living, but even impossible. The domestic flea, for example, has his admirers. "Don't you like fleas?" said an enthusiastic old lady, "I do; I think them such cheerful little creatures!" and the naturalist finds in their structure, as in that of all created objects, matter for study and admiration. Are we, then, not to kill fleas? Many other examples will occur to the reflective reader, of creatures which it is impossible to encourage; we should like to know, for example, what is to be done with "rats and mice and such small deer"? Surely the use of mouse-traps is not incompatible with Selbornian views?

Speaking as Londoners, where birds are so few, we confess to a liking for sparrows as one of the few links which bind us to the nature-world outside, and we venture to differ from Mr. Aubrey Edwards when he says they are not pretty. The sparrow and the street boy are two of the most familiar features of London life, having indeed many points in common; and the

absence of either of them would be felt.

We will now let our correspondents speak for themselves. We have been compelled by the exigencies of space to abbreviate some of the communications, but we have omitted no

argument or fact of importance on either side. We have, however, left out the protests made by more than one writer against the language used by the Rev. F. O. Morris with regard to Mr. Aubrey Edwards. In these protests we entirely concur, and it was with considerable hesitation that we allowed Mr. Morris's strictures to appear. We hope that our correspondents will remember that strong language is not necessarily an evidence of forcible argument, and that it was a "weak case" which elicited the advice:—"Abuse the plaintiff's attorney."—ED.]

As I have been a close observer of the habits of birds from my earliest childhood until now—a term of considerably over half a century—may I be allowed to make a few remarks regarding the sparrow? That he is a very pugnacious bird everybody knows. In "A Chronicle of London," 1367-1370, among other matters noted, is:-" Also in this yere was grete and stronge batailes of sparroes in Engelond in diverses places, whereof the bodyes were founden in the feldes dede withoughte nombre." And this fighting propensity seems to have lasted until now. In Mr. Morris's British Birds (p. 273) he describes how one or more attacked successfully a blackbird, yet in his reply to Mr. Edwards (p. 9), he says: "But never once have I known him interfere with one of those other birds, except in the case of a few martens' nests [italics mine], and this only some three times in ten times three years or more, nor even then were these driven away, they only built other nests." This may be so, but when martens are late hatched they are often unable to migrate. This I have observed.

Further, I know several localities where martens used to build under the eaves of old farm houses, barns, and sheds, and I have found that the sparrows had driven all the martens away, and now there does not exist a single nest where I used to see numbers when the farmers had sparrow-clubs in the neighbourhood. I visited a friend last year who told me the sparrows had driven away all his martens. Last year, also, when at East Grinstead, I saw four nests of martens in the front of one house. As I took a pleasure in watching the habits of the birds, I spent, much time doing so. I saw, to my great annoyance, in spite of my throwing stones at them, the sparrows take possession of two of the nests and cast out the eggs—one set being partly hatched. I might largely add to the foregoing evidence, but space is limited. By the way, I must mention that I put up two boxes close to my window for the starlings to build in, so that I could have them under close observation. They took to these boxes, built their nests, when one day I saw a cock sparrow looking out of one. He went in and then began to turn out the nests and some eggs of the starlings, being helped by two hens. The starlings came back and fought them, but after awhile the sparrows conquered, and the starlings were driven off, and then to my astonishment the sparrows built two nests, one in each box,

the one cock helping each hen to build alternately. As I did not want the sparrows there but starlings, I turned out the nests. In spite of all Mr. F. O. Morris's indignation and the epithets that he bestows on Mr. Edwards, I must say—and that from actual observation after a number of years—that I entirely side with Mr. Edwards as regards that most useful and homely bird,

the marten, and also generally in his statements.

Now as to the food given to the young sparrows, I have taken much trouble to ascertain this. When very young they are fed on aphis, if it is to be got-if not, young buds of the plum and gooseberry and other trees are taken. I was told (as I expected) that all these buds had insects in them, so I netted some trees and bushes here and there, and limed some others. Those not netted had scarcely any fruit, those limed some quantity, and the netted ones an excellent crop. I may add that all the trees were "set for bloom" equally well. The sparrows also feed their young on seeds—radish, parsnip, and wheat or grain from the poultry yards—in proof of which I refer the reader to Mr. Morris's British Birds (vol. ii. p. 285). In fact I was obliged to give up feeding my poultry on wheat, the sparrows coming in such numbers. What are the wire sparrow guards for peas sold for if not to protect the young growths from the sparrows? The sparrows also picked off all the flowers of my yellow crocus as soon as they appeared, and every year even until this last—they picked off all my primrose blooms. I have watched them doing it times without number. In fact, in the garden they do more actual mischief than any other halfdozen birds that I know put together, with the exception of the bullfinch. I did not shoot my sparrows; they congregated in the laurels. I bought squibs, crackers, &c., fired off a gun under them; not a bit of it, back they came and roosted as before; they would not go. I would very gladly be rid of them, though so much is said in their favour, for the harm they do in many ways far exceeds the good.

I feed numbers of birds here every day, and I note frequently

I feed numbers of birds here every day, and I note frequently the sparrows driving away the blue tits and the blackbirds. They attack the thrushes. I have seen them drive away a nuthatch that came, and have frequent quarrels with my starlings. The poor little hedge-accentor dares not come for any food until the sparrows are gone, nor often the robins, for two or three will attack him at one time, then his chance of defence is gone.

HARRISON WEIR, F.R.H.S.

Sevenoaks.

P.S.—Miss Isabel Fry appears to think that the sparrow-hawk feeds entirely on sparrows. Would that it were so! 'Tis a beautiful bird, this sparrow-hawk, and I have derived much pleasure in watching them in their wild state; but when they built a nest near my grounds, and reared a number of young ones on my young chicken, taking over twenty of them,

I rose in anger and had one of the young ones shot and hung up; whereupon all the rest, to my great satisfaction, left the neighbourhood.

I was glad to read Mr. Aubrey Edwards' indictment of the sparrow, which I think is not a bit too strong. I have watched the habits of this bird for over forty years, and I regret to say that the little good it does is more than counterbalanced by its misdeeds. I admit that sparrows at certain seasons consume the seeds of the knot-grass (Polygonum aviculare), and that during the very early stage of their nestlings' existence they feed them with aphides and other insects; but in a week or so this diet is changed for peas and young wheat, when procurable. Who has ever seen the sparrow feeding on the wireworm, turnip-nigger, or gooseberry grub? One morning in the middle of June, two summers ago, I saw thousands of the larvæ of the small ermine moth (Yponomeuta padella), which had just denuded a fine thorn in a London square of every leaf, and were letting themselves down by gossamer-like threads on to the railings of the enclosure and marching off to another tree; but although their line extended for many yards, and plenty of sparrows were sitting on the railings, I never saw them attempt to eat one. They were simply looking after the corn on the neighbouring cab-stand!

The sparrow is not a particularly early riser; the greenfinch is up and has done an hour's work before it will even utter its sleepy chirp, and it wakes up in time to get a good meal when the poultry are first fed, and then loafs about the house and buildings until it can get another meal gratis. In August, when the last of their brood—of which they often have three—are ready to fly, they go off en famille to the ripe corn, and are joined by the town sparrows, who annually take their summer outing. What gardener, too, in spring has not had his primroses and

crocuses plucked off in sheer wantonness by them?

Here, as in many places, we feed the small birds all the year round, but the sparrows greatly interfere with them, and drive away many of our sweetest songsters of the soft-billed species; and it is only after the sparrows have gone to roost that the robins and hedge-sparrows can really enjoy their meal.

Another great argument against the sparrow is the unanimous outcry made against it whenever imported into our colonies.

In your January number are two short extracts in its favour, from the "Birds' Protection Committee" Report. This is a volume of over 200 pages, and is very good reading; out of the thirty-eight experts and naturalists examined a vast majority declared against the sparrow.

Since the operation of the "Poisoned Grain Act" the sparrow has greatly increased all over the country, and has even taken to build in the hedges; it is a corn-feeder all the year round, a parasite upon the farmer, and must be kept within

due bounds.

I think Mr. Edwards is much too hard on the sparrows; they may have many of the faults he mentions, but I certainly think they have also more virtues than he gives them credit for. What could fill the place of sparrows about a town house? How companionable they are, how cheerfully do they take life! There is a hardy robustness about them, and an apparent determination on their part to do their work in life, which I have always felt helpful to myself. The front of our house is covered with ivy; here year after year they build their nests and breed, and I know, were they destroyed, we should all sorely miss the cheerful little residents there. For many years also I have regularly fed the birds in the winter, and have always found the sparrows interfere very little with the others. The robins, chaffinches and tom-tits (dear little birds that they are) all squabble for the food, but the sparrows seem generally to keep apart, and to exercise that virtue—sometimes, alas! too rare—of minding their own business. I love all the birds about, and should be very sorry to see even the dowdy little sparrows destroyed.

Newtown, Waterford.

HANNAH F. WHITE.

Mr. Morris gives his sparrow a character that is not borne by the Herefordshire sparrow. Few people have had better opportunity of observing the habits of this mischievous bird than my brother and myself in boyhood's days in our vicarage home, and I cordially endorse every word of my brother's "indictment."

We waged a fierce war against the sparrows in the name of those far prettier and weaker birds that could not fight for themselves. In our village (Orleton), a very city of birds, each day there rose the cry "driven from home." But the point to be noticed is the rapid increase in numbers. A short time ago I was visiting Salt Lake City. The authorities there, thinking to get rid of a plague of caterpillars in the cotton trees that line the streets, sent to England for five sparrows. A man assured me that in three years there were five millions. The plague has now a different form, for the sparrows took kindly to customs prevailing in Mormon circles.

For my part I could put up with the Rev. J. G. Wood's sparrow, but I cannot defend the sparrow that has lived next

door to me for twenty-five years.

Petersfield.

Cyril Edwards.

Concerning martens and sparrows, the following note may be interesting to your readers. I can vouch for the accuracy of it, as it occurred in Kings Lynn, almost in front of my window, and was daily under my observation.

and was daily under my observation.

In the spring and summer of the year 1890 a pair of house martens made repeated attempts to complete their nest and rear a family in one of the top corners of a blank or bricked-up window. Each attempt, at an earlier or later stage, was frustrated by children throwing stones and breaking the nest down. Again and again this occurred, until the owner of the house had two pieces of wood fixed up so as to hide and protect the nest—leaving an entrance and exit for the birds at the end. The old birds seemed to realise this new structure was for their special benefit, and instead of being frightened away by it they commenced at once to finish their nest in the inside, where the brood were afterwards safely

brought up.

In the early part of the following spring a male sparrow might be seen sitting on the spout directly over the site of the martens' old nest, calling incessantly to his mate, and ready to do battle with any other male sparrow that ventured too near his now sacred ground. A few weeks later, and the protection put up for the benefit of the martens contained the clumsy, strawy nest of the sparrows—and a very snug place it was too. And all this happened before the martens thought of leaving their winter quarters. I watched intently for their arrival, expecting to see at least some attempt to regain their rightful possession, but I was disappointed. They resigned themselves to their fate, and after spending two or three days in flying about their old quarters, sought fresh grounds. I do not think they left the neighbourhood, as a pair built in a new situation in the next street.

I believe that the number of cases where the martens are "actually driven out" of their nests by sparrows is very greatly exaggerated. Certainly the martens seem to be decreasing as builders on human dwellings. But are the sparrows the sole cause? On the cliffs in Wharfedale (Yorkshire) the martens

seem to me to be increasing.

I do not think it is generally known that if a house marten's nest be pulled down (no matter what it may contain) it is almost invariably built up again in the same place. If, however, the contents be taken and the nest left standing intact, the birds are

sure to desert it and build another elsewhere.

The sparrow, in its ever-increasing numbers, is certainly a pest, and a great curse to the agriculturist. If it were reduced to its normal numbers it might be of use to its present sufferers. The sparrows in the towns—while they keep to the towns—are really useful birds. They clear away many minute particles of matter which would otherwise decompose and make the atmosphere more impure. Our scavengers and sanitary systems can free us of the larger masses, but for the numerous smaller particles we must call in the help of the smaller animals.

HARRY B. BOOTH.

Kings Lynn.

In this short reply to some of the correspondents in your last issue, I must begin by entreating Selbornians—especially the ladies—not to be carried away by sentiment in favour of the sparrow, and to remember that it is only of the common house-

sparrow that I am treating. He must not be mixed up with the other birds, as he seems to have been in the evidence of the late Rev. J. G. Wood, which is of small value, as he himself says therein: "I have not done very much with the sparrow."

Mr. Rowland H. Hill tells us that the sparrow takes a back seat in favour of the robin, and I have often noticed the apparent politeness. It is due to the fact that the sparrow has the sense of caution largely developed, and that the robin has next to none. Let the sparrows be satisfied that the coast is clear, and that there is nothing to fear, and scant courtesy will be shown to the robin, who will quickly be sent to the right-about. This stands to reason, for most birds are entirely selfish, except as regards some of their relations, and the weak have to give way to the strong. To another of Mr. R. H. Hill's points it will be sufficient reply to ask, Who made the venomous snakes, and the bacillus of influenza, cholera, rabies, &c.? I attribute no fault except to man, who has upset the balance of nature and allowed the sparrows to increase to an inordinate extent, and whose duty it is, in self-defence and in defence of the better birds, to reduce its numbers within the former limits.

The plain answer to Mr. F. O. Morris' "very plain question" is this: That the process of the elimination of the marten by the sparrow has not been going on for thousands of years to any appreciable extent, because the natural enemies of the sparrow, the hawks, weasels, and (probably) owls, kept his numbers within bounds, and the old thatched barns afforded him ample and comfortable quarters. It is only within the last thirty or forty years, and more especially within the last ten, that the sparrows have multiplied, the thatched roofs decreased, and the martens suffered

deprivation to such a deplorable extent.

Mr. Morris does make one point against me, and that is the quotation from Mr. Harting's evidence, showing that one pair of sparrows had destroyed over 700 cockchafers for a single brood. This is certainly in that family's favour, but is only a single instance, and probably occurred under exceptional circumstances. But how strange that Mr. Morris should urge it! Good gracious! more than 700 of these beautiful beetles—and are they not beautiful?—cruelly sacrificed, their wings ruthlessly torn off their writhing bodies, their legs pulled out, and their helpless forms deliberately pecked to pieces and swallowed warm. It is horrible—and this to have occurred more than 700 times in a single season! And these cockchafers are creatures that the Selbornian can afford to love in moderate numbers, for in this part of the country at all events they hardly cross his line, though to a market gardener it is another matter. I like to watch them flying round the nut-trees on a warm summer's evening, and to listen to the soft hum of their wings. An active boy with a hooked stick and a bottle will soon clear a garden of cockchafers, and can put them to a merciful death; the sparrow is not indispensable on their account.

Six or seven martens' nests are usually to be found under the eaves of this house, and unless I keep a very sharp look out the sparrows take them all. The martens build again and again, and when they do succeed in keeping their own the brood is sometimes so late that it perishes from the cold on leaving the nest. Surely this robbery ought not to be allowed, and the sparrows ought to be kept under. No "farrago of fancy and fiction and forced facts" is the book by Messrs. Gurney, Coues, and Russell, but sober truth, patiently gathered and carefully tabulated.

Let no Selbornian be afraid to face the truth—the sparrow is in most places increasing rapidly, and in large numbers is incompatible with other better and more beautiful birds. The hawks and the weasels are gone—they were present in Waterton's Park—and man, who banished them, must do their work.

AUBREY EDWARDS.

I reckon the sparrow among my friends, and nine-tenths of the charges brought against him are, according to my observation, carried on since I was a boy of 12 years old—and I am now 78—are not founded on fact. Nothing can be more grotesquely funny to a man like myself, who has lived so long among them and their reputed victims, than the allegation that they drive away the martens. As to the other birds, alleged as victimised, the charge is too silly. The sand marten is just as scarce here as the house marten, in comparison with former times, and the swallow and swift more so still, and whatever reason there is for talking of the driving away of the house marten by the sparrow, it would be intensely difficult to prove that it did not hold good for the other three birds named also. One would think that any wiseacre might be aware that if a marten-and I am sure the total number is nothing like one per cent., even if one in five hundred -if dispossessed by the "ruffian" sparrow of its nest, would be constrained by nature to go and build another elsewhere, and that being so, the total number of young martens of the year would not be diminished by reason of the buccaneering propensities of the sparrow. As to which, I should not like to have to swear that I have ever seen half-a-dozen martens' nests appropriated, whether as derelicts, or otherwise, by sparrows for nesting purposes, in all my time.

J. C. ATKINSON.

Danby in Cleveland.

AN OPEN SPACE FOR DEPTFORD.

HE belief in the old saying that "the streets of London are paved with gold" dies hard, and its almost implicit acceptance among the rustics of the home counties and of the East of England has swelled the district known as the London Basin with an almost overflowing population. If some of the pretty rural spots twelve or fourteen miles out of town are in jeopardy of falling into the hands of the builder for ever, owing to the increased value of land per acre, it is little wonder that the fields and hedgerows that lie closest to the crowded streets share the common fate of being swept away, to be covered with small houses for the accommodation of the aforesaid rustics, who pour into London and there dwell for the remainder of their too often shortened lives. Yet, indeed, many such a place has escaped the destruction of its natural beauty, and, what is far better still, has been saved to be a source of happiness to the dwellers around. As instances of such there need only be mentioned Parliament Hill and Fields, part of Highgate Wood, Finsbury, Clissold and Waterlow Parks, and Hackney Down in the North and North East of London; and Brockwell Park in the South. Every one of these would have been partially, if not wholly, built over by this time if it had not been for the action of energetic societies

and the munificence and generosity of individuals.

Why should not the Hilly Fields of Brockley be included in that list? During the last few months—though indeed it lias been known and talked about for more than a year-the public of London have had it impressed upon them that this sole remaining open space in a crowded district in the South-East of the Metropolis is within a little of being handed over to the builder. Miss Octavia Hill, one of the most earnest and practical workers on behalf of the Open Spaces movement London has ever had, says in a forcible and convincing letter to the Daily Graphic:—"Of the £42,000 which it will cost to purchase this hilly ground for ever for the people, by far the larger part is, the Committee believe, practically secured, thanks to donors in the locality, the Greenwich District Board, and the London County Council. Surely Londoners in general will not lose so splendid an opportunity for benefiting their fellowcitizens for all time to come. If the land is to be secured, £5,980 must be immediately promised. I shall myself be delighted to receive promises, as will Mr. Walter Derham, 76, Lancaster Gate, Hon. Secretary to the Joint Committee representing the Commons Preservation Society, the Kyrle Society, the Metropolitan Gardens Association, and residents in the neighbourhood. No money will be called up unless the scheme is carried through." It would be a thousand pities that, when over £36,000 have been promised, the land should be lost for the want of the remaining one-seventh of the purchase money.

If, in round numbers, 120,000 people were to guarantee one shilling each, or 1,500,000 (rather more than one quarter the population of Greater London) one penny each, more than the remaining amount needed would be forthcoming, and the Hilly

Fields would be saved to-morrow.

We levy rates for the maintenance of our Board Schools and Public Libraries, from the conviction that both are necessary for the intellectual and, let it be hoped, for the moral well-being of the rising generation. Yet to save open spaces for the enjoyment of the surrounding inhabitants is an object just as praiseworthy, just as necessary-supremely so in a case like the present, in which the rescue of the Hilly Fields (to quote Miss Hill again) "will benefit a district she has known well for some years, and which she considers more forlorn of all influences and agencies for good than anywhere she has laboured." One would hardly care to promote the idea that a compulsory rate should be levied for the maintenance of open spaces as in the case of the above-mentioned institutions-Public Libraries and Board Schools; but it seems strange indeed that the Imperial Government, which yearly by vote of Parliament bestows thousands of pounds upon the maintenance of highly paid sinecures, should not long ago have shown its interest in the movement by directly aiding in the purchase of these ever-needed parks and recreation grounds. It would hardly be fair to institute a comparison between two countries and two governments in many ways so diverse as those of England and the United States of America, but surely the United States government showed a better appreciation of the principle when it handed over the territory now known as the Yellowstone National Park to be a gigantic playground for the American people.

But the failings of a government do not absolve wealthy individuals from apathy in a matter like this, and many such must surely be numbered among the readers of Miss Hill's appeal. When we think how easily this appeal could have been already answered by a few who have more money than they know what to do with, their neglect of it means nothing less than failure of duty to their poorer fellow-citizens. At the same time all praise is due to the generous donors who by their contributions have left so comparatively small a deficit to be made up. Yet all can help alike, poor as well as rich. But, as said above, if the thing is to be done it must be done with all speed, as "the time when we shall have the option of purchase is just expiring." The inhabitants of the streets and courts of Deptford need fresh air and change of scene just as much as the dwellers round our London parks. Let those (if there be any) who think otherwise reflect, and ask themselves whether the generation that is being reared in that crowded, sordid neighbourhood will be the worse or the better if the breezy expanse of the Hilly Fields continue such for ever. To that question there can be but one answer.

ARCHIBALD CLARKE.

THE TENDER HEART.*

SHE gazed upon the burnished brace Of plump, ruffed grouse he showed with pride;

Angelic grief was in her face,-

"How could you do it, dear?" she sighed; "The poor, pathetic, moveless wings-The songs all hushed—O cruel shame!" Said he, "The partridge never sings:" Said she, "The sin is all the same.

"You men are savage through and through! A boy is always bringing in Some strings of birds' eggs, white or blue, Or butterfly upon a pin; The angle-worm in anguish dies, Impaled, the pretty trout to tease"— "My own, I fish for trout with flies."

"Don't wander from the question, please."

She quoted Burns's 'Wounded Hare,' And certain burning lines of Blake's, And Ruskin on the fowls of air, And Coleridge on the water-snakes; At Emerson's 'Forbearance' he Began to feel his will benumbed, At Browning's 'Donald' utterly

"O gentlest of all gentle girls," He thought, "beneath the blessed sun!" He saw her lashes hung with pearls, And swore to give away his gun. She smiled to find her point was gained, And went, with happy parting words, (He subsequently ascertained) To trim her hat with humming-birds.

His soul surrendered and succumbed.

[* We found these lines among the MSS. received from Mrs. Myles; if they have been printed elsewhere, we apologise for their reproduction without acknowledgment.—Ed. N.A.]

A BOOK FOR NATURE LOVERS.

Animal Sketches, by C. Lloyd Morgan, F.G.S. Illustrated by W. Monkhouse Rowe. London: E. Arnold. 8vo, pp. 312. Price 7s. 6d.

Here is one of those books of which modern readers have so many that they

perhaps hardly appreciate them at their proper value. In bygone days, the publication of *The Natural History of Selborne* marked an epoch, and the book itself became, and remains, a classic. Atkinson's *Moorland Parish*, excellent as it is, and greatly in advance of White's work (as is only natural), is never likely to attain the position which has been conceded to the earlier work-a position, indeed, which has gained for it a place among Sir John Lubbock's "Hundred Best Books." Such books as Mr. Morgan's are now happily so abundant that they form a class of their own—a class which is continually enlarging, and which, indeed, is capable of doing so indefinitely, so long as writers are content to write down what they themselves have observed. It is only once in a generation that we can



CHAMOIS.

hope to find a Richard Jefferies; but the qualities which made him what he was are in a measure given to all of us. It is nearly a century since Dr. Aikin and Mrs. Barbauld published *Evenings at Home*; but it is only the other day that we

were urged by one of our readers to reprint from that work the chapter entitled "Eyes and no Eyes"—of which Oliver Wendell Holmes says in his recent volume, Over the Teacups, "left a lasting impression upon me, and which I have always commended to young people—one may profit by it at any period of life. I have never seen anything of the kind half so good."

Mr. Morgan has used his eyes to good purpose, and he writes of what he ows. "Seldom," he says, "have I turned to books in preparing these sketches; but hardly ever have I ventured to write without renewing my acquaintance with the subject in hand, in the country, at the Zoological Gardens, or in the Museum." This is the line which separates the compiler from the observer; the skeleton from the living being; in many cases, indeed, the false from the true. "Nature never did betray the heart that loved her," and to those who will take the trouble to learn them she unfolds her choicest secrets.

In this attractive and well illustrated volume—by the kindness of the publisher we give a specimen of the illustrations—Mr. Morgan ranges through the animal kingdom, beginning with the lion, out of compliment to his title, "The King of Beasts," and ending with the oyster. From his first chapter we cite a passage which will give a good idea of his style, and will show how the author has utilised his opportunities of observation.

"The whelps or chits, to use an old term long since diverted, are, like kittens, born blind; but I am informed by the keeper at the Clifton Gardens that their eyes are opened after two days instead of nine as with kittens. delightful, clumsy, kitten-like creatures, and are spotted, the spots not entirely disappearing for two years or more. I had an opportunity some little time ago of fondling one of these little princes, and letting him mumble my finger in his almost toothless mouth. He was really the most engaging little fellow. There are generally two or three, but sometimes as many as five in a litter. On one occasion a little lion-whelp had tottered forward to the front of the den, and I patted his head through the bars. I shall never forget the look which the lioness gave me as she rose with the utmost dignity, came forward slowly, took the whelp by the scruff of the neck, and carried it back to the further end of the den. 'How dare you touch my child!' she seemed to say, or rather to look. But Mr. Nettleship, who knows lions and how to paint them, to whom I mentioned this

fact, observed, 'I dare say she was mightily afraid of you, and that was the meaning of the look.' So difficult is it to get at the thoughts of animals."

Like Mr. Silas Wegg, Mr. Morgan occasionally "drops into poetry."
"Burns has his mouse," he says, "Wordsworth his green linnet, Shelley his skylark, Blake his burning tiger-why may I not in verse apostrophise the bear?

And he proceeds to do so, as follows:-

"Inveterate shuffler! murmurous plantigrade! Why sitt'st thou ever mumbling at thy toes Revolving many ills? What are thy woes? Dost mourn thy missing tail? Or hath it made Thee sad that man so meanly hath repaid Thy many gifts, the rug that tempts repose, The busby, striking terror to his foes, But dear (how dear!) to many a nursery-maid!

"Yet are we not ungrateful (take this bun!), Still round thy choicest gift fond memory plays, Mid sweetest scents of fragrant orange-sprays. Ah happy years! when life had scarce begun, Ere baldness came with age. Ah fragrant years! I thank thee for them, Bruin, through my tears."

This attempt "to throw over the unctuous product of the coiffeur's laboratory (by the vulgar called bear's grease), the delicate glamour of poesy" is at least ingenious, and shows that Mr. Morgan can be amusing as well as instructive. Both young and old will be delighted with his book.

NOTICES OF BOOKS.

Nature in Books: some Studies in Biography, by P. Anderson Graham. London (Methuen & Co.). We have here an extremely suggestive volume of essays, written by one who has a keen sympathy with his subject, and considerable literary power and appreciation. The writers whose nature-studies are passed under review are Jefferies, Lord Tennyson, Thoreau, Scott, Carlyle, Burns and Wordsworth. To each of these a chapter is devoted, headed respectively—"The Magic of the Fields," "Art and Scenery," "The Philosophy of Idleness," "The Romance of Life, "Laborare est orare," "The Poetry of Toil," "The Divinity of Nature." The "Introduction" which precedes these is in some respects the best chapter in the book; the beginning of the first essay is the worst passage in it, and calculated, in our opinion, to prejudice the reader unfavourably. Mr. Graham there describes the banks at Coate as adorned with "the gowan, the speedwell and forget-me-not" in the month of October! The "gowan"—unless (which we do not suppose) Mr. Graham shares Mr. Micawber's ignorance "as to what a gowan may be"—is known to southrons as the daisy, and we do not see why the name which was good enough for Chaucer, and for many a poet since, should not have sufficed. The forget-me-not certainly never grew upon a hedgerow bank, although the speedwell may have put in an appearance out of due time. But if Mr. Graham does not know plants, he knows Jefferies, who did; his essay on him is thoroughly appreciative, and will delight the admirers of that model Selbornian. He appreciates Lord Tennyson, too, though he indulges in the speculations which young men (and some older ones) affect as to the permanence of his work—as if any test but that of time could satisfactorily settle the matter. There is, indeed, throughout the essays that tone of superiority which suggests that Mr. Graham is a young man; which fact being allowed for, his book is a very charming one, and will, we hope, accompany many holiday rambles in the summer which we all look forward to this year.

In Delagoa Bay; its Natives and Natural History (George Philip & Son, 9s.). Mrs. Monteiro gives us an account of what she terms this "benighted region" of Delagoa Bay, which supplies us with another illustration of the story of "Eyes and No Eyes." "Benighted" it may be to civilized eyes, and in some aspects; but, as everywhere else, there is amply sufficient to furnish interesting material for observation. Even that kind of civilization which has, as its outward and visible ground, "many additional canteens" and a "fine new cemetery," is not wanting, although a "daily paper—that sure sign of progress" has not yet made its appearance. Recognising "the proper study of mankind," Mrs. Monteiro devotes the earlier portion of her book to the Kafirs, of whose domestic life she gives many interesting particulars; she is properly severe upon the encouragement to drink afforded by the whites—"it seems shocking to see ship after ship arrive with rum forming the principal cargo." The Kafirs are cruel to birds after fashions of their own, and Mrs. Monteiro sometimes enforced Selbornian principles by striking arguments. "Once," she says "I caught two young fiends calmly picking the feathers from living birds; luckily I did catch them, and administered punishment." Perhaps the little Kafirs were making preparations for some "sport" analogous to pigeon-shooting. Birds, reptiles, insects, and flowers all shared Mrs. Monteiro's attention, so that the Kafirs named her "papalata," meaning "one who collects everything." Many illustrations add to the attractiveness of this interesting book.

In noticing last month the books sent us by the Religious Tract Society, we omitted to mention Ants and their Ways, by the Rev. W. Farren White (3s. 6d.). It contains a summary of many of the observations of Sir John Lubbock and Dr. McCook, but is by no means a mere compilation. Mr. White has himself kept and studied ants, and a large number of original observations and drawings find a place in these pages. Moreover, as an appendix, there is a descriptive monograph of British ants, believed by the author to be the most complete published, which only wants a fuller citation of authorities to be a thoroughly scientific numeration. This is an excellent example of what a popular natural history book should be.

Such Selbornians as are in want of a "birthday book," either for their own use or as a present to others, cannot do better than get *Through all the Varying Year* (G. Allen, 4s.), arranged by Miss Mary Jeaffreson. The extracts given from "nature-loving poets" are by no means of the hackneyed type of which books of this kind are too often composed, and each is connected with the natural phenomena assigned to the day or month. Thus under March 1st we have Mr. William Morris's lines:—

"Slayer of Winter, art thou here again?
O welcome, thou that bringest Summer nigh!
The bitter wind makes not thy victory vain.
Welcome, O March! whose kindly days and dry
Make April ready for the throstle's song!
Thou first redresser of the winter's wrong!"

It is a charming little selection, and cannot fail to please the lover of nature. We ought to have noticed sooner what appears to be a very complete List of the Macro-lepidoptera and Birds of Winchester and the vicinity, compiled by members of the Winchester College Natural History Society, and published at the low price of sixpence. Mr. A. W. I. Fisher enumerates 425 butterflies and moths, which have all occurred within six miles of the College, and Mr. S. A. Davies enumerates the birds. Such lists as these are evidence of much careful investigation, and are very creditable to the compilers. If they can induce the printer to omit from any future issue the typographical "ornaments"—which are by no means ornamental—their list will be as creditable in appearance as it is excellent in execution.

SELBORNIANA.

Mummy Wheat.—As we pointed out on p. 35, the mummy wheat myth still survives; and it may therefore be worth while to reprint the following extract from a lecture delivered last month at Grantham, by Mr. William Carruthers, F.R.S., and reported in the local journal:—"They might consider that the extreme life of a grain of wheat was twelve years. He had tested this by experiments, and many others had done the same, so it was quite certain that they could not grow a seed of wheat after this period had elapsed. Of course, this cut at the root of all stories about mummy wheat. It was quite certain, as had been clearly established again and again, that no seed which was buried with the mummy at the time it was put in the cossin had ever germinated. It was not only the examination of the seed that would establish that; experiments had been made to show that this was not the case. He himself had examined a large number of seeds in the British Museum, taken from mummies, and they were all in the same condition that the mummy itself was in. It would be impossible to stretch out the arm of a mummy, because the whole of the muscle was entirely burnt up by the slow action of the oxygen, and it was completely rigid. It was so with the whole of those grains of wheat, and flax, and various other seeds that were preserved—they were in the same condition. They had been subject to the slow burning action of the oxygen, and the whole of their vitality had disappeared. With regard to what was grown as mummy wheat, it was only a form of corn that was still extensively cultivated on the southern shores of the Mediterranean, and was easily obtained from Arabs and others, who were always ready to impose upon travellers, who brought it home as true mummy wheat." Selbornians may also refer to Professor Henslow's article on the subject, printed in NATURE NOTES for 1890, p. 119.

"Dead Larks."—My attention has been called to the following advertisement in the *Times* of January 26, 1892: "France.—Dead Larks—ten dozen, price 25f. (£1); six dozen, 16f. 25c. (13s.); three dozen, 8f. 75c. (7s.); carriage paid on all orders accompanied with remittances. J. Bonglon, à Larroque, par Condom (Gers)." The foregoing suggests two trains of thought: one of pity for France and her silent larks, the other of shame that Englishmen should be so unappreciative and so dead of soul, that a mercenary Frenchman should find it

worth his while to lay himself out to cater for them delicacies which presumably they only care for in edible form. To Selbornians this will act only as an additional proof, if such were needed, of the urgency of vigilance, lest such a hapless plight should fall upon us too. ISABEL FRY.

The matter comes nearer home than appears on the surface, for a correspondent informs us that it was recently stated in the Christian World that 250 men lately netted between Brighton and Newhaven 15,000 larks in two days! If this statement is even approximately accurate, we quite agree with our correspondent that "some fresh Act for the Preservation of Birds ought to be drawn up

at once."-ED. N.N.].

The Protection of Wild Flowers.—At a recent meeting of the Tunbridge Wells Natural History Society, the President, the Rev. T. R. R. Stebbing, spoke of "the growth of wild flowers in the immediate neighbourhood of towns and villages. As a rule, nothing but a daisy or a dandelion was given a chance of existence by the wayside anywhere near the habitation of human beings. It would add greatly to the common enjoyment if people would abstain from plucking and rooting up the wild flowers by the roadside within and near our country towns. There was no need for the intervention of the legislator and the policeman; what was wanted was a healthy public opinion, which must be formed in the first instance by the help of mothers and nurses, and, in the second, by the instruction of the schoolmaster. If our streets and roads were allowed to become gay with wild flowers, which were respected as the common property of all, there would be a chance that people of wealth would then cease to fence in their forecourts with the gloomiest-looking shrubs, and would rather stock them with beautiful flowering plants, open to the view and enjoyment of all.'

Wanton Destruction of North Park, Eltham .- Under this heading Mr. Wm. Phillips writes to the papers a letter in which he speaks of "The shameful act of Vandalism already commenced by the Commissioners of Woods and Forests, which unless public opinion and indignation are aroused, may lead to the total destruction of not only the most beautiful and most interesting park within the metropolitan area, but of the finest lung of all South London. park was enclosed by Edward IV., and was a favourite resort of Queen Elizabeth. It is about 140 acres in extent, 81 miles from London, and close to the rapidly increasing population of Lee, Plumstead and Woolwich. The mischief has already commenced; 26 acres have been let for building, and as I pass the men cutting down the fine old trees and wrecking this sylvan scene, I cannot help thinking that they are cutting down the health and happiness of future generations. What aggravates the case is that this is national property, and that the highest interests of the people are being sacrificed to the inconceivably sordid notion of their own paid servants. . . . A grievous wrong is being perpetrated, and I earnestly entreat all who value open spaces to see to its redress before it is too late."

We wrote to Mr. Phillips for further particulars, but he has not acknowledged our letter, from which it would seem that he is unaware of the important help which the Selborne Society has given in other cases of this kind.

"Advance, Australia!"-At a recent meeting of the Field Naturalists' Club of Victoria, the eminent botanist, Baron von Mueller, advocated strongly the protection of insectivorous and native birds in the colony. He thought that this object might be attained, not only by putting a comparatively heavy tax upon guns and by more strictly enforcing the present laws, but by the initiation of some scheme which would enlist the sympathy and co-operation of all persons interested in the subject. He suggested that a distinctive badge might be worn by members if such a union were ever formed. Is there a branch of the Selborne Society in Australia?

What is to be Done ?-Will some reader who is versed in the laws relating to property kindly inform me exactly what the law is concerning the uprooting and carrying away of ferns and plants from the lanes and woods? A short time ago a friend related to me the following incident:—"A bailiff, jogging along the lanes in his cart to the nearest market town, observed two men digging up fern roots in large quantities, and packing them into a cart which stood near. He warned them off his master's property, and told them to stop pulling up the roots. But the men took no notice, so the bailiff continued his course to the town, procured two policemen, and brought them back in his cart to the scene of action. They arrived just in time to arrest the two men, who were about to drive away with their booty. The point of the story is this: that the magistrate before whom they were brought was unable to convict them for stealing fern roots, but could, and did, sentence them to a few days' imprisonment for removing the portions of soil which still clung round the roots of the plants." If those men had washed the roots clean of soil before they carried them away would they have been within their rights if they had cleared that wood of every green shoot within it?

Edgbaston. A. M. DIXON.

NATURAL HISTORY NOTES AND QUERIES.

Domestication of Wood-Pigeons.—Some of the readers of *Nature* Notes may be interested in the following, which I take from some natural history

reminiscences jotted down several years ago.

Our boyish experiment in the pigeon line most worth remembering was with wood-pigeons or ring-doves. It has often been said that these birds cannot be domesticated; this we wished to test and hoped to disprove. Two we kept from their youth up, and turned out (without any clipping of wings) with our dovecot pigeons. One died young; the other (my property and chief care) lived and flourished, and attained full plumage with the white patch or ring and the beautiful tints on the neck. He was a fine bird, much larger than our other pigeons, and master of all. With them he used to come and feed, but was exceptionally bold and tame, and would readily feed from my hand. Sometimes he would take flights on his own account and be absent for hours, but he always came home. He never went into the pigeon-holes to roost, but had one or two favourite perches just under the eaves of the house. He often flew with the other pigeons, that is to say, he flew when they flew, but generally rather apart from them. This was especially noticeable if anything startled the whole flock. The rest would circle within narrow limits with frequent turns, but Woodie (as I called him) took a wider range, dashing round at a great pace in large circles that embraced the whole village. There are, in Macgillivray's British Birds, some remarks quoted from Mr. Neville Wood, who tried to domesticate a ring-dove. "It found some difficulty in keeping upon the wing with the tame pigeons, as wild pigeons are not accustomed to turn rapidly or frequently in the air." This seems to me quite true, that the wood-pigeon could not adapt himself to the flight of the tame pigeons; but perhaps "keep up with" is not exactly the word, for I am sure my wood-pigeon covered far more ground (or rather air) than did the others during these flights. My other experiences with my ring-dove were curiously like Mr. Wood's. This bird behaved as mine did; "it flew off," he says, "on one occasion to a considerable distance, but returned, to my surprise, after an absence of a few hours." Mine did this repeatedly. Mr. Wood's bird died after six months. lost mine by an accident—at least by a violent death. He would occasionally roost on an elm-tree bough out of our grounds, though in sight from them. I had tolerably certain evidence that he was there shot early one morning by a mischievous pot-hunter from a neighbouring cottage, wilfully, I was sure, for the bird was well known as my tame favourite. Very indignant I was and distressed at He was of my own training and education, and I hoped he would take the loss. a consort from the dove-cot. He was in beautiful adult plumage. I have no contemporaneous record of how long I had him, but certainly for something like a year and a half till the autumn of the year after he was hatched.

Thus my experiment completely succeeded for a much longer time than Mr. Wood's. I never had the opportunity of renewing the attempt to domesticate the ring-dove, but I, with Mr. Wood, "doubt not it would succeed with common

care."

Hepworth Rectory.

W. C. GREEN.

The Robin's Song (p. 38).—I am much interested in Mr. Collier's note on "The Robin's Song." I have never before met with any mention of what I have called the whispered song. Many years ago I used to visit at a friend's

house who had an aviary—a very large cage divided into storeys. One side looked into a conservatory, while it stood in the hall, which was a central room with others opening out of it. As I sat at the end of a long table in the dining-room a tame robin could sec me if he came to the corner of the aviary, and there he would stand singing aloud to me as I talked to him. Occasionally he used to be let out about these rooms. One day I heard a very sweet but unknown sound; he was by my side on the ground vohistpering out this sweet song to me. He was a young bird of the previous season.

F. C. Major. Breeding the Bulbul.—The following memorable incidents in oviculture may interest the readers of NATURE NOTES. It has been stated in some works on foreign birds that no bulbuls have ever bred in captivity in Europe, save once in Germany. I am able to mention a second exception to this statement. A few years ago I brought three bulbuls (Syrian) from Beyrout; two of these-one of which was exceedingly tame and a rare pet-died. One, a hen, lived on, and has become very tame and familiar. I not very long since bought a white-eared bulbul, and put it into the same cage; the birds paired, but built no nest, though evidently desiring to do so, and the Syrian hen laid two eggs at the bottom of the cage, which were broken. Last summer I set them free in the conservatory, and they built a nest high up in a corner formed by the ledge of the window in the roof, but this was evidently not to their mind; only one egg was laid, and the hen left it. In a few days they built another nest in a hanging basket containing a fern, and two eggs were deposited, on which the hen sat constantly for fourteen days, when one young bird was hatched—the other egg was unfertile. It was the prettiest thing possible to hear the sweet tones which both she and the male bird used when they perched upon the basket, and invited the nestling to eat the food they had brought. The young bird thrived for ten days, when on entering the conservatory I found it dead, far away from the nest, the male sitting close by; they must have carried it there. They built again in the same place, two eggs were laid, two birds were hatched, lived five or six days, and then died. I fear the old birds neglected to feed them. This time the dead body of one of the young ones was deposited in their old cage. It must have given the parents some trouble to convey it there from the nest, which was at some distance. During the time of incubation the hen bulbul zealously guarded her nest from intruders, and flying at anyone who approached, flapped her wings in their face, and tried to get Hying at anyone who approached, happed her wings in their tace, and their eyes with her sharp beak. I need not say what a disappointment it was to me that the young birds did not live, so that I might have been the fortunate possessor of that rara avis—a young bulbul reared and latched in England. I hope to be more fortunate this year. The birds are healthy and strong, and I shall give them every opportunity of building again in the hanging baskets in the conservatory. May they lay eggs, hatch them, and fulfil the responsible duties of parents more effectually than before!

The Rectory, Cheltenham. CHARLES D. BELL, D.D.

The Chiff-chaff in Winter.—Is the appearance of the chiff-chaff (Sylvia rufa) in winter in the British Isles unusual? It was seen and heard here at Glenam, near Clonmel, Co. Waterford, on the 29th of January, and occasionally since that date.

S. GRUBB.

R. M. W.—We have submitted your specimens to Professor Jeffrey Bell, who says they are not in a condition which justifies him in giving an opinion on them

OFFICIAL NOTICES: WORK OF BRANCHES, &c.

OUR VOLUMES.—We desire to call the special attention of our readers to the volumes of NATURE NOTES for 1890 and 1891, which may be obtained at the offices of the Society, 9, Adam Street, Adelphi, W.C., at the cost of three shillings each, or by post, three shillings and fivepence. By the variety and interest of their contents these volumes are admirably adapted for the school or parish library, and we would urge upon our readers not to neglect so excellent a means for advancing the interests which they have at heart. Cases for binding the numbers for 1890 and 1891 may be obtained from the Secretary at the above address, price

is, each; or the numbers will be bound and the case supplied by Messrs. Bale & Sons, 87, Great Titchfield Street, W., at the cost of 1s. 3d., or with gilt edges, is. Iod. The name and address of the sender, with stamps to the above amount, should be forwarded with the magazines in order to prevent mistakes or delay.

Miss II. C. Manson has disposed of the numbers which she kindly offered to give to a country lending library. Miss E. C. Eden, of The Grange, Kingston, Taunton, will be very grateful for last year's volume for a library for village lads.

At the Council meeting held on Feb. 3rd, great regret was expressed at Mr. Edward King's resignation as delegate of the Lower Thames Valley Branch, and he was thanked for the many services he has so generously rendered to the Council and the Selborne Society generally.

A vote of sympathy with Dr. Beale in the sad loss of his wife was passed.

Miss Isabel de Michelé, Old Palace Gardens, Weybridge, has kindly consented to resume the office of Hon. Sec. of the Weybridge Branch held by Mrs. Beale.

Miss Isabel Waterston, Hon. Sec. of the Forth Branch, forwarded a letter from Dr. Colville, of Glasgow, kindly offering to lecture there in the interests of

the Selborne Society, and also to get others to co-operate in lecturing.

A letter was received from Mr. Louis Davis, of Pinner, Middlesex, who is anxious to form a branch of the Society among the children and young people of his neighbourhood. He thinks it would be a good plan to have some lectures on Natural History before the spring, and suggests that such a subject as "Birds and their Habits," or "The Wild Flowers of Middlesex," would make attractive lectures for the children.

The thanks of the Council were given to Dr. Pankhurst, who is resigning the secretaryship of the Brighton Branch, in which he is succeeded by Miss Emily

Bourne, of 12, Denmark Terrace, Brighton.

Members who joined the Society this year are reminded that the entrance fee of Is. decided upon at the Annual Meeting last year is now payable.

Some of our readers may have felt surprise that NATURE NOTES gave no expression to the universal outburst of sympathy with our Royal Family which was expressed by the nation on the death of PRINCE ALBERT VICTOR. We had, however, supposed that some special reference to the sad event would have been made by the Council at its earliest meeting after the occurrence, and it did not seem to us fitting to anticipate their action. By some inadvertence, no resolution on the subject appears to have been passed, although it is needless to say that the sympathy with the Royal Family, one of whom honours us by her patronage, was none the less felt. We feel that we are merely carrying out the wishes of the Council and Members by placing on record this expression of sympathy on behalf of the Society.

NOTICE TO CORRESPONDENTS.

Contributions for any number should reach the Editor, JAMES BRITTEN, F.L.S., 18, West Square, London, S.E., not later than the 15th of the month.

When it is particularly requested, MSS, not accepted will be returned, if stamps sufficient to pay the postage are sent for that purpose.

Queries on any points connected with Botany or Zoology will be answered if possible, and advice will be given as to the best books for students in any department of Natural Science; but all questions must be accompanied by the names and addresses of the writers, not for publication, if this is not desired.

Specimens sent for identification will be named, if sent carefully packed and

in good condition, but we cannot undertake to return any specimens.

Several books stand over for notice. Publishers will confer a favour upon our readers if they will always state the price of any volumes they may send, in order that it may be quoted in the notice. This addition is much appreciated by our readers, and is desirable in the interest of the volumes themselves.

It is particularly requested that subscriptions and letters connected with business should not be forwarded to the Editor, but to the Secretary of the Selborne Society, 9, Adam Street, Adelphi. Editorial communications and books for re-

view should be addressed to Mr. Britten, as above.

Mature Motes:

The Selborne Society's Magazine.

No. 28.

APRIL, 1892.

VOL. III.

THE NEW FOREST IN DANGER.

MONG the many speeches of political orators made during the past autumn and winter decrying the barrenness or extolling the fruitfulness of the parliamentary session of 1891, not a word was spoken condemnatory of a cunningly-worded Bill terminating in a hastily-passed Act which has been used as a tool to cut at the roots of the rights of Englishmen. How could it be otherwise when our legislators themselves did not know the purport of the Act they were passing, or the fruit it would bring forth?

Allowing for changed times and changed conditions, it would be difficult in past history to find a grosser instance of a secret and unjust conspiracy carried out by two departments of a government than in the present arrangement between the War Office and the Commissioners for Woods and Forests, to filch 800 acres of the finest playground of the English people, under the plausible pretext that it is done "for the good of the nation."

An easy railway journey and frequent service of trains have made it possible for dwellers in London to spend six hours of a summer's day in the New Forest, and enjoy its beauty and wildness. Never, when the population of the metropolitan district is so enormously increasing, were open spaces of proportionately vast extent—such as the New Forest alone in the south of England can afford—so much needed; and yet, when other waste grounds that can lay no claim to beauty can easily be had, and are waiting to be made use of, the War Office has cast longing eyes upon those that possess it in the fullest degree, and is about to convert them into rows of rifle-ranges. It would take pages to trace the various steps of legislation that have led up to appropriating so large an area of the New Forest for military purposes; the barest outline must here suffice. Successive Acts of Parliament have been passed for the purpose of providing

ranges and drill grounds, first on land of limited extent and for Volunteer forces only, then on areas of greater extent, for both the Regular forces and Volunteers, the rights of commoners still being respected, till finally the limitation area has been abolished, and the rights of commoners over these practising-grounds suspended for as long as the land is leased to the War Office.

The friends of open spaces and the rights of way, through no fault of their own, failed to perceive that the elements of a storm were brewing—not a storm of nature against man, but of man against nature. We owe it to certain leading articles in the Times, which appeared last December, and to an urgent protest from Mr. Herbert Goss, in the shape of a letter to several of the other daily papers, that the tactics of the War Office are now made fully known. In the words of one of the leading articles of the Times, "the powers exerciseable under the previous Acts, sufficiently large in all conscience, may henceforth be exercised with respect to any lands 'notwithstanding any prchibition or restriction contained in any local or personal Act, or in any Act specially relating to such land, and notwithstanding any common or other rights or easements over the land." The whole matter therefore lies in a nutshell, so to speak. The clause of the Ranges Act (1891), quoted from the Times, and here given in italics, (without mentioning any names, though the framers of the Act must have been well aware of what was intended) entirely subverts the main clauses of the New Forest Act (1877), which are as follows :-

"That the New Forest shall remain open and unenclosed, except to the extent to which it is expedient to maintain the existing right of the Crown to plant trees. That the ancient ornamental woods and trees shall be carefully preserved, and the character of the scenery shall be maintained.

"That the powers of inclosure conferred by statute shall be exercised only on that area which has hitherto been taken at

various times."

The New Forest Act of 1877 was passed deliberately, after ten years' discussion and inquiry. It was considered a final settlement of all the long disputes between the rights of the Crown and those of the commoners; yet it is to be undone by an Act, the outcome of a Bill literally rushed through both Houses of Parliament at the fag end of the session of 1891, and the first-fruits of it are the appropriation of 800 acres of the New Forest by the War Office. The most telling point in the secrecy with which the orders as regards the New Forest are to be carried out lies in the fact that no notice, official or otherwise, was given to Lord Montagu of Beaulieu, the Chief Verderer, whose court was specially re-constituted by the Act of 1877 to regulate the commoners' rights over the Forest.

It now remains to lay before our readers some of the results that will follow this cleverly concocted arrangement between the War Office and the Woods and Forests Commissioners,

first the immediate, and then the more remote.

(1) First and foremost, it is our duty as Selbornians to protest against the destruction of natural scenery that will most certainly ensue. Can any one pretend to assume that Wimbledon Common looks the better for the ugly mounds and deep trenches that cross it in various directions? Precisely the same will take place in the New Forest. Is it not the lament of the botanist that the localities for plants, some rare, are yearly becoming lessened, from the ravages of the builder near town and indiscriminate trench-digging and draining in the country? Yet if it were necessary to throw up a mound or dig a trench at a certain spot in the New Forest, and that spot happened to be one of the haunts of the beautiful Gladiolus illyricus, whose only English home is there, what amount of consideration would the War Office be likely to show? The New Forest has long been one of the most celebrated haunts for our English Lepidoptera, yet it is well known that butterflies and moths fight shy of dust, smoke and noise. So much for the powers of the War Office to drive away those loved remnants of wild nature that delight our eyes wherever we see them.

(2) Those of us who are acquainted with Wimbledon Common well know what it is on practising days to have to keep clear of the range of half-spent bullets. There the range lies chiefly over a hollow between two eminences, so that the shot passes overhead, and continues to do so even if it misses and passes the butts. In the New Forest the line of fire will be mainly over level ground, and, do what the authorities will, to prevent accidents outside the reserved range either to man or

beast will be well-nigh impossible.

Now to turn to results more remote, but no less certain. It has been stated on good authority that the War Office has a lease of the ground for twenty-one years. The following quotation shows the nature of the dilemma into which those who possess rights in the common land to be appropriated have been thrust:—"If the commoners complain of the injury they are sustaining, their rights will be acquired and extinguished, and the Crown authorities will possess the large area in question freed from all common rights and may enclose and plant or till it. If they do not complain, their abstention will be used as argument that the Forest is not fully stocked and that other inclosures may be made by the Crown on the principle of the Statute of Merton—that is, leaving sufficient food for the commoners." Quite lately, Mr. G. B. Eyre, an extensive landowner in the New Forest district, and a staunch

^{*} From leading article in *Times*, Saturday, December 26th, 1891, quoted in "Public Opinion on the Intended Interference with the New Forest" (p. 4), a pamphlet issued by the New Forest Association.

champion of common rights, pointed out, in an interview with one of the staff of the Pall Mall Gazette, that the rights of the cottagers on the eastern side of the Forest, where the 800 acres are situate, would be practically ruined. That the proposed range was the only large extent of commonable land on the eastern border, and that the larger the common the greater were the opportunities and value of the small holdings, because the cattle could migrate according to the seasons, the quality of the pasture, and, what was very important, the supply of water, all of which happened to be abundant at a bottom across which the range was to pass, and that any interference with the water-supply would spoil much of the whole waste. The same gentleman gave it as his opinion that it was a delusion to think the fullest compensation could ever make up for the loss of common rights—a loss which deprived the small holder of the hope of bettering his condition; and that compensation was but a snare, since its recipient could only devote to his personal or temporary uses the poor equivalent of his right in the land-a right that he could have handed down to his posterity. May not we be permitted to add that the system of small holdings, as it at present prevails in the New Forest, is the greatest possible antidote to the overcrowding of large towns, and unwieldy extension of their suburbs, more especially in the case of the metropolis? If there were a few more New Forests all over England there would be a million less people in London.

To charge the opponents of, and petitioners against, the New Forest scheme with want of patriotism would be simply absurd. All that is desired is to protest against the violence done by the War Office and Woods and Forests Commissioners to the principle of the rights of way and open spaces questions in the unjust and unpopular choice of ground they have made.* These are questions the importance of which is in the highest degree significant, from their being non-political. Men of advanced, of moderate, and even of re-actionary opinions in general politics can join issue in them, and therein lies the greatest hope that the cloud of this threatened encroachment on public and private rights will be scattered by the winds of popular indignation. At the same time no words can be too strong to condemn the action of those who would degrade this matter of national importance to the level of a party

question.

Most of the readers of NATURE NOTES are acquainted with

^{*} It may be news to some of our readers to learn that part of Epping Forest is used as a practising ground for one of the Hertfordshire militia companies. The tract of ground thus employed, or rather mis-employed, lies on the left-hand side of the road from High Beech to Epping town, in the direction of Waltham Abbey. How this arose we have not been able yet to ascertain, but it is indeed surprising that the Corporation of the City of London and the Verderers, who have done so much to restore parts of the Forest from the possession of land-grabbers, should permit it.

the fact that a Bill emanating from private members, interested in open spaces, was this year to have been brought into Parliament, by which the obnoxious clause in the Ranges Act would have been rendered inoperative, and consequently the War Office unable to lay a finger on the 800 acres. Unfortunately one of the principal promoters of the opposition against the War Office scheme has instituted an inquiry into the matter, which hampers action in Parliament at a time when delay is dangerous indeed. Without thinking of imputing to him the unworthy motives for so doing that a contemporary weekly journal has dared to do, it must be confessed that an inquiry into the rights and wrongs of an unprovoked assault of one man upon another, by a third party who has witnessed the same, would be just as much to the point.

So there the matter rests, at a critical period indeed, but the "darkest cloud" is said to have a "silver lining," and who knows that before the year is out one of the greatest blows will have been struck at the encroachment system—a system which

has too long cast its blighting shadow over our land.

ARCHIBALD CLARKE.

Since the above was written it has become public knowledge that the Secretary of War, in deference to the vigorous protest brought to bear upon the Government by the press generally, by signed petitions and by platform speakers, has prepared and brought into Parliament a Bill which at first sight seems to entirely exclude the New Forest from the operation of the Ranges Act and other Acts of earlier date. But the War Office are loth to give up their ill-gotten gains, acquired when the public were in ignorance of the whole matter, and that it is their clear intention to keep a tight grasp upon the 800 acres, part of the last section but one of the new Bill (Section 29), here quoted, most clearly shows: "Nothing in this Act shall affect the validity or operation of any lease granted before the passing of this Act." That general attention has been called to the fact that the new Bill is nothing but a tricky compromise is the result of an ably-written letter signed by several leading naturalists, as well as by the editor of NATURE NOTES, that appeared in the Standard and Morning Post of March 7th. Of course it is good news to know that the Government Bill provides that no more of the New Forest is to be taken, and well it may be so, for at present under the 10th clause of the Act of 1891 there is nothing to prevent the War Office leasing as much more of the New Forest as they want for military purposes from the Forests Commissioners, no doubt with the full approval and delight of the latter body, to judge by their past actions.

A TALK ABOUT THE PRIMROSE.

HE other day my aunt, who is a dressmaker, living near London, came down to our village to see my father and mother, and as she was not well, mother let me knock off work and take her walks. I have heard the young ladies at the Hall and the Rectory say that our village is

ladies at the Hall and the Rectory say that our village is beautiful; but I never thought much about it till mother's sister came, and seemed to take such an interest in just common

things.

One day we were going up Halstead Lane when we met Mrs. Langton's boy Tom, that father always calls (though I don't know why) "a precious young limb." He carried in one hand a broken shovel, and in the other his handkerchief, all in rents, through which some primrose roots were falling. Tom laughed, and so did I, but aunt didn't. She said, sharp, just like a lady in school, "What's your name, boy?" Tom, he looked up, and said, "John Atkinson." "O Tom!" I said, "what a story! it's Tom Langton." Tom, on the instant, put his shovel and handkerchief down, and crying out to me, "I'll smack your head, you little sneak," made for to do it, but my aunt stepped on one side and caught him such a one as I never see before. Tom fell in a puddle in the middle of the lane, and sat there, screaming over and over again, "I'll tell my mother of you, see if I don't."

My aunt, she didn't say nothing, but she took the primrose roots, and, giving me the shovel, climbed up the bank as far as she could, and then made me bring the shovel and dig some holes,

into which she stuck the plants.

"Get up, boy," she said, when we were again on the road; "there's your shovel, and now go home, and don't go digging up the hedge plants again."

"I was only a-going to sell 'em," Tom grumbled, as he sulkily

took his shovel.

When Tom stood up I saw that he was very wet, and that his new knickers were torn, and I was frightened. I told aunt, and she only said, "If you know his mother take me to her." I suppose it is London ways, but I never heard mother or anybody

speak so short and masterful.

Mrs. Langton was a widow, and a long time ago—six or seven years—had kept school, but had now got the rheumatics. She seemed to me to be always a-tidying—worse than mother, ever so much. Well, aunt makes herself known to her, and it appeared as they were old friends, and then aunt she told all, and allowed to have smacked Tom's head, and then she said all about Tom's knickers and his handkerchief being torn, and then she said, as being accustomed to her needle, and free from rheumatics, 'twould be a pastime to her to set Tom up again.

Tom came in that moment, and stood against the door, because there was other boys laughing outside in the street. He looked so funny that his mother and all of us could not help laughing too, and then my aunt waited till he put on his work-a-days, because he had gone out in his Sunday knickers, and took him home with me.

After dinner, aunt says, "I'll tell you, young ones, why I was so cross this morning. I live in a town near London, and although there are lanes and hedges near it, there are no wild flowers. In some parts of these lanes primroses and violets used to grow, but men came with sacks and dug them all up, so that now you may walk for miles before you can see a flower. It is the same with ferns, which I love to see growing, because they remind me of the days when I lived in this beautiful country, far away from hateful smoke and filthy dust, and horrible smells from refuse and drains. I have no garden, and near me there is no common or open space even, on which the grass might grow through the smuts. I live in a tangle of houses." Tom looked quite frightened. "I try to keep the wild flowers in my memory, by reading about them and getting as much out of them—though not by your plan, Tom—as I can."

"What do you mean, aunt?" I asked.

"Well," she said, "I know that the root which Tom dug up is formed at the radicular extremity of the embryo. I know how to pronounce these words, because the last curate lodged at our house, and taught me the meanings and quantities of them."

"Aunt," I said, "I am so sorry, but I have such a pain in my

head; perhaps it's the sun."

"No," replied aunt, "it is not, it is the long words; they generally make young people faint. Tom has a primrose still sticking out of his pocket, and we will see whether we can get an answer to its riddle. Girls are sharper than boys. Can you describe this primrose, Olive?" asked aunt.

I said, "It has five yellow leaves stuck in a—in a—sort of a green holder with five points, and down the middle there is ever such a long hole, with a sort of planty stick with some thready

things with tops to them in it."

"There's sweet stuff at the bottom," said Tom.

"I must tell you," began aunt, "that plants are related to each other like your brothers and your cousins and your aunts, and people who know all about them put them, according to their habits and appearance, into families and classes. First they are divided into two groups, those that flower, and those—like mosses, ferns, and seaweeds—which do not. The primrose, of course, belongs to the group producing flowers and seeds, from which grow little plants. The cord-like roots spring from a rough underground stem, called the root-stock, crowned with leaves. If you cut the primrose in half you will see that around the top of the little flower-stalk is one green cup with the five points, in which rests the tube of the five yellow flower leaves. Inside the tube are the five thread stalks, on the top of which a double purse holding a yellow flower-dust, which, when made large through a magnifying glass, is wonderfully beautiful. In

the centre stands the fruiting stem, containing little seed eggs, which, when mixed with the pollen, grow into primrose seed."

"Who mixes them?"

"They are mingled by the bees, who, thrusting their long tongues down into the tube in search of the sweet stuff, bring away the pollen and carry it to another flower. The difficult names for the various parts of the primrose or *Primula*, which would have deterred or frightened you at first, you can now learn and seek to use them yourselves, in your searchings for answers to plant riddles. Each plant has its tale to tell, and nobody who has got the habit of listening to such tales can honestly complain of being dull. To me, within reach of the smoky air of London, these tales are delightful, and when people selfishly take away my little plants, I feel quite angry in my grief.

"Not long ago I heard of a Society, formed by a number of people who thought as I thought, and when I found that they banded themselves together to get old and young people all over the country not to dig up (do you hear that, Tom?) or destroy plants, but to protect them in every possible way from those persons who would injure them, and also to bring the knowledge of plants within reach of unlearned people like ourselves, who long to know so much and have so few opportunities of easily

gaining knowledge, I became a member."

My aunt had not finished until father came home from his work (he is a carpenter, and knows a lot about trees, and about birds too), and was leaning, unbeknown, by mother's side, behind auntie's chair.

"Speaks like a book, she does," said he, "the London lass."

"Who'd a thought it?" said mother.

"What may be the name of the Society?" asked father,

with his half grave expression.

Then aunt told us about the Selborne Society, which is a union for the protection of birds and plants and other things which are beyond me, and she said that the Princess Christian and the great poet, Lord Tennyson, were in it, and that she paid half-a-crown a year and got it back in a book, for which she, or even a little girl like myself, might write, if we put down just what we saw, and wanted to find out the truth, and then father said, "Well, I be hanged if it ain't worth the money. There's my two-and-six. I wish they'd protect trees and woods. They trippers burnt the squire's finest copse last week, and cut their names on trees that I set my eye on for years and years."

"They do protect trees," cried aunt.

"Bless 'em-I mean us!" returned my father.

"Mayn't I do something?" whimpered Tom: "I can lick the other boys that go a-digging up the plants, if I'm a member of the Selborne Society."

Sir, this is all I can remember, but I have written on one side

of the paper only, and legibly, as you direct, and in a round hand, because mother said that editors and printers could not read what I wrote unless I did the spelling right, and the writing clear, for they were arbitrary gentlemen, that threw everything they could not understand into a basket to be burnt. I hope you will forgive a little girl for writing.

OLIVIA PRIMROSE.

TO THE POOR OF LONDON:

A MESSAGE FROM THE KYRLE SOCIETY.

Brothers! who, in darkness dreary, Learn to suffer and to do,— "To the utmost of our power," We would stretch our hands to you.

Sisters! who, in silent labour,
Feel the prick of life's sharp thorn,
We would share the brighter lesson,
How its roses may be worn.

By yon grim wall's blank denial,
Where God's meadows smiled with green;
By the foulness and the blackness,
Where the sunlight poured its sheen;

By the sky still bending o'er us;
By the breeze that blows for all;
By the memories of the beauty,
That has fled beyond your call;

By each faithful heart's endeavour Still to give despair the lie; By the common hopes of England! By the love that cannot die;

Brothers! we will work together;
Till the scoffing world shall know,
That God's sacred gift of beauty
Blooms for all who strive below.

C. E. MAURICE.

THE NOTES OF BIRDS.

HAVE known robins and other garden birds long and well, and that sweet little far-away-sounding warble that Mr. Collier speaks of (p. 38)—sometimes more seen than heard—has often been sung close to my elbow whilst gardening, by some tame robin that has been following me about. It is by no means exclusively a "love song." I saw one the other day singing it quite to itself, sitting all alone on a low twig; a sweet little meditative soliloquy it was, expressive of peaceful content and enjoyment of the moment. And it is not only the robin that does it; I have heard a

one the other day singing it quite to itself, sitting all alone on a low twig; a sweet little meditative soliloquy it was, expressive of peaceful content and enjoyment of the moment. And it is not only the robin that does it; I have heard a hedge sparrow do it—with a difference of course—hiding behind a faggot. It was "only the song of a secret bird," and that not a fine singer, but it was very sweet. I have also heard a goldencrested wren do it, creeping in and out of the branches of a rose tree growing up the verandah; and that had a curious sequel, for the bird did not at first observe my approach to a window very close to it, and when it did, before flying away it scolded me, just as I have heard babies scold, with a harsh, guttural note. To be scolded by a gold-crest! Birds seem to me to sing softly or loudly according to the distance at which they wish to be heard,

and assuredly they sing from a great variety of feelings.

I must protest against the notion that the robin has only two songs. It has one voice, but the variety of its strains is indefinite —I had almost said infinite—for I have often listened for some time to two robins that have been singing to, or against, each other from a distance, and I have failed to detect any two strains alike—alike, that is, from the same bird, for I have often thought that I could detect clumsy imitation on the part of one, and then I have suspected a singing lesson. For birds require to be taught almost everything, from fear to feeding; for though a young bird is of course easily startled, it does not seem to fear one till it has seen that other birds fly away. At first it looks wonderingly after them. I had a good opportunity once of watching the education of a young chaffinch that was nearly brought up on my well-provided windowsill. I observed, amongst other things, that birds can peck up before they can swallow without assistance. One day last summer I was feeding a very young robin on a bush in the garden, the bird's attention being wholly occupied, when a hedge sparrow suddenly piped up close by in a lively manner. In a moment the robin turned to it, and began to make a curious little chuckling noise in its throat, with much earnestness and strong endeavour. It was obviously a first attempt at singing.

So far from "all the songs" of the warblers being "love songs," I should say that comparatively few of them were that. First of all, I am convinced that they sing, as human beings do, for the love of it. Then there is musical rivalry, immense! I have seen and heard a blackcap and a whitethroat singing

against each other on the same tree, and I believe that it ended in their flying at each other, but, boughs intervening, I could not be sure. Then robins, when they have their young about—a time of great trial and anxiety to the old ones—sing continually to let them know where they are to be found and keep them together, and I have noticed that there is one long, low, often-repeated and most pathetic note (they call it weeping here), which is used to draw a young out of danger, and it is very effective; not that they rely on that only; they will sometimes dash down violently on the little one and drive it away, if it approaches one

too rashly.

Very various are the feelings that the robin expresses by its wonderful organ—one might almost say of speech. Certainly it is more like speech than that of any other bird I know, though I have had here lately a quite curiously eloquent cole-tit. It was constantly here for months, hanging about the window, as tits do, in all sorts of positions, but generally upside down, and emitting a number of loud and lively notes with quite different meanings; but at last it suddenly disappeared, to my great regret, for it was most amusing. It was also a masterful bird, for which reason I gave it the name of King Cole, as it set all the others at defiance. It came, I think, as third husband to a dear little old hen cole-tit which has been here for two or three years—so small and so wise. But not eloquent—no; she flutters before the window, but seldom utters a cry, though once, when her first husband had been found dead on the top of a wall opposite, after waiting and looking about for him disconsolately for a day or two, she sat in the rose bush and set up a loud wailing like an American Indian woman for her brave. A fourth mate has arrived, but we do not care much for him yet. King Cole used to express most emphatically a great variety of feelings, from gratitude to rage, if kept too long waiting. Once, when he wished his little wife to come to dinner, and she did not appear, he began a curious little dolorous cry, all the time clapping the mandibles together. It was like the whimpering of a child; not a call, certainly-too low for that.

I had a robin once that used to call me to the window to feed it by means of a strain that it appeared to have invented on purpose. It was quite unmistakable, and very short and low; it did not wish other birds to hear, for robins greatly prefer to eat alone, though they will take food away for their wives as well as their children, and sometimes will call them to some near bush for that. But there the hen will sit, not venturing to come near. It seems to be a rule with the birds that I have observed that the male is to eat first, the female waiting till he has finished, trembling with impatience, perhaps, but not venturing even to look at him—on the contrary, carefully looking another way. This looks curiously like a beginning of an idea of etiquette, but

I suppose it is only fear of the stronger bird.

The robin's sense of hearing must also be a very wonderful

one, for it appears to recognise the very faintest and most distant voice of its own kind and its own people, and it is keenly sensible of the least hoarseness or harshness of voice. You may allure with a soft, clear voice a young robin that would fly away from you if you spoke hoarsely or in a lower key. One speaks to them naturally, as one does to babies—indeed, birds are very like children in many respects.

Sidmouth.

J. M. H.

THE ACCESS TO MOUNTAINS (SCOTLAND) BILL.



UR readers will have observed with pleasure the passing of a resolution by the House of Commons in favour of Access to Mountains. Mr. Bryce is to be congratulated on the success that has, after much seeking,

crowned his efforts to obtain this great public boon. A Bill has now been introduced by Dr. Farquharson (on behalf of Mr. Bryce), to secure for the public the right of access to mountains and moor lands in Scotland, and we give its provisions below, that it may be clearly seen how moderate and yet satisfactory these are, and how well the rights of owners are safeguarded in the matter of possible but extremely improbable offences by the tourist and scientific public.

Whereas large tracts of uncultivated mountain and moor land in Scotland, formerly pastured on by sheep and cattle, have of late years been stocked with deer, and attempts have been made to deprive Her Majesty's subjects of the rights which they have heretofore enjoyed of walking upon these and other tracts of uncultivated mountain and moor land for purposes of recreation and of scientific or artistic

And whereas doubts have arisen as to the respective rights of the owners of uncultivated mountain and moor lands in Scotland and of Her Majesty's subjects generally as regards the use of such lands and the access thereto, and it is expedient to remove such doubts, and to secure to Her Majesty's subjects the right of free access to such lands for the purposes of recreation and scientific and artistic study, subject to proper provisions for preventing any abuse of such right.

Be it therefore enacted, &c.,

1. This Act may be cited as the Access to Mountains (Scotland) Act, 1892,

and shall come into operation on 1st January, 1893.

2. Subject to the provisions hereinafter contained, no owner or occupier of uninhabited mountain or moor lands in Scotland shall be entitled to exclude any person from walking or being on such lands for the purposes of recreation or scientific or artistic study, or to molest him in so walking or being.

3. In any action of interdict or other proceeding at the instance of any owner or occupier of uncultivated mountain or moor lands founded on alleged trespass, it shall be a sufficient defence that the lands referred to were uncultivated mountain or moor lands, that the respondent entered thereon only for the purposes of recreation or of scientific or artistic study, and that no special damage resulted from the alleged trespass.

4. Nothing in this Act shall prevent any person from being excluded from any land from which he could, if this Act had not been passed, have been lawfully excluded, or shall enable any defence to be raised which cannot now be raised in

any of the following cases:-

(a) Where any person goes upon land in pursuit of game or other wild birds, or for the purpose of taking eggs, or accompanied by a dog, or carrying firearms.

(b) Where any person encamps on any land, or lights any fire, or does any damage to the surface of the land, or to any trees growing thereon, or to any buildings, fences, or any erections thereon.

(c) Where any person destroys or removes the roots of any plants or shrubs.(d) Where any person so disturbs any sheep or cattle as to cause damage to

their owner.

(e) Where any person goes on land with any malicious intent, or wantonly disturbs or annoys any person engaged on such land in any lawful occupation.

5. Nothing in this Act shall apply

(a) To any lands actually occupied and enjoyed as a park or pleasure ground in connection with and in proximity to a dwelling house.

(b) To any plantation of young trees.

(6) This Act shall not extend to England and Ireland.

SHORT NOTICES OF BOOKS.

Mr. 11. W. Traill has lately given us a goodly list of our minor poets, but it is far from being complete. Mr. R. F. Towndrow, whose A Garden and other Poems (F. Fisher Unwin) we have just received, is not among the number who appear on the list, but his little volume seems to entitle him to a place there. The worst of it all is that we have so many poets; they crowd each other out, as it were. We may not agree with the Laureate that—

"All can grow the flower now For all have got the seed,"

but it must be admitted that there are many who write verses which, were the gift less common, would attract more notice than is at present the ease. Mr. Towndrow has a keen love of Nature, and expresses himself in a pleasing manner. Here is a sonnet on "Gradual Spring."

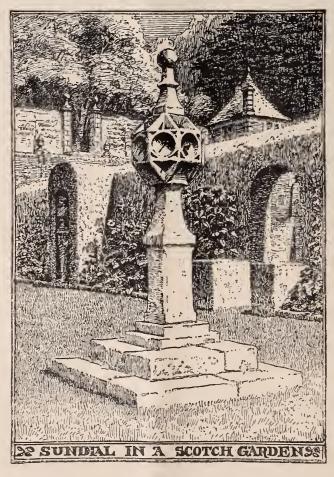
"Bird voices gather volume day by day
Where Windflowers whiten under naked boughs,
The trusted confidants of early vows
And nesting schemes. Here a precocious spray,
Leafless and black, with crowded bloom is gay:
In that warm nook the Celandine allows
Her golden stars to glisten: now endows
The Primrose, with pale gold, each woody way.
Skies of intenser blue provoke earth's green,
In loving rivalry, to clothe her woods;
The hedgerows brighten with their leafy buds
Ere yet the Hawthorn's snowy wreath is seen:
Now anxious parent birds and clamant broods
Declare that Winter is not, but has been."

Mr. Albert Millican gives us a plain, unvarnished tale in his *Travels and Adventures of an Orchid Hunter*, a handsome volume lately published by Messrs. Cassell (16s. 6d.). He has made five journeys after orehids during four years in northern South America, Columbia, and the West Indies, "travelling with natives through the forest, sharing with them the hospitality of the wayside hut or the forest shelter and the camp-fire, as well as the more agreeable life of hotels and towns." The illustrations, from photographs by the author, give an additional value to the book, which will find a place in the library of every orchid grower.

We have also received from Messrs. Cassell an excellent introduction to the study of Geography, by Mr. II. O. Arnold-Forster, entitled, *This World of Ours* (2s. 6d.).

Mr. Reginald Blomfield and Mr. Inigo Thomas have done all that pen and pencil can do to make *The Formal Garden* (Macmillan, 7s. 6d. net) attractive: we have seldom seen a more beautifully printed or charmingly illustrated book.

The pictures indeed—some from various old sources, others from original sketches—would go far to reconcile us with "the formal system of gardening," although the authors protest against this as "a question-begging name." "The point to consider," says Mr. Blomfield, "is: Is the garden to be considered in relation to the house, and as an integral part of a design which depends for its success on the combined effect of house and garden; or is the house to be ignored in dealing with the garden?" He is justly severe on the methods of the modern landscapegardener, in our cemeteries and elsewhere: and deals in scathing terms with those



who "bed out asters and geraniums, make the lawn hideous with patches of brilliant red, varied by streaks of purple blue," who "plant them in patterns of stars and lozenges and tadpoles, and border them with paths of asphalt." The delightful old writers—Markham, Lawson, Worlidge, and the like—have full justice done to them; and the book is one of those which it is a pleasure to read, to look at, or even to handle. By the kindness of the publishers we give a specimen of the illustrations.

SELBORNIANA.

Wanted, a Primrose League — not a political association, but a League for the Protection of the Primrose. We very earnestly exhort Selbornians to show their faith by their works, and to discourage by every means in their power the wanton destruction of one of our most charming wild flowers under the mistaken notion that thereby honour is done to a deceased statesman. It is not against the gathering of primroses that we protest, but against the wholesale uprooting of plants, which is sadly too prevalent. This year the poor primrose is in double danger, for Easter Day and "Primrose Day" come close together. We would implore all true Selbornians to spread as much as possible the teaching which "Olivia Primrose" puts forward in another part of the present number.

Are they Inaccurate?—We all remember .Esop's fable of "The Old Man and his Ass." The Editor of Nature Notes often finds himself in the position of the former when he began his journey, but he has no present intention of imitating his conduct, nor of throwing his burden over the bridge. He will, indeed, do his best to please everybody, but when this becomes impossible, he must either leave his friends to fight it out (within due limits), as is being done on the great Sparrow question, or decline to enter upon what would be a long and wearisome controversy. This latter course he is compelled to adopt with reference to "Sport," which was the subject of an article in the February number. For this article he has been both praised and blamed; he has been begged to push the matter farther, and censured for having already gone too far. From which he ventures to hope that he has taken the middle course, which is proverbially the safest.

A letter, however, from Mr. F. G. R. Duke, of Braehead, Kilmarnock, charges us (we must resume the usual editorial mode of address) with having based our conclusions "on statements which have been shown to be inaccurate, and which [we] should have recognised as prompted by feeling far removed from any real love for animals." The latter point, being a matter of opinion, need not be further noticed; the former charge is more serious, and we therefore wrote to Mr. Duke, informing him that, if he would tell us where the inaccuracy of the statements in question had been shown, we would at once publish a correction of them. His only reply was a curt rather than courteous acknowledgment of our letter.

No cause is benefited by inaccurate or exaggerated statements. We have no intention of employing either, and we trust our readers will not hesitate to call us to account should we appear to do so. In the present instance, however, we cited the sources of our information, which appeared to us worthy of credence, and we are not prepared to admit their inaccuracy on Mr. Duke's unsupported ipse dixit.

Death of Miss Gifford.—The Journal of Botany for March contains a sketch of the life of Miss Isabella Gifford, of Minehead, a careful student of British seaweeds, and author of a popular handbook, The Marine Botanist, in which they are described. Miss Gifford (who was born at Swansea about 1823, and died at Minehead on the 26th of last December) joined the Selborne Society in 1890. "I would have tried," she then wrote, "to get a branch established here, did my health permit of it, but I must not undertake more duties than fall to my share, and which I can only most inadequately perform." Miss Gifford lived with her mother, "a very quiet life, but a most refreshing one to come in contact with, because of its unworldliness, and its large and genial sympathy. Influenza attacked the household before Christmas, and mother and daughter passed away within twenty-four hours of each other. They were laid to rest on New Year's Eve in the beautiful churchyard of Minehead, surrounded with hills and sky and sea; a fitting resting place for one who loved Nature so truly."

"The Wild Flowers of Selborne."—This is the title of a paper by the Rev. John Vaughan in *Longman's Magazine* for March, the purpose of which is "to compare the botany of Selborne as chronicled by Gilbert White in 1778 with what we know of it to-day." The same writer gave a more strictly botanical summary of the same comparison in the *Journal of Bolany* for December, 1887.

Longman's Magazine contains also a short paper, or a fragment of a paper, by Richard Jefferies, on "The Lions in Trafalgar Square"—the last, says the editor, that will appear above his signature.

The Destruction of Larks (p. 56).—There is, I fear, little doubt that many thousands of larks are netted and killed for food at Brighton. When I was there in the autumn, the curator of the Booth Museum told me that a man had just passed with a sack full of larks!

J. JENNER WEIR.

Birds and Wireworms.—In the Annual Report for 1891, of observations by Miss E. A. Ormerod, just published, it appears that there was a remarkable abundance of the common garden and farm insects last summer. When the ground has been covered with snow for some weeks in the spring, as was the case in 1891, insect life is abundant during the following summer, as the larvæ are protected by the covering of the snow, and very many of the smaller insectivorous birds perish; but when there is continued frost without snow, the contrary is the case, and insect life is less abundant, partly because the larvæ are killed by the frost, and partly also because there are more birds to consume them. The following extract from the Rural World of 12th February, 1892, will show how inefficient are all the means that have been devised for the destruction of the insects that are so injurious to the fruits and crops in the spring, and the great importance of preserving insectivorous birds as the only and most effective check

to their undue increase :-

"The undermentioned are the results of the experiments made upon wireworm in the larval state, which of course is the most destructive to plant life. Two sets of cages were filled with soil and planted with seeds of Indian corn. The seeds in the experiment cages were coated with some poisonous material, and the others used in the natural state by way of check. A number of larvæ were put into each cage, and their behaviour watched. The seeds in one series of experiments were coated with Paris green and flour, and the experiments were extended over nearly two years. The results were that the poisonous coating to the seeds retarded germination, but did not seem to injure the larvæ even when they ate the seeds. Somewhat similar results attended the coating of the seeds with tar. Germination is retarded, and it was found that wireworms would attack the seeds even when completely coated with tar. In other trials the seeds were soaked in solutions of salt for ten and eighteen and twenty hours respectively before planting, and they were greedily devoured by the wireworms, which suffered no injury. Sulphate of non or copperas was used for soaking the seeds, in a series of trials extending over two years, but the larvæ are and destroyed the seeds without injury to themselves. Seeds were soaked in chloride of lime and copperas, and planted on April 27th, along with others that had not been treated. The seeds were destroyed in both cases before germination by the 15th of May, and the larvæ showed no signs of injury. Seeds soaked in kerosene oil fared in the same way in the course of a month. Spirits of turpentine were used in another case, but neither prevented the wireworms from eating the seeds, nor did it injure them. What appeared to be more drastic measures were then undertaken. Some seeds were soaked for eighteen hours in one part of sulphate of strychnine to 400 parts of water, and in another trial some seeds were soaked for twenty hours in one part of strychnine to 200 parts of water, and then planted. The poison neither prevented the worms from eating the seeds, nor did it injure them. J. A. KERR.

The Rectory, Clyst St. Mary.

An Appeal.—Will you draw attention to the iniquity of rooting up wild flowers to sell them to English dealers? I could name a district in the Basses Pyrénées, where not a single wild daffodl is now to be found. The flower was once abundant there, but an English resident chose to bargain with a well-known dealer, to furnish him with roots; and this has, I think, been attended by grave injustice to France.

E. H. H.

Sending Living Creatures by Post.—There is a widespread custom in existence amongst naturalists, by which they transfer living animals by means of the parcel post. This means is also largely used by dealers, when supplying their customers with living specimens. Apart from the fact that the senders of such

parcels are liable to prosecution on discovery by the Postmaster-general, this means of conveyance is a most cruel one, and one which all true naturalists should discourage. White mice, frogs and toads, lizards, and even scorpions and pigeons, have at times been discovered in the post; and I write to ask Selbornians, whose great object is to prevent cruelty in any shape, to use their influence to prevent the cruelty which is occasioned living creatures on their passage through the none too tender mercies of the post.

E. A. M.

The Memorial to Richard Jefferies in Salisbury Cathedral was unveiled by the Bishop of the diocese on Wednesday, March 9th. We are compelled to hold over until our next issue an account of the proceedings.

NATURAL HISTORY NOTES AND QUERIES.

English Plant Names.—Seven years have passed since the English Dialect Society issued the third and last volume of the Dictionary of English Dialect Society issued the third and last volume of the Dictionary of English Plant Names. The compilers then congratulated themselves that their work was fairly exhaustive; but it is the nature of a work of that kind to be never quite complete, and after the lapse of seven years they are compelled to acknowledge that the Dictionary upon which they bestowed so much time and labour is no exception to the rule. During the last seven years new plant names have come to hand from various sources. Many names which are not to be found in the Dictionary at all, and much additional information respecting names already included therein have been collected, and the time, therefore, appears to have arrived when a Supplement has become desirable, and indeed necessary; and the authors are now engaged in compiling such a Supplement from the materials that have already reached them. They by no means regret this, because they have always desired that their book should be as complete and therefore as useful to students as possible, and to render it so by means of the proposed supplementary volume they desire to make an earnest appeal for help to all who take an interest in the subject. Lists of plant names which are not already recorded in the Dictionary, or which are used in other counties than those already named, and especially names used in the counties of Durham and Northumberland, which are as yet not very nume rously represented, will he acceptable, and will be gratefully acknowledged. Such lists may he sent to the Editor of this Journal, 18, West Square, London, S.E.

Drawings of Fungi at the Natural History Museum.—The very useful exhibition of British Plants at the Natural History Museum in Cromwell Road, has received an addition of great interest and beauty in the series of drawings representing the British Fungi. The intention in making this exhibition, as a whole, is to illustrate completely with specimens the British flora, and this has been done so far as the Mosses. The great difficulty in making a corresponding exhibition of the larger Fungi, owing to the loss of colour and form in drying, has been met by the bold expedient of a complete series of drawings. Mr. Worthington Smith, whose double qualification for the task as an artist and a mycologist is well known, undertook to carry out this great work, and the fruit of months of work has now been placed in the gallery of the Department of Botany, in the shape of coloured drawings of some six hundred species. As the work advances the exhibition will keep pace with it, but sufficient has already been done to enable visitors to judge of the excellence of the performance.

The drawings are made on large sheets containing each a varying number of species, and these are hung in frames moving on hinges round a pıllar, as in the cases of flowering plants. It is intended to illustrate all the British Basidiomycetes in this fashion, and when complete there will be about one hundred of the sheets. The lower Fungi are to be exhibited in the form of specimens, with generic illustrations—a work, advancing side by side with this, entrusted to Mr. George Massee. The Museum possesses a very extensive series of drawings of Fungi by Mr. Worthington Smith, acquired for the most part about fifteen years ago; and this series, kept for

study in the Cryptogamic Herbarium, is of immense service to Mr. Smith in his

present work.

Few naturalists have other than a vague idea of the extraordinary variety and beauty of form and colour to be found in the Agarics—the Mushroom and Toadstool group—now illustrated partly by the plates exhibited, and a visit to the gallery will certainly open the eyes of all but those experts who already know the attractiveness of this field of study. A remark, constantly made by students of the subject, is that never until now, when the figures of the species are seen side by side, have these same species seemed so well marked and distinct. A greater compliment could hardly be paid to Mr. Smith's work, since the prevailing idea among botanists is that the numerous species of Agarics run into each other in a way that fills one with despair. No doubt a large amount of weeding out of species will one day have to be done, and one of the best services towards this end is the making of this exhibition, since the species are here passed deliberately in review in systematic order by the hand and eye of a master in the study who has no foolish prejudices in the way of species-making. Mr. Smith is to be congratulated on having added to the attractions of the Museum an exhibition remarkable for its artistic beauty as well as its scientific nerits.

GEORGE MURRAY.

Rooks Burying their Food .- Can any of your readers inform me if it is unusual for rooks to bury their food? One day in February when the snow was covering the ground, we put on the lawn, a little distance from the window, a large slice of cake, in the hopes of some birds finding it. We were not disappointed: shortly a rook appeared, and walking up to it broke it into three pieces; then taking one of the pieces in his beak, walked towards a large tree about twenty yards off, under the branches where the snow was not laying so thick. He found a hole and deliberately buried the cake in it; having done so to his satisfaction he returned to the remaining pieces: taking another in his beak he again marched off to the tree, this time burying it close to the trunk in a hole formed by the branching of the roots. Back he came again, and, taking the last piece, buried this in the same manner in another hole under the boughs of the tree. He then returned and for some time appeared to be searching for more cake. At last he gave it up, and walking back to the tree, stopped for a moment near the place where he had buried the first piece, turning his head from side to side as if trying to recollect the exact spot he had placed the cake; then he walked up to the stem of the tree and began eating the piece hidden there. A little later he flew away, apparently quite forgtting the third piece. On the following morning our old friend again appeared; we recognised him by a broken feather in his wing. This time he was busily searching the ground near the stem of the tree, probably remembering his feast of the evening before. He was not unrewarded, for he seemed to find a few remaining crumbs. I may add that during the severe weather a great many rooks came to be fed, and very amusing it was to watch the caution they showed in fetching the food; they would walk in a circle, or in any way rather than go direct towards it, turning their heads about all the time; if another rook approached they assumed an air of careless indifference, which was quite comical to behold, and marched off in another direction.

R. C. C.

Swallows in 1891.—Mrs. Stevens, of Woodham Hall, Woking, writes:—"Seeing the letter in your January number on the scarcity of swallows last year, I should like to tell you of a few that were seen by me and two friends about September 15th. We were strolling down the banks of the Thames in the evening, just below Boulter's Lock at Maidenhead, when we became aware of a wonderful fluttering and chirping going on over head. On looking up we saw thousands of swallows circling round and round, and as the sun set they kept pitching down, first of all by twos and threes, and then by scores, into the willows on the eyot just above the bridge, and before we left the whole island was literally alive with them. I drew the attention of a native, who was passing, to the sight, and he said that he had never remarked it before. It is possible that owing to the wet season, or for some other cause, that swallows this year frequented the neighbourhood of rivers, and selected these withy beds for their meeting-ground before the long flight south. The next evening we were at the same spot. The sun had set, and there was not a sign of a bird in the air, but such a chattering was going on amongst the osiers, which told us they were all there again, and, indeed, on a closer inspection we

NATURAL HISTORY NOTES AND QUERIES. 79

could discover that the willows were quite black with them. We clapped our hands, and for a moment the buzz ceased and every bird was silent, but only to burst out again in universal chorus."

A Sea Mouse.—My children found a little sea mouse on the shore rather more than a fortnight ago. They brought it home, and we have kept it ever since. It is in a bottle of sea water, with a great deal of sand at the bottom; when we take it up to show our friends it seems quite uncomfortable, and gradually settles itself by a slow peculiar motion in the sand, till it is covered right over. It is evidently Aphrodita hystrix, being only two inches long. Its bristles are beautifully iridescent. I should be glad if any of your readers could give an idea of its food, habits, &c. We have also found a small pipe fish (Syngnathus ophiation), which is very peculiar. It is about six inches long, and its snout is very similar to that of the sea horse. I should be glad to know something about it too.

M. E. Cowl. Bournemouth.

Jackdaws Tamed by Jackdaws.—A curious thing, which may interest some of the readers of NATURE NOTES, happened with regard to a pair of jack-daws which we had here about twenty years ago. We had had them from the nest, and during the first summer we had slightly clipped their wings; but after this their wings were allowed to grow, and they lived at full liberty in the garden. They were perfectly tame, and would come at call and feed out of our hand, would come into the house, and in the morning knock at the windows to ask for some breakfast. In the spring they used to fly away and join their wild companions, make their nests, and rear a family; but when this was over they came back to the garden again, fed from our hand, and were as tame as ever. But the curious thing was, that after one or two seasons they brought another jackdaw with them, presumably the young of one of them, which was just as tame as themselves, although we had never done anything to tame it, so that we could not tell which were our original favourites, and which was the new one. And moreover, when after a few years one of these jackdaws was accidentally killed, another was brought by the other two, so that they seemed resolved that we should always have three tame jackdaws in the winter.

Modbury Vicarage, S. Devon.

G. C. GREEN.

Swifts and Swallows.—The swifts left us last summer unusually late, not till September 9th. A late brood of swallows remained until September 28th, and a solitary one was seen on November 8th here in Berks.

Ivy.—Has anyone noticed the exceedingly sweet fragrance of young ivy shoots? For many years we have lived in a house with a great deal of ivy over two gables, and every spring after it has been cut and is making its spring growth, the rooms round the windows of which it grows, and even the passages, are filled with a swect odour quite as sweet as violets. It seems to proceed from the young mealy leaves of the ivy, and is not at all like the natural odour from bruised leaves. I have never met anyone who has noticed it, but there can be no doubt about it, for I have noticed it elsewhere, and have investigated the neighbourhood to see if any other fragrant plant could have been the cause, but have found none.

North Moreton Vicarage, Wallingford.

M. S. Y.

M. S. Young.

A Nest-building Robin.—Is it usual for a cock robin to build a nest before taking to himself a mate? Through February a cock robin has been observed busily engaged in building a nest in the ivy on the wall of a house near Oxford. When the snow came he suspended operations, but recommenced them when the weather improved. A. L. M.

A Jackdaw Query.-I am anxious to domicile some jackdaws in a disused clock tower over my stables. I can get young ones. What is the best food, and am I likely to succeed? Where is the place to get breeding boxes for birds, to hang under the eaves of buildings? E. II. S.

British Butterflies. - Are the following species of butterflies, which have of late years been taken in Britain, to be admitted into our list as "British"? Or, if not all, which of them? P. Apollo, Parnassius Delius, Danaus Archippus, Melitæa didyma, Polyommatus Amyntas, Pamphila lineola, Argynnis Niobe, Colias Philodice. F. O. Morris.

[Mr. W. F. Kirby kindly answers Mr. Morris's question for us as follows:-P. Apollo, P. Delius, Melitwa didyma, accidentally introduced, if met with at all. Argynnis Niobe, said to have been taken in England; but it is doubtful whether reputed British specimens are anything more than varieties of A. Adippe. Polyommatns anymtas (or argiades), a small tailed blue, occasionally taken in the West of England, and possibly indigenous. Danans Archippus, a North American species, frequently taken, and which may perhaps become naturalised. Colias Philodice, a North American species, frequently taken fifty or sixty years ago, but which did not succeed in establishing itself (this is Colias Europome of old authors). Pamphila lineola, undoubtedly British; but till lately confounded by British collectors with the much commoner P. Linea.]

R. M. W.—Euchytraus vermicularis.

E. H. H.—The plant is Clandestina rectiflora, a near ally of our Toothwort (Lathrea).

R. H. R.—Kindly forward name and address, not necessarily for publication. W. F. E. L. (Ceylon).—Dr. Bowdler Sharpe says it is impossible to name

your bird from the description given. He recommends you to consult, if possible, Legge's Birds of Ceylon.

OFFICIAL NOTICES: WORK OF BRANCHES, &c.

OUR VOLUMES.—We desire to call the special attention of our readers to the volumes of NATURE NOTES for 1890 and 1891, which may be obtained at the offices of the Society, 9. Adam Street, Adelphi, W.C., at the cost of three shillings each, or by post, three shillings and fivepence. By the variety and interest of their contents these volumes are admirably adapted for the school or parish library, and we would urge upon our readers not to neglect so excellent a means for advancing the interests which they have at heart. Cases for binding the numbers for 1890 and 1891 may be obtained from the Secretary at the above address, price is. each; or the numbers will be bound and the case supplied by Messrs. Bale & Sons, 87, Great Titchfield Street, W., at the cost of 1s. 3d., or with gilt edges, 1s. 10d. The name and address of the sender, with stamps to the above amount, should be forwarded with the magazines in order to prevent mistakes or delay.

The Annual Meeting of the Clapton Branch was held on Friday, 26th February. The report for 1891 showed a considerable increase in the number of members, and the junior section formed last year, for boys and girls under sixteen, has been a great success, and numbered about 100 members. For these a lecture, illustrated by lantern or specimens, is given on the second Wednesday in each month. Dr. F. II. Daly, the President of the Branch, has given a donation of one guinea to be offered in prizes to the members of the junior section, and a Reference Library is about to be started. Notices were issued during the year calling upon excursionists and others to make a proper use of Epping Forest, and not to ruthlessly destroy the birds and plants, nor injure the trees and shrubs. Dr. Daly, J.P., Messrs. T. J. J. Russell, Gerard Smith, M.R.C.S., and R. Marshman Wattson, were re-elected to the respective offices of President, Vice-Presidents, and Secretary.

At a Committee Meeting of the Birmingham and Midland Branch, held on March 3rd, it was resolved "that Mr. A. W. Wills, of Claregate, Wylde Green, near Erdington, be elected Vice-President of the Selborne Society," according to the rule that any Branch, consisting of as many as 150 members, may elect a Vice-President. At the same Meeting it was resolved that a Popular Lecture should be given in the Town Hall before Easter, to the Board School children and teachers, and as many of the public as chooses to come, to make more widely known the aims and objects of the Society, to be illustrated, if possible, with magic lantern

slides.

Miss A. J. S. Giles, of the Red House, Bushey, writes:—"I think it might be possible to form a Branch here, or at any rate to secure some members if it could be arranged to hold a drawing-room meeting and secure a good speaker. I should be willing to lend my room if there seemed to he a prospect of success." Miss Giles would be glad of information as to the best way of arranging such a meeting.

Mature Motes:

The Selborne Society's Magazine.

No. 29.

MAY, 1892.

Vol. III.

A LETTER ABOUT OLD MAY DAY.

Abbotsbury, Dorsetshire, May 14, 1889.

Y DEAR ETTIE, I want t

I want to tell you about something pretty that was done here by the village children yesterday, and which pleased me very much. While I was getting

my breakfast, I saw some little girls on the other side of the street with what looked like a large ring of flowers, which they were carrying between them. I thought that it was a wreath which they were taking to the churchyard to lay on, perhaps, a sister's grave. But my landlady told me that at Abbotsbury the 13th of May was always a holiday, and was called "Garland Day," and that it was the children's pleasure-day of all the year.

The people of Abbotsbury own ten or eleven fishing boats, that is, some of the people do. With these they go out on the sea in the proper season—now is the very time for it—to catch

mackerel, and in that way they get part of their living.

On Garland Day the children belonging to each boat get up very early in the morning and make up a large framework of wire or sticks in whatever shape they like best. Then they tie beautiful flowers all around the frame until they completely cover it, and so have a splendid show of gillyflowers and tulips and other richly-coloured blossoms, mixed of course with white ones, making a sort of picture. Yesterday most of the picture-shapes were like crowns, very large and handsome ones, or something of that kind, but one was meant to represent "Little Bo-Peep." The idea of "Little Bo-Peep" was got from a pretty piece of play-acting some of the children had performed at the school a few nights before.

When all are ready the boys and girls—not the very big

ones, nor of course the little toddlers, but the real children—dress in their best clothes, and go around the village in groups, each carrying its own flower-picture, which they call a "garland," to show it at the door of every house. It takes two children to carry the garland, and the other children of the group walk behind it. They knock at a door and the two with the flowers stand in front with their garland between them, while the others stand around. The people of the houses are all ready to see them by nine o'clock, and they expect them and welcome them. So the door is soon opened and the flower-picture is looked at. Nobody is in a hurry. The children are asked whose boat the garland belongs to. The next question is-who holds the purse? for it is held wrong for the purse-bearer to push forward. Then the money-bag is held out, and the people of the house put a penny or twopence or sixpence in it—just what they can afford. Very nice and pretty the groups of children, with their beautiful "garland" for each, looked, as they stood around the door-step. So they move on from house to house, not begging, but of course expecting something, which it has been the custom for perhaps hundreds of years to give the children on their Garland Day.

The people think kindly of the children, and take great interest in the flower-pictures. They don't look on the custom as one of begging in the least, but just as one of kindly good-will towards the little ones. So they arrange beforehand how much they can give. They know that there are eleven boats (I think it is eleven) and a garland with its children for each, and they give as nearly

as they can the same money to each group.

By eleven o'clock the different companies have been all round the village. By twelve they have to be at the Castle—the great house where a kind lord and lady live. The lady—the Countess of Ilchester is her title—meets them there, and the children show her their garlands, and she puts a gift in every

purse.

The Castle is close by the sea, a mile away from the village. After the children have been there they go home for dinner, and then in the afternoon go back again to the wonderful great pebble beach in front of the Castle called the Chesil Bank, which is, I think, described in your geography-book. This beach is all made up of clean, rounded, lovely pebbles: there is not any sand in it, much more no dirt at all, and it rises ever so much higher than the waters of the sea rise now, even when the tides are at their highest. I should so like to take you on it some day, and to talk to you about it on the very place itself. God has made that Chesil Bank in a very wonderful way.

The children of the garlands go back to the sea-side, on this lovely pebble beach, in the afternoon and play there until the evening, buying cakes and lemonade and sweets—which people carry down there in baskets—out of the moneys they have had given them in the morning. All the village children come down

too, and others from the farm-houses and gentlemen's dwellings around the village are driven there in carts and waggonettes. Many grown-up people join the company, and Abbotsbury itself is left nearly empty, and quieter than ever—it always is

very quiet-a mile away.

The fishermen are on the beach too, with their boats. When the waves are not too rough, each company of children is taken out to sea in its own boat, with its "garland," and then the garland is thrown overboard and the boat returns to the beach. I did not see this myself, but was told afterwards that this was the regular thing to do, and that it was done yesterday by all the boats but one.

Of course this throwing of the flower-pictures into the sea is now nothing but a custom. Not even the oldest people of the village now know why Garland Day is observed, nor why the garlands are thrown into the sea. But I feel very sure that in the years far far gone by—hundreds of years ago perhaps—the flowers were meant as a real offering to the sea, or to the spirits or the god who ruled the sea, in the hope of thereby obtaining good weather and an abundant fishing harvest in return for this really beautiful acknowledgment of their rights and powers.

Very likely you have already read something in your books about May-day sports and May-day flowers, and perhaps have wondered why May-day is not now anything like what it was in the times which they tell you of. There is not often any real warm sunshine on May-day now, and not many sorts of flowers—

not many flowers of any sort have yet appeared.

The difference is easily explained. The first day of May is now two weeks earlier than it used to be. The reckoning of the months and years was once-for reasons which you will find out as you grow older and learn more from your books and teachers—not so true as it is now; and so it had to be changed. And the change was made since the old descriptions of May-day (the first day of May) were put into poetry; since the old Mayday customs—dances around the May-pole, flower-feasts, Queen of the May processions, and other pretty observances—were established. What is now the first day of May was formerly only the 18th day of April; the old first of May is now the thirteenth This of course means a difference—that (almost) fortnight does-between the time when the flowers are just coming out and the time when many of them have appeared in all their beauty. It means the difference between a time when spring has scarcely more than begun and mornings and nights are still cold, and a later and brighter day when the sun is conquering and warm weather is really coming on—when trees are putting forth all their greenness, and the hedge-banks, woods, and fields have already dressed themselves in daisies, blue hyacinths, golden cowslips, and many other lovely things.

Fishermen and children and people stay upon the beach until the sun sinks low and disappears behind the hills, and

then evening draws towards night. I came away sooner, with my friends. The last I saw of "Garland Day" at Abbotsbury was a waggonette full of children and bigger folk driving through the village on their way home, and soon after a little girl, very tired, trudging to her home—with her still more tired and tinier sister carried upon her back.

That was yesterday. Isn't it all very pretty and sweet and

nice? I am so glad to have been here for Garland Day.

I am, dear Ettie, Your loving Uncle, W. W.

BROWNING'S "THREE-LEAVED BELL."

R. BERDOE, the author of the Browning Cyclopædia, sent to the press a surprisingly small number of "difficult problems which neither [his] friends nor such books as [he] possessed could explain to [his] satisfaction."

Dr. Berdoe must be singularly unfortunate, both in his friends and his library, if he could learn from neither of them the story of the procession of Cimabue's Madonna "through old streets named afresh from the event"—the Borgo Allegri of Florence. His ignorance of Ouida's stories is more pardonable, perhaps even meritorious, though he would find the "cue-owls"—another of his problems—explained by a letter in Frescoes: "I hear the cicala boom, the maize stalks rustle, the chiu hoot."

But one of the problems relates to a flower:—

A three-leaved bell, Which whitens at the heart ere noon, And ails till evening gives it to her gales To clear away, with such forgotten things As are an eyesore to the morn; this brings Him to their mind, and bears his very name.

The solution suggested, and accepted by Dr. Berdoe, is that the plant "is the Day Lily, sometimes called St. Bruno's Lily, an alpine plant, commonly called in France Belle-de-jour, in botany known as Hemerocallis." Now there never was a more striking instance of "two single gentlemen rolled into one" than is presented by this sentence. The Day Lily is one thing, St. Bruno's Lily another. The former is the Hemerocallis, but the "alpine plant" belongs to the latter; the former, from its frequent occurrence in gardens and its early fading, is very likely to be called Belle-de-jour, although that name is more usually applied to the blue convolvulus (C. tricolor).

The St. Bruno's Lily (*Paradisia Liliastrum*), however, is certainly not intended, for that has a *six*-leaved bell, and could not become whiter than it is. The plant meant by the poet is

probably *Hemerocallis fulva*, well known as the Day Lily, and so prettily described by John Parkinson in his *Paradisus* (1629) that I cannot do better than transcribe his description, from which I think readers will have no difficulty in recognising the plant

as a common garden flower:-

"The red Day Lilly hath divers broad and long fresh greene leaves, folded at the first as it were double, which after open, and remaine a little hollow in the middle; among which riseth up a naked stalke three foot high, bearing at the toppe many flowers, one not much distant from another, and flowring one after another, not having lightly aboue one flower blown open in a day, and that but for a day, not lasting longer, but closing at night, and not opening againe; whereupon it had his English name, The Lilly for a day; these flowers are almost as large as the flowers of the white Lilly, and made after the same fashion, but

of a faire gold red, or orange tawny colour."

That this is the species intended, and not the almost equally common *H. flava* with golden yellow flowers, is, I think, clear. Although both have really six leaves to the flower, the three inner ones of *H. fulva* are very nuch larger than the three outer, so that the description "three-leaved bell" is not inapt. In *H. flava* the divisions are more equal in size, and the blossoms do not fade so rapidly. The poet's description, however, is not accurate as to the dead flowers being "cleared away" by the "evening gales," for, so far as I remember, they wither on the stem; nor does the *Hemerocallis*, so far as I can ascertain, bear any name at all resembling Eglamor—the "him" of the lines quoted.

Dr. Berdoe accepts apparently without hesitation the expla-

nation given in the Browning Society's Papers of the

One plant,
Woods have in May, that starts up green
Save a sole streak which, so to speak,
Is spring's blood, spilt the leaves between.—May and Death.

According to this authority, the common Persicaria (Polygonum Persicaria) is meant. Now this plant does not grow in woods, and would hardly be visible in May, as was pointed out when the passage was under discussion in Nature Notes two years ago. Both the Arum and Purple Orchis sometimes grow in woods, though they are not characteristic woodland plants, and the leaves of both are often spotted; but what is the "sole streak"? To me this plant is far more difficult to identify than the "three-leaved bell," and I venture to hope that Dr. Berdoe may include it in any future list of "difficult problems," inasmuch as the above explanation cannot be considered satisfactory.

JAMES BRITTEN.

ANTS IN CEYLON.

Y far the most interesting of all the insects out here to me at present are, I think, the ants. I have several colonies of ants about the estate in which I take a special interest, and always look to see how they are getting on when I pass them. Sometimes I come upon a colony and find every ant occupied with clearing out the sand that has got washed down into their nests. Every ant, as it comes to light, will be seen to have a little pellet of earth in its mandibles, which it carries up and lays down a little from the mouth of the nest, then returning for another and yet another load. Stooping down to watch them closely you will perhaps see one with a regular boulder, a piece of quartz looking very small to us, but fully as large, or even bigger, than the ant itself, who is tugging and straining at it with might and main. Now it will push it upwith all its might, now it will turn round and begin tugging and dragging it backwards; at last it will have advanced about an inch, when it will tread on some newly-deposited earth and down will slide ant and boulder together, and the lost ground will haveto be made up as soon as possible. So hard does it work and with such zeal, that I was almost going to say it made one expect to see it take a handkerchief out of its pocket and mop its forehead!

The most curious part of it all is, that you will sometimes see another ant which has just deposited its burden turn round and run home, passing right over its heavily-ladened comrade, just as if the latter were not there. Another feature concerning these ants is that they seem to have their regular "beef days,"* on which every ant goes out in search of provisions. Here is one noble sportsman returning in triumph with some small insect, such as a very small moth or wing of a dead fly; and there you will see a large gang of about fifty coolies (I mean ants) all dragging along the body of a large beetle or a worm. I once saw two ants both hauling away at the fragment of a worm on the very edge of the crater surrounding the entrance to the nest. No. I had found what he considered a very choice morsel and was bearing it home in high glee when No. 2, for some unaccountable reason, seized hold of it and began pulling it in the opposite direction. It may have been under the impression that No. I was going in the wrong direction, or he may have thought that this was not a particularly agreeable joint todine off, or he may have been an ant from another colony who thought the worm a most particularly dainty morsel for a royal banquet and much too good for the ants of No. 1's colony. At

^{*} On all upcountry estates in Ceylon, a coolie is dispatched on one day in the week to bring from the butcher a supply of meat for the planter's bungalow, which is almost always beef.

any rate I witnessed a most exciting tug of war. First No. I began to gain ground, and then losing his footing and with it his advantage, he was dragged a few lengths with his burden when a No. 3 appeared, joined in a round, but went off in disgust leaving Nos. I and 2 to settle their own affairs. At last after various struggles No. 2 gave it up and tried something else,

while No. 1 bore the booty in triumph away.

Another day I saw a string of ants streaming forth, evidently in search of "pastures new," but I just flicked away the leader and waited to see the result. There was an immediate halt made by the foremost ants, and a scene of utmost confusion ensued. The ants from behind kept arriving at the scene of the catastrophe and there was soon a black crowd of ants huddling and jostling one another. Some would detach themselves from the main group and take a turn round, trying to find some traces of their leader; then at last the tail end of the line arrived, and after brief consultation they all started off again and a line soon began to unravel itself from the tangled mass moving back to the hole from which the whole company had so lately started on "pleasure bound or labour all intent." While I was watching the return journey, I felt something stinging my leg. Ugh! a leech! I took it off and put it down in the line of march. will carry off a worm, why not a leech? It was, however, most amusing to see how carefully all avoided the leech.

W. F. E. LIESCHING.

THE JEFFERIES MEMORIAL.

HE monument to Richard Jefferies in Salisbury Cathedral was unveiled by the Bishop of Salisbury on Wednesday, the 9th of March. It consists of a marble bust, the work of Miss Margaret Thomas, of which the accompanying is an illustration, below which is the inscription given on following page.

The Dean of Salisbury then delivered an address, of which

the following is a portion:-

"I could well wish that the task of saying a few words on this occasion had been entrusted to one better qualified than I am to say what the friends and admirers of this remarkable writer would desire. The story of a life like that of Richard Jefferies cannot fail to make a deep impression upon the most careless. It has been told by one of the most skilful and popular writers of the present day, and the growing interest in the later writings of Jefferies, as evident on all sides, must be to Mr. Besant a most gratifying result of what he has

^{*} From photograph by Mr. Owen, Salisbury.

done. It was well said by Thomas de Quincey that life had had many additional pleasures given to it since Shakspeare lived and wrote, and all lovers of natural history, all admirers of the weird



TO THE MEMORY OF RICHARD JEFFERIES,

BORN AT COATE IN THE PARISH OF CHISELDEN AND COUNTY
OF WILTS, 6TH NOVEMBER 1848,
DIED AT GORING IN THE COUNTY OF SUSSEX,
14TH AUGUST 1887,
WHO OBSERVING THE WORKS OF ALMIGHTY GOD,
WITH A POET'S EYE
HAS
ENRICHED THE LITERATURE OF HIS COUNTRY,
AND
WON FOR HIMSELF A PLACE AMONGST
THOSE
WHO HAVE MADE MEN HAPPIER
AND WISER.

beauty of the Wiltshire Downs, the nooks and corners of old England, the varied associations which birds and trees and flowers convey to rich and poor, to learned and unlearned, must feel, as they peruse *The Gamekeeper at Home* and *The Life of the Fields*, that a new pleasure has been imparted to every-day existence, and, to use Mr. Besant's words, 'the author has written down the response of the soul to the phenomena of Nature, and has interpreted the voice of Nature speak-

ing to the soul.'

"There is a charm and a distinction in these writings perfectly unique. English literature is not without many and many a page reflecting the fulness and beauty of Nature in her varied moods. But there has not been in our own time, with the exception perhaps of Charles Kingsley, such a combination of minuteness and fidelity, such a power of producing the sense of beauty, and the deep calm which, to use the author's words, 'is the ideal of Nature.' He who could look on Nature with such eyes, desired above all things to see the life of literature and the friendship of books carried into Wiltshire villages as a means of elevation and delight. The chapter on 'Country Literature' in The Life of the Fields ought to be prized and valued by all who are seeking to make the lives of our labourers more

bright and happy.

"The story of his life must always be a sad one. We cannot help wishing that there had been some one like the great Edmund Burke, who appeared like a good genius at the most critical time of the poet Crabbe's career, to lead and console a sorely tried spirit in the way to health, success, and faine. A stern teaching, hours of sorrow and poverty, vain attempts to solve the problems of existence, days of doubt and wild expression, utterances, too, of thoughts best left unsaid, were his portion and his burden. But at eventide there came light, and the hours spent in prayer and reading the gospel of St. Luke, the gospel which enshrines for ever the words of return and hope. 'I will arise and go to my Father,' remind us that in this temple of reconciliation and peace we can think of Richard Jefferies, and tell to the many children who from time to time may come to worship, that there is here a memorial of one who died 'listening with faith and love to the words contained in the old Book.

"A gulf of generations lies between us and the morning star of English song, Chaucer, but the spirit which moved that great genius has never departed from the sons of England, who have entered into the secrets, the open secrets of Nature, and like William Barnes in poetry and Richard Jefferies in prose, have moulded into noble and enduring forms the sights and sounds of the pure and elevating life of the country. These men have added to the lasting pleasures of life, and while they lead us onward and upward, they cheer and console—to use the words of a great historian, Alexander Kinglake,—'men militant here upon earth, enduring quiet, content with

strife and longing for peace hereafter."

JACK: A BIOGRAPHY.

ACK was a native of the little village of Findon in Sussex. Nothing is known about his parentage. He may have been a scion of one of the numerous families of ecclesiastical Daws, who have from time immemorial

inhabited the roof of the dear little old church and its closely surrounding beech trees, and proved the truth of Hood's well-known lines:—

"The daw's not reckoned a religious bird, Altho' he keeps a-cawing from the steeple,"

by invariably choosing the hours of Divine Service in which to hold their profane parliaments. Or he may have been a member of the other great tribe of Daws, haunting the grey-green, orchisgrown slopes of Cissbury Hill. Jack's parents may have been among the noisy crew that "jacked" and "quacked" over my head many a time as I sat on the soft sweet turf—looking south over the far-reaching, low-lying coast line to the blue sea beyond, dotted with white sails; or north, over the gently swelling

wooded weald of Sussex, to the Surrey Hills.

But it is still more likely that Jack was not able to claim relationship with either of these two great aristocratic clans. The village was full of small colonies of jackdaws, and Jack's parents probably belonged to one of these. Every high tree with a rotten patch in its old stem big enough to be pecked into lodgings for two, with a liberal accompaniment of sticks as furniture, was pounced on at once. Farm-buildings and old roofs provided lodgings for others. In fact, the place was so popular among jackdaws, that the demand for house-room far exceeded the supply. Mark Twain's famous Blue Jay would have blushed at the mildness of his own language if he could have heard an average newly-married Findon jackdaw, when looking out for a desirable mansion about nesting-time.

I made Jack's acquaintance first as an inmate of the village blacksmith's family, a very young bird indeed, although past the yellow-billed age. He was in jacket and trousers, so to speak—with one wing clipped, otherwise free to wander at will; black and sleek as to plumage, tolerated by all on account of his sense of humour and power of evolving fun out of scant materials, poor little chap, suspected to be a "limb," but too young to have taken any decided line of action yet. So he was not at once given the bad name, that is as good as hanging, for all power it leaves its unfortunate possessor of ever becoming a self-respecting member of society again, or of getting others to believe in his wish to improve; and Jack's owners tolerated the bird as I have said, suspected him, and waited—and so did Jack!

It was not long before stories began to circulate freely respecting Jack; small thefts, and tiresome teasing ways almost human in their cunning, and power to annoy just the one against whom Jack had a grudge, soon wore out the patience of the

blacksmith's family, who were industrious, hard-working people, not inclined to waste much time over a black imp of a bird, whose relations swarmed everywhere and were shot down by dozens by the keepers and crowscarers and anyone and everyone as vermin. Doubtless Jack began to find out what a hazel-switch meant, and also that a dish-cloth could be put to other

uses than that of wiping dishes.

One day there was a tea-party at the blacksmith's house, and a plate of hot cakes was brought into the sitting-room and put down inside the fender to keep hot for the expected guests, under the watchful eye of the blacksmith's mother. Whether the dear old lady dozed, or whether she was simply absorbed in her knitting, there is no one now to tell; but it was the housewifely daughter bustling about her preparations who was the first to notice that the pile of dainties in the fender was visibly diminishing without any apparent agency. Calling her mother's attention to the fact, she left the room again, on hospitable thoughts intent, and presently when the room was still, a pair of beady grey eyes peered out from below the deep flounce of the old-fashioned sofa, and Jack slowly crept into view. Picking his way on tip-toe across the room, with tail and bill elevated in the air as if he were afraid they would catch somewhere and make a rustle, he snatched a piece of buttered cake and rapidly disappeared with it under the sofa flounce again, where he shared his ill-gotten gains with the house cat.

I think it was after this last escapade that the patience of Jack's owners gave way, and Jack was consigned to a wicker cage, where he would, if he could, have committed suicide before the first day was over. In prison Jack soon got to look quite disreputable. He wore his beautiful black tail down to a bunch of shabby stumps that looked as if they had been used for cleaning pipes, brushing them against the bars. He broke the upper mandible of his strong bill trying to peck a hole through the roof or the floor of his prison, and wearied himself in vain attempts to untwist the fastening of the hateful door. He never gave up trying to get free from a place where there was nothing to do for a bird of mind and character, and as the weary days wore on, and all his poor little efforts to regain his freedom failed, the truth slowly dawned on Jack's mind and his heart began to break. His owners, busy and pre-occupied as they were, were too kindly-natured to neglect any living thing in their care, and soon noticed the bird's altered looks; and coming to the true conclusion that Jack was pining to death in prison, sent him down one night as a present to my sister, who had

often expressed an affection for the bird.

One evening a servant came in with a covered basket, out of which she produced Jack: then delivering herself of the polite message sent by his late owners, she betook herself to the back regions of the house again with the basket, leaving five grown-up people looking at the most disreputable semblance of a jack-

daw it is possible to imagine—broken-beaked and tailless—and wondering what in the world to do with the creature. Jack watched his new owners thoughtfully, and then put an end to the situation, which was becoming strained, by a flick of his wings and a sudden departure under the dining-room table to pick up crumbs. In a day or two Jack was quite at home, and then came the discovery that he was a bird of no ordinary character.

ELLA F. CONYBEARE.

(To be continued.)

THE FIRST SWALLOW.*

I heard the wheat-ear singing in the dale, I saw the ouzel curtsey to the sun And cried, "The days of winter sure are done, The spring upon the mountains doth prevail, Soon shall the cuckoo come to tell her tale." E'en as I spake where Calder's ripples run To seek the shining Solway, there came one Songless but sweeter than the nightingale.

From silent wastes and those dumb Memphian hills Where dead men slumber in Sakkaran dunes, He came, he could not speak our English tongue, But as he flashed above the daffodils On bluest April air he wrote in runes That Love was near, and Life again was young.

H. D. RAWNSLEY.

A BOOK FOR NATURE LOVERS.

Recollections of a Haffy Life, by the late Marianne North, 2 vols, 8vo. Macmillan & Co. Price 17s. 6d. net.

Amongst the many works of travel recently published, none will receive a warmer welcome from all true lovers of Nature than this. Miss North, of whom some account appeared in this Journal for November, 1890, introduces the reader first to her home life at Hastings—then a picturesque town, represented by her father in the Parliament of 1830, the year of her birth. Spending part of her life there, and at Rougham, the old seat of the Norths, with an occasional visit to Lees, belonging to Sir John Marjoriahnks, she soon felt the force of heredity, and experienced the gradual evolution of the tester for music and pointing conand experienced the gradual evolution of the tastes for music and painting conspicuous in old Roger North. Music of the highest class was a life-long passion with her, and the makers of it were always ranked amongst her dearest friends.

After her father ceased to represent Hastings the family travelled abroad, seeking preferably the unbeaten tracks, but occasionally foregathering with the virtuosi of the principal German cities. In April, 1855, Mrs. North died, commending her husband to the love and care of his daughter, who, true to her trust,

made her father's happiness the sole object of her life.

^{*} Seen above Calder river, about four miles south of St. Bees' Head, April 1, 1892.

During the next twelve years tours were made in Europe, Egypt, and Syria; plants were collected and stored in the glasshouses built for them at Hastings Lodge, and soon became familiar friends. One day Sir William Hooker gave Miss North a branch of the *Amherstia nobilis*, with its great bunches of bright vermilion flowers sacred to Buddha, and from that time father and daughter often talked of visits to the tropics-visits, however, never to be accomplished by them together. In 1867 Mr. North's health began to fail, and after an excursion to Gastein he returned to Hastings to die.

In July, 1871, Miss North took the first of her long tours to Canada and the United States; there her loving intimacy with plant life became confirmed. The sweet-scented Comptonia, so called after a bishop of London, was one of the first of the wayside plants with which she made acquaintance. Later, she was gathering and painting, if possible in situ, the wild flowers in the neighbourhood of New York, the Indian turnip of the Americans (Arisama triphylla), the lady's slipper (Cypripedium parviflorum), the cancer root (Aphyllon uniflorum), the brilliant Azalea nudiflora, the stagger bush (Andromeda Mariana), and other plants.

Returning occasionally to social life, with which she was never much enamoured, Miss North met Longfellow, Agassiz, and other well-known persons. She found time to visit some of the North servants who had settled in America, and finally found her way to the White House, where President and Mrs. Grant, being under the impression that she was the daughter of Lord North the ex-Prime Minister, showed her marked attention. Armed with letters from Charles Kingsley and others, Miss North, chilled by the severe cold of the northern States, determined on spending her Christmas Day in Jamaica, where she soon found a little home about a thousand feet above the sea.

Revelling for a time in the glorious tangle of tropical vegetation, she painted the great Caladium esculentum and other plants; and under the guidance of the Governor, Sir J. P. Grant, she saw the gigantic bread-fruit, the mahogany trees, the bamboos fifty feet in height, the ebony and cotton trees; ate sour sop and guava, and listened to a musician in the shape of a bird who "whistled two notes scientifically describable as the diminished seventh of the key of F, E flat,

and B natural alternately, always in perfect tunc."

Returning to England on the 16th of June, our artist started again in August to continue her studies of tropical plants in Brazil. Always observant, however, she did not permit her mind to be entirely absorbed by the vegetation, magnificent as it was in its growth and variety of form and colour. At Rio she saw Bauget's valuable collection of humming birds, and cried out with child-like delight when at Morro Velho she discovered a nest of one of these fairy-like birds hanging by strands of spider-webs to bamboo leaves and maiden-hair ferns.

At the height of 3,000 feet above the sea she found the Araucaria brasiliensis, which, beginning life as a perfect cone, then becomes barrel-shaped with a flat top, and ends as a giant stick supporting a leafy saucer. After visiting the once prosperous mining districts and the healthy Highlands of Brazil she returned to Rio, spending a pleasant hour with the versatile Emperor and Empress. The amount of painting which she got through during this expedition was enormous. Of the subsequent tours made to Teneriffe, California, Japan, Borneo, Java, Ceylon, and the native states of India, which she left in 1879, none afforded her more pleasure than that to Borneo, where the Rajah and beautiful Ranee of Sarawak gave her that freedom of life and sympathy with her tastes so dear to her.

In California Miss North was a favourite in the neighbourhood of the "Great Grisly" as being "one of the right sort, neither caring for bears nor yet for Injuns." Japan was visited at a good time of the year for an artist fond of the gorgeous tints of decaying foliage, but too late for health, with the result that, after constant attacks of rheumatism terminating in rheumatic fever, she was compelled to beat

a retreat to the warm air of Singapore.

On her return to England Miss North hired a room in Conduit Street for the exhibition of her pictures, which gave rise to a suggestion in the Pall Mall Gazette that they should ultimately find a home in Kew Gardens. An offer to present the collection to the nation was immediately made, and Sir Joseph Hooker and Mr. Fergusson, the architect, gave their assistance in carrying out the plan. The design of the museum settled, Miss North, on the personal recommendation of Darwin, determined upon adding the flora of Australia to her collection. Leaving England with the Brookes in 1880, she reached Borneo for the second time on the 25th of May, and after a delightful visit there, resulting in the discovery of Crinum Northianum, she returned from Singapore with the writers of this notice to Brisbane, whence she made her way to Govett's Leap (Govett, not Govall, was a surveyor) and down the zigzag railway to Sydney, where we had the great pleasure of introducing her to Dr. George Bennett, the veteran author of Gatherings of a Naturalist, and to Mrs. Bennett, who had recently received a valuable present from D'Albertis of birds of paradise in perfect glossy plumage. After seeing the district of Illawarra and Camden, she continued her journey

After seeing the district of Illawarra and Camden, she continued her journey from New South Wales through Victoria to Albany; thence she was driven in the police cart to Perth. At Newcastle she painted the white-leafed Eucalyptus macrocarpus with its scarlet flowers. Leaving West Australia in January with her three little flying mice (Acrobata pygmæa), which lived for some months in the flat in Victoria Street, she sailed for Tasmania and New Zealand, and returned to England by way of the United States. A year was then spent in London in the completion of the Museum at Kew, which was opened to the public on the 7th of June, 1882.

In August of the same year she went to South Africa, and after a pleasant sojourn there of some ten months, returned home to start again in a few weeks for the Seychelle Islands. This expedition was too great a strain for a person suffering from increasing deafness, but in spite of a nervous collapse, she planned and carried out the fatal one to Chili in 1884, when the effects of the hard life led in that country were only too apparent to all her friends upon her return to

London.

In 1886 she retired to peaceful Alderley, near Wootten-under-Edge, in Gloucestershire, full of projects for a garden which would remind her of delightful days in distant countries and the true friends who had contributed to her happy life, and was content to rest after labours which had culminated in the creation of one of the most attractive institutions in the country—"the North Gallery at Kew," affording instruction to all classes not only on week days but on Sunday afternoons, which Marianne North, surrounded in her quiet home by the most beautiful objects which the world could produce, felt were in England often given up to depraved and mischievous idleness, fostered by the compulsory closing of picture galleries and museums, with their wholesome and elevating influences. The crowds of simple folk as they gaze on the walls made beautiful at Kew, bless the "memory of the lady that did all the flowers herself," and who passed away from her many loving friends on August 30th, 1890.

Having an admirable eye for colour and an infinite capacity for taking pains, she painted plants and animals as lovingly as if they were portraits of dear friends, and added a great charm to her pictures by introducing, as accessories, objects

with which they were commonly associated in life.

Being often greatly fatigued and ill, Miss North was apt to be silent and sometimes a little brusque with oores and unsympathetic souls, but in her heart she liked to give pleasure, and to many ladies rich in talent but poor in purse she ever offered a warm and generous welcome. She had a keen sense of humour, loved children and young people (especially good-looking ones), and delighted in fun. In planning an expedition to her room at Kew, or some little dissipation in the way of one of her charming dinner parties in the Victoria flat, she always used to exclaim with a little laugh, "Won't it be fun, eh?" and when accomplished,

"Wasn't it a success, eh?"

These Recollections of a Happy Life, lovingly edited by her sister, Mrs. J. A. Symonds, should be in the hands of all young people, and of those who wish to travel in the countries therein described with leisure hours unwasted. The thoroughly suggestive impressions of tropical life might form the basis of pleasant lessons in geography and natural history, the illustrations being sought in life or pictorial presentment at Kew. The study of the fauna and flora of a country associated with various geological formations, altitudes, &c., would also in itself be a good exercise in that accurate observation, the absence of which is often the source of the general ignorance of science and art so frequently deplored by the authoress.

It would be a great improvement in the next edition if the Kew catalogue formed an appendix, and a map with some sketches were added. Some slips

of the pen and reader's errors need correction—Mongeese, Govall, Huguns, Balli Pass, Cana, &c.—and above all, the important omission of an index should

be supplied.

In a necessarily short notice of a work crowded with detail it is impossible to make extracts, but we draw the attention of readers to the story of Garibaldi the poodle, p. 36, vol. I; the house-building caterpillar, p. 120; the spider's web, p. 150; the descriptions of Niagara, California, India, Japan and Borneo, which are especially full of little touches true to life. Every page of this work will lead to the desire either to see the countries and their inhabitants, or to obtain more information concerning them.

GEORGE A. and THERESA MUSGRAVE.

WORDSWORTH AND HIS BIRDS.

"When all the greater evils of life shall have been removed, Mr. Mill thinks the human race is to find its chief enjoyment in reading Wordsworth's poetry."*
This happy period, indeed, has not yet arrived, but the steadily growing appreciation of Wordsworth may perhaps be regarded as an indication that we are preparing for it. Every Selbornian must rejoice at this; and it is indeed matter for congratulation that we have now presented to our choice three delightful little pocket volumes, ranging in price from threepence to half-a-crown, containing some of the last poetry of "him who uttered nothing base." Messrs. Cassell give us in their "National Library" Selected Poems from Wordsworth (3d. and 6d.), and we trust they will make similar selections from other poets. Mr. Walter Scott issues The Poetical Works of William Wordsworth (Selected) (1s.), in his "Canterbury Poets," while the Poems of Wordsworth (2s 6d. net.) chosen and edited by Matthew Arnold for Messrs. Macmillan's "Golden Treasury" Series, has long been considered a model for works of the kind, and has a special value on account of the admirable prefatory essay contributed by the editor. Every lover of poetry, every devotee of Nature, every Selbornian should have one of these volumes in his pocket when he goes for his summer holiday. If he is worthy of any of these titles, however, the little book will not long remain there undisturbed.

Mr. Wintringham's volume on The Birds of Wordsworth (Hutchinson & Co., 13s.)

Mr. Wintringham's volume on The Birds of Wordsworth (Hutchinson & Co., 18s.,) is certainly not a book for the pocket, although its physical lightness compared with its bulk is a noteworthy feature. It would be cruel to suggest "Love's Labour Lost" as a second title, and yet it seems to us more accurately descriptive than the one chosen by the author: for the birds of Wordsworth are but the "half-pennyworth of bread" to the "intolerable deal of sack" supplied by Mr. Wintringham. When the delightful author of English as She is Spoke, said: "I see you have a very bad style," he might have been thinking of Mr. Wintringham. The introduction abounds in sentences of this kind: "Wordsworth's knowledge of British birds is rich, varied, and far above the average possessed by bards, and furthermore he is transcendent. If his predecessors were ready to restrike chords in vibration, his followers have been quite as willing to prey upon his ideas." "He was not a plagiarist emphatically, yet provided the pre-author's line of thought ran clear and cleanly, possessing no degrading laudations of sensuality or vulgarness, he was as ready to retravel it as later poets have been to sing again the pure conceptions his mind has produced." There are 420 (beautifully printed) pages of this kind of thing, interspersed, indeed, with snatches of music from the poet's lyre, but "mainly consisting of (sentences) like these," in which Mr. Wintringham brings together apparently all that he can remember about birds, but (strangely enough) not a "complete list of Wordsworth's bird references."

If "you may know a man by the company he keeps," it is equally true that you may judge a writer by the authorities he quotes, and by those he omits. Mr. Wintringham thanks—or rather "expresses gratification for the use of," among other works—Dr. Brewer's Dictionary of Phrase and Fable—that mar-

^{*} The New Republic, book i., chapter 3, with a reference to J. S. Mill's Autobiography.

vellous volume which, at any rate in the "thirteenth edition, revised and corrected," explains "benedicite" as "two words" benedicite (bless you), and derives "coltsfoot" from "cold's food," i.e. "food for colds and coughs." He does not, however, appear to have heard of Mr. Swainson's Folklore of Britis Birdsh, the only good book we have on the subject. He is not more fortunate in the selection of his ornithological authorities; and Mr. John Burroughs's volume of sketches entitled Birds and Poets appears as "Mr. John Borough's essay, 'Birds and the Poets,'"

book we have on the subject. He is not more fortunate in the selection of his ornithological authorities; and Mr. John Burroughs's volume of sketches entitled Birds and Poets appears as "Mr. John Borough's essay, 'Birds and the Poets,'"

Lest it should be thought that we have given too unfavourable specimens of Mr. Wintringham's style, we will give another example, opening the book literally at random. This is how he introduces the cuckoo:—"As so little is known about the mysterious cuckoo, which is indeed within the volume of Nature 'the mystery of mysteries,' unparalleled even by any of the mysteries of the monster son of Penelope, the most terrifying Pan, the one great outrage Nature permits against herself, I ask the reader's licence here to condense as much as possible the life-history of this bird." And this is how he takes leaves of "this interesting violator of that one great dictate which binds the world in harmony. Here I leave to the reader's notice a creature which possesseth neither patience, kindness, generosity, humility, courtesy, unselfishness, good temper, nor guilelessness; a bird which does not possess a single element which is essential to love; a little monster who commits murder the very day he is given liberty if not sight; and yet a bird which has not only encouraged Wordsworth to re-write Chaucer's lengthy poem, in which that poet makes the cuckoo and the nightingale maintain a fantastic discussion, but writes of it at Laverna, when his hearing is dulled with age" (here follow three pages of quotation).

Mr. Wintringham has not even the excuse of being ignorant of the way in which a book of this kind should be done, for he refers with appreciation to Mr. Harting's book on the birds of Shakespeare; Mr. Ellacombe has done the same work equally well in another branch in his Plant-lore and Garden-craft of Shakespeare. It is with regret that we speak thus unfavourably of a volume which we opened with the most pleasurable anticipations; but our criticisms feebly portray the sense of disappointment with which we laid it down. Almost worst of all,

there is not only no index, but not even a table of contents.

SHORT NOTICES OF BOOKS.

In Alexis and his Flowers—Flower Lore for Boys and Girls (Unwin, 5s.) Miss Beatrix F. Cresswell gives us a good deal of information about the names and folk-lore of plants, strung together by a slender but graceful thread of narrative. We are afraid that some of the legends are not genuine, and the spurious antique of T. M. Forster, beginning:—

"The snowdrop in purest white arraie, First rears her head on Candlemas Day,"

finds a place here, as in every other work of the kind, and is dignified as "the old monk's rhyme." But this is hardly to be wondered at, and the lines themselves are so pretty that we can hardly grudge them their reputation. Miss Cresswell's ecclesiology is somewhat fanciful. We should like to know where and when snowdrops were substituted for "the image of Our Lady" on Candlemas Day, or where churches were decorated with Lent lilies and yew on Ash Wednesday. "Saint Patrick's Cabbage" is a book-name, not a real Irish title for London Pride. This is a pretty little volume, and cannot fail to please.

Messrs. Longmans have added to their "Silver Library" a new edition of Richard Jefferies' Red Deer (3s. 6d.), which was first issued in 1884. In its present form it is curiched with seventeen illustrations, which add to the attractiveness of the book. The works of Jefferies need no recommendation to the readers of NATURE NOTES. The present differs from his other books in being mainly devoted to one subject, but it of course abounds in the charming word-pictures which are never absent from his writings.

Lessons from Fields and Lanes, by Mr. G. A. Grierson (York: Bleasdale, Is.), deserves its sub-title, "A field-companion for the botanical student." The chapters comprising it were originally written and published with a view to assisting the pharmaceutical student, but the author has done well to make them accessible to a wider circle of readers. The book is more strictly botanical than others of its class, and is commendably free from the errors which they too often contain. But the absence of an index, either of terms or plants, is a very serious drawback to the usefulness of the little book.

We have to acknowledge the receipt of two delightful volumes by "A Son of the Marshes"—Annals of a Fishing Village and Within an Hour of London Town (William Blackwood & Sons, 7s. 6d. each); Walks and Talks of Two Schoolboys, and Playhours and Half Holidays, by the Rev. J. C. Atkinson (Macmillan & Co., 3s. 6d. each); Island Life, by A. R. Wallace (Macmillan & Co., 6s.); Mary Howitt, an Autobiography (Isbister, 10s. 6d.) We hope to notice these as soon as the many demands upon our space will allow.

SELBORNIANA.

Shameful Decision with regard to the "Hilly Fields."—The Lewisham District Board of Works have declined, by a majority of 12 to 10, to rescind their former resolution to have nothing to do with the purchase of the "Hilly Fields." All the arguments in favour of saving the "Fields" that have been urged in Nature Notes and elsewhere were employed by a deputation at a meeting of the Board at which the vote was taken. This time only £2000 were asked instead of the £6000 of the former occasion, but they declined to contribute even £2000 of the ratepayers' money towards the purchase. No better comment on this shameful decison can be found than in the fact stated by a contemporary, that the money which ought to be spent on a means of giving health and happiness to their neighbours, is wasted by these unworthy local legislators on their own selfish luxuries, in the shape of driving about in carriages and expensive dinners at the Crystal Palace.

Archibald Clarke.

A Devoted Dog.—We are indebted to the Rev. F. O Morris, to whom it was sent by a correspondent, for the following touching anecdote:—"I think I must tell you an anecdote of the affection and intelligence of a dog, such as one reads of, but seldom has the opportunity of verifying. The lunatic asylum in Alton is now in the hands of Roman Catholics, and a young priest who was attached to the establishment as chaplain has lately died. He had a dog, a sort of pug, I think, which was his constant companion and pet. Shortly before he died the dog was with him, and licked his face all over. After his death one of the Sisters took the dog into the room. He looked at his dear master, set up a howl, ran into another room and fell down dead. The touching story was told to my husband by the doctor." The Sisters, in corroborating the above account, say, "Poor little Jack was a universal pet, and very knowing. He did not die for about half-an-hour, and was not a pug, but a sort of English terrier."

The Spring Snowflake at Charmouth.—I went down to Charmouth, near Lyme, in the niddle of March, knowing it to be one of the stations for the spring snowflake. Through the kindness of a friend I quickly found its habitation at Wootton Farm, about two miles from Charmouth. It grows freely in a double hedgerow, in a thick clay soil, at least half a mile from any house or garden. I ascertained that it had been growing in the same spot for upwards of eighty years. Trespassers from Lyme and other places go in the early morning to gather it, breaking down the fences and trampling on the corn, and doing other mischief, so that the farmer threatens to root up all the plants. Can nothing be done to save this rare plant from externination? Many of the Charmouth people have removed this plant to their gardens, but it does not take kindly to the change; the flowers are small, and the leaves lose their bright dark green glossy appearance.

E. PEARL.

"The Tender Heart" (p. 52).—The Editor of *The Irish Monthly* kindly sends us a cutting from an American newspaper which shows that this poem, the source of which we were unable to trace, is by an American lady, Miss Helen Gray Cone.

The Sparrow.—The Rev. J. C. Atkinson contributes to Macmillan's Magazine "A Good Word for the Sparrow," which will delight his champions. We could have wished that his article, which was suggested by the discussion initiated in these pages, had been sent to Nature Notes, where it would have found a more appreciative, if not a larger circle of readers. We hope to publish in our next number the views of our valued correspondent "E. V. B." on this vexed question.

Commons Preservation Society.—We are glad to see that a special committee of this Society has been formed for Kent and Surrey, devoted especially to the promotion of the work of the Society in these two counties. The committee will also proceed to enrol as many residents in Kent and Surrey as possible, as members of the Society, who will each pay an annual enrolment fee of Is., with any larger subscription they may like to give: to enlist the services of pedestrians who know any parts of the counties well, who will mark on sheets of the ordinance map the foot-paths now open to the public, the roadside strips still unenclosed, and the commons—instructions as to the way of marking and the notes which should accompany the map will be furnished by the Secretary on application—: to enrol in many parts of the counties corresponding members, who will be prepared to allow the Secretary to ask them to obtain for him any information he may need in their neighbourhood, should questions arise as to enclosure or closing of paths. We need hardly say that the multiplication of such committees has our warmest sympathy, and we shall be delighted to chronicle the formation of similar local organizations. The Hon. Sec. of the Kent and Surrey committee is Mr. Benton Fletcher, 5, Red Cross Cottages, Southwark, S.E.

NATURAL HISTORY NOTES AND QUERIES.

Nesting Habits of the Blue Tit .-- A pair of blue tits have for the last two summers built and brought up a family in a box placed for them in the garden here. Their altered demeanour while rearing their young was very noticeable, and interesting to watch. The usual bold, fussy and almost aggressive manner of the little blue-cap entirely disappeared, and was replaced by a singularly timid and retiring one. At the same time they acquired a habit of dropping the wings, and shaking them with a quick tremulous motion—in short, one might imagine, from watching them, that they had, for the time being, adopted the character and manners of their gentle and unobtrusive neighbour, the hedge sparrow. They also became remarkably silent, uttering no sound whatever, even when the nest was approached by a cat. Unlike the inajority of birds, whose agitated manner and repeated cries tend to draw the intruder's attention from the nest to themselves, this pair of tits seemed to rely mainly—for the preservation of their young—on stealth and concealment. They evidently tried hard to elude observation, particularly during their frequent journeys to and from their family-no easy task, considering the number of hungry youngsters to be provided for. The two old birds were never, I believe, in the nesting box at the same time. If both happened to arrive simultaneously with food, one would wait close by till its mate had entered, disposed of its burden, and flown off for more, before going in itself; indeed it is hardly likely there would be room for both, especially when the eight or ten young birds within were approaching their parents in size. Some idea of the good service rendered to gardeners by this pretty and amusing little bird may be formed by watching a pair with a family. Almost the whole of their time is occupied in searching for and bringing food to their nestlings, and this food (as far as my observation goes), invariably consists of small green or greenish white caterpillars. In one instance, where a pair had a nest in a kitchen garden here, these caterpillars were taken from the raspberry canes; but shrubs and trees of many other kinds, and especially fruit trees, are too often infested with these or similar

caterpillars, and a nest of young blue tits hard by would be a valuable aid towards checking their depredations. The number destroyed by a pair of tits in a single day must be enormous. These little birds can often be induced to build about houses and gardens (especially if fed through the previous winter), by nailing up suitable nesting boxes in cosy, sheltered corners, out of the reach of cats. The entrance hole should be placed near the top, and be only just large enough to G. T. ROPE. admit the tits.

Some of my Pets.—Some time ago I had a pair of toucans. They were very interesting, and would eat almost anything; I fed them on bananas, grapes, oranges, boiled carrots, raisins, figs, soaked bread, &c. When they arrived I put them into a large cage together, but the male bird would not allow his partner to join him in his meals, so I had to separate them at first. I kept them in my study, but they got to smell rather unpleasant, so having then no other place, I was

obliged to commit them to my stables; there they lived for months in good health, and their plumage was grand, being orange, black, and carmine.

Another of my pets was a pair of alligators. They were brought to me one day in a small birdcage by a man who had brought them himself from Florida; one of them (the female) lived six years, the male I have at present living in my study in a vivarium, with a terrapin and a slow-worm—the latter was born there. The alligator becomes torpid every November, and does not eat again freely until May. The terrapin and slow-worm wake up occasionally during the winter and feed. I have had the alligator more than nine years.

Another pet is a lemur. This animal was sent to me two years ago. When it arrived, transferring it from one cage to another it managed to escape, and was caught with difficulty. It has become very tame, and will feed from my fingers on ripe fruit, bread, &c. Its fur is of a fine soft texture, silver gray, with dark ringed tail. It has for companion a tiny marmozeet.

Ulborough, Newton Abbot.

R. M. J. Tehl.

A Bat in March.—On Tuesday, March 15th, at about 6.15, when standing at an upper window, I observed what I at first thought to be a tit, but on account of its fluttering flight I had some doubts concerning its identity. As it passed within four feet of the window I discovered beyond doubt that it was a bat, which, from its slow flight, and feeble, undecided motions, appeared but recently awakened from its winter hibernation. I am sorry that my eagerness to compare data with Waterton deprived me of a further sight of the little fellow, and after the first glimpse I saw no more of him. I find that although Waterton observed a bat on the 3rd January, 1848, he considered the appearance of one as late as the 21st April of the following year worthy of his attention.

C. F. CAMBURN. Addiscombe, Croydon.

Rooks Burying their Food.—In answer to R. C. C.'s question (p. 78), I should like to say that all the rooks I have been intimate with have done so. One I have had (like all German rooks and crows, he was called Jacob) always hid the remains of his dinner in the flower beds in front of the kitchen, and my little dog, who was not allowed meat at that time, used to watch him, and as soon as his back was turned (for he was much afraid of Jacob's beak), he used to dig it out and eat it himself. My last rook got very troublesome by reason of his thievish propensities. His wings had never been cut, so he flew in at every open window and greatly annoyed our neighbours, so at last I took him up into the woods of the Heiligenberg near Heidelberg, and sat with him there till it was dark, and he had gone to roost on a tree, when I quietly stole away. As long as the daylight had lasted he had amused himself with hiding beetles, spiders, and such like treasures in the folds of my dress, as I sat quietly reading under the trees.

E. P.-I. Trachelium caruleum.-2. Potentilla norvegica.—3. Carex stricta.-4. Juncus squarrosus.

J. E. P. (Melbourne).—We have forwarded your letter to the Rev. T. A. Preston, who will doubtless communicate with you.

D. B.—The Everyday Book of Natural History, by James Cundall, would probably suit you; we believe it is out of print, but a new edition is said to be in preparation.

OFFICIAL NOTICES.

OUR VOLUMES.—We desire to call the special attention of our readers to the volumes of NATURE NOTES for 1890 and 1891, which may be obtained at the offices of the Society, 9, Adam Street, Adelphi, W.C., at the cost of three shillings each, or by post, three shillings and fivepence. By the variety and interest of their contents these volumes are admirably adapted for the school or parish library, and we would urge upon our readers not to neglect so excellent a means for advancing the interests which they have at heart. Cases for binding the numbers for 1890 and 1891 may be obtained from the Secretary at the above address, price Is. each; or the numbers will be bound and the case supplied by Messrs. Bale & Sons, 87, Great Titchfield Street, W., at the cost of 1s. 3d., or with gilt edges, 1s. 1od. The name and address of the sender, with stamps to the above amount, should be forwarded with the magazines in order to prevent mistakes or delay.

The Annual General meeting will be held at 9, Adam Street on Wednesday, May 4th, at half-past four. The business will be the election of officers, and the consideration of the annual report and the following proposed alterations in the rules.

(1) Proposed by Mrs. Martelli: that the Council be empowered to fix the date

of the Annual Meeting in the future.
(2) Proposed by Mr. Musgrave: that the Council be permitted to add to their number.

(3) Proposed by Mr. Wattson: the Editor of the Magazine shall be ex officio a member of the Council.

THE SELBORNE SOCIETY.

THE object of the Selborne Society is to unite lovers of Nature for the following purposes :-

The Protection from unnecessary destruction of Wild Birds, Animals and

Plants;

The Protection of places and objects of Antiquarian Interest or Natural Beauty;

The Promotion of the Study of Natural History.

The minimum Annual Subscription (which entitles the subscriber to a monthly copy of the Society's Magazine) is 2s. 6d.

All particulars as to membership may be obtained from the Secretary of the Selborne Society, 9, Adam Street, Adelphi.

NOTICE TO CORRESPONDENTS.

Contributions for any number should reach the Editor, JAMES BRITTEN, F.L.S., 18, West Square, London, S.E., not later than the 15th of the month. When it is particularly requested, MSS. not accepted will be returned, if stamps sufficient to pay the postage are sent for that purpose.

Queries on any points connected with Botany or Zoology will be answered if possible, and advice will be given as to the best books for students in any department of Natural Sciences, but all questions provided to the consequence of the state of the sent of the sent of the sent of the state of the sent of the sent of the sent of the state of the sent of th inent of Natural Science; but all questions must be accompanied by the names and addresses of the writers, not for publication, if this is not desired.

Specimens sent for identification will be named, if sent carefully packed and

in good condition, but we cannot undertake to return any specimens.

Several books stand over for notice. Publishers will confer a favour upon our readers if they will always state the price of any volumes they may send, in order that it may be quoted in the notice. This addition is much appreciated by our readers, and is desirable in the interest of the volumes themselves.

It is particularly requested that subscriptions and letters connected with business should not be forwarded to the Editor, but to the Secretary of the Selborne Society, 9, Adam Street, Adelphi. Editorial communications and books for re-

view should be addressed to Mr. Britten, as above.

Mature Motes:

The Selborne Society's Magazine.

No. 30.

JUNE, 1892.

Vol. III.

WIMBLEDON COMMON.

BREEZY common standing high above the surrounding country; the whole horizon girded with other heights and woodlands which fade into a soft grey, or dimly purple shade. A soft wind is blowing, the sun shining brightly, and both have still sufficient charm of novelty to make

brightly, and both have still sufficient charm of novelty to make them a pleasurable sensation. Since the autumn all Nature has been more or less in a state of hibernation, and even man himself, though he may not like the bear retire to a hollow tree, or to a church tower, like the bats, to sleep away the cold, shares in a trait which is common to the whole animal creation. The strong delicious air and the revivifying sun awaken and quicken into active being the whole animal and vegetable world. "Hope springs eternal in the human breast" as soon as the days begin to lengthen; and that man is to be pitied to whom the first primrose or snowdrop brings no sanguine views of the purpose of life.

Far and wide, above and beneath, great patches of yellow gorse are bursting into bloom, scenting the air for a mile around with breath as sweet as honey. These patches of gorse crop up here and there, trailing off into unexpected places—now topping the crest of a hill, a yellow mass of flame against the sky, and appearing on the lower ground as burnished gold against the dark shadow of the wood. But its effectiveness as a whole is not diminished by this discursive habit; its splendour as a mass of burnished magnificence is complete.

We scorn the beaten tracks and strike off through gorse and bracken: the latter is deliberately unwinding each hairy frond beneath the shelter of the dark green arches. The dogs are keenly alive to the enjoyment, the scent of rabbits is around, and they dash through the bushes in eager expectation of coming to close quarters. All Nature seems to be stretching

itself after its long sleep and basking in the glorious sun; the buds burst, the leaves expand, there is a crackle in the air, telling of renewed life, which is most enjoyable. On a day like this there is a peculiar delight in this hilly country, a sense of health and freedom, the delight of drinking large draughts of pure unbreathed air, the breezy exhilaration born of wide

prospects and towering heights.

Already the promise of May may be seen in the field and the hedgerow; the dandelion, one of the earliest and handsomest of our wild flowers, if familiarity did not breed contempt, is in bloom. The falling catkins of birch and alder and willow are littering the footpath before their leaves have unfolded. Over all the lark trills its song, rising and falling in joyful cadence, revelling in the return of spring, so that it seems as though its little throat would burst in a vain endeavour to pour forth a louder strain.

The birds fly from beneath the bushes disturbed by the dogs; there goes a chiff-chaff to a neighbouring thorn, chirping its well known note; a thrush utters its frantic cry of indignation at being disturbed in its search for snails; the flute-like whistle of the blackbird is heard from the hawthorns that skirt the wood; a deeper thrill runs through his notes when they are muffled and lowered to a throbbing undertone. The song is simple, sensuous, perfect as a verse of Herrick, with the same mixture of unconscious pathos and careless delight in the wild

freshness of morning.

But hark! there is that dissolute bird with the half human voice which reiterates its name, cuckoo! cuckoo! No bird has probably been more written about and is less understood. Volumes have been written on its habits and its distribution; and yet for all its winter migrations and other eccentricities of conduct the cuckoo is one of the most popular of English birds. It is nevertheless strange how few people have seen a cuckoo or know anything of its habits, beyond the fact that it is a brown bird with a speckled breast, about the size of a hawk, with a peculiar and unmistakable cry, and communistic notions respecting the rights of other birds to call their nests their own. This seems to sum up the extent of popular knowledge. As for the country people, they are more interested in the supernatural powers which the superstitions of ages have woven around it, than in solving any of the moot problems in its career.

The cuckoo arrives about the 10th April, seldom earlier, the males arriving first and taking up their quarters—which by the way are permanent during their stay—some days before the females. That is one of the many differences between this curious bird and the whole of the rest of the bird-world. It remains within short range of the selected spot until its departure, and you will hear the same cuckoo day after day in the same field, or on the margin of the same wood. It is otherwise with the females. They appear to be always on the wing,

skimming along the hedgerows, often pursued by an angry flock of small birds, who either mistake it for a hawk, or have an intuitive instinct that its visit betokens no good to their offspring. There are vastly more females than males: of course they do not pair, or we should have the usual programme of nest building and rearing of the young. One hears his voice along the whole country side, and as this is the season of courtship it is more full and sonorous than in any other month. The cuckoo is one of the shyest of birds, and though he is heard everywhere he is but seldom seen; and yet he is not a frequenter of thick bushes, but takes boldly to large trees. The female is less conspicuous than the male, for she has no betraying call and is less often in the open.

It is now a recognised fact that the hen cuckoo, having deposited her egg on the ground, carries it in her bill and deposits it in a nest which has probably been already selected. In no other way could the egg have been placed by the bird in some of the situations in which it has been found. It is a mistake to suppose that the hedge sparrow, or indeed any species, is particularly selected for the doubtful honour of being foster parents to the young cuckoo. The garden warbler, nightingale, blackcap, whitethroat, robin, red start, wagtail, pipit, yellow hammer, chiff-chaff, greenfinch, linnet, spotted flycatcher, and several other species have at times been chosen for the

imposition.

We have now left the gorse, and cross a wide open tract covered with heather, which by-and-by will be gorgeous with its pretty pink blooms. Again come small hills and dales, and then we arrive at a wood mostly oak and birch, with rides cut through it. The oaks are yet bare, but the birches with their silver stems and delicate drooping branches, just tinged with bright green, look like a lovely emerald fountain. There is a continuous twittering and chirping of birds intent on family cares: how glad the trees must be on awakening to renewed life to hear the birds once more! In places there is a thick undergrowth of brambles and hazels and occasionally a few clumps of holly: it is a famous spot for nightingales. Here they sing all day and all night, and as old Izaak Walton says, "they breathe such sweet loud musick out of their little instrumental throats, that it might make mankind to think that miracles had not ceased."

This wood lacks one great charm, it has no great variety of wild flowers. The wild hyacinth flourishes, and occasionally you come upon a large patch that "makes the earth look like the sky," but primroses are scarce, and so is the wood anemone. Ask most people which comes first, the full harvest of the primrose or the full harvest of the wood anemone. They doubtless will be ready with a confident answer, one giving priority to the first, another to the second. They will both be wrong, there is no telling: all depends how Nature orders her

sunshine, her drought and her moisture. It is supposed also to be a race between the oak and the ash, and various portends are foretold along the country side when the oak is first in leaf. Yet who can tell what will happen in this climate of ours? The gradations from winter to spring are so fine and so subtle that any one trusting to this or that sign is sure to incur a bitter disappointment. "One swallow does not make a summer," and neither this flower nor that, neither one songster nor the other is conclusive proof that "winter is over and gone."

Those who watch Nature closely know that occasionally she "plays fantastic tricks" that make, if not the angels, at any rate the farmers and the holiday-makers weep. A week's continuous wet or a week's continuous dry heat, make all the difference. There is an uniformity over all no doubt in the end, but the bitter east wind to which we are so liable at this season often makes confusion worse confounded among the harbingers of spring.

CHARLES WORTE.

JACK: A BIOGRAPHY.

(Concluded from page 92.)

VERY member of my family is devoted to fur and feathers in any shape; the household we had then were quite as fond of the dumb creation as ourselves, and lack's appearance, too, asked for great kindness.

and Jack's appearance, too, asked for great kindness, both to mind and body. But out of all the kind hands and hearts trying to make happiness for the small black waif suddenly thrust into the midst of the family, Jack chose the writer of this article for his friend, and having made his choice became absolutely indifferent to all the other members of the household. I say Jack was absolutely indifferent to all the rest of the household, but there was one exception-and there Jack showed that he could hate as heartily as he could love, and apparently with no more reason for his enmity than for his love. Jack was courteous by nature, and rarely allowed a kindness or a civility to pass unacknowledged. But he was actually demonstrative to no one but me. Was I absent from home for a few hours Jack's voice was silent, and the fun was gone out of life for the time—for him. He moped about silently, trying to amuse himself in really lugubrious fashion till my voice or step was heard, and then it was touching to see his joy! Half-fluttering, half-scrambling over the ground he came to meet me, uttering a succession of delighted "Jacks," and then crouched down on the ground before me, coaxing to be taken up and caressed. It was impossible to ignore him, and not till Jack had had all the attention he wanted would he consent to

be put aside for a moment in favour of anyone else. The very expression of the bird's eyes was human at those times—so

loving, so gentle, so absolutely content.

Truth compels me to say that the revulsion of feeling from depression and loneliness to intense happiness frequently proved too much for Jack's moral equilibrium, and he would go straight from my presence, where he had been proving himself almost more than a mere bird, to plan and carry out some impish trick against some unoffending member of the household.

But there was nothing underhand about Jack. When he was in mischief he assumed a manner I knew, and everyone knew, and Jack knew they knew, boded ill for the peace of the household; but he never sought to disguise his manner, or to

deceive the family as to his intentions.

My people would occasionally say—"You'd better come and look after your bird, he's awfully busy about something out here, I suspect it's mischief." No need for me to call Jack twice if he were within hearing. One decided shout of "Jack," and a little pause, then Jack's voice would answer "Wha-a-at?" and in a second or two he would come drifting sideways into view.

"What are you doing, sir?" and away Jack would go, back to the scene of action again, looking over his shoulder to see if I were following him, talking to me, and telling me all about it; chuckling with amusement at the fun of it. Arrived at the place, Jack sometimes had a moment's anxiety as to what I should think of his work, and would peer up into my face as much as to say "Don't be too hard on a fellow; it was such fun." And a reproachful "O Jack, how could you be so naughty?" would send him off into the shrubs, not to reappear till some time after, when he would assume a jaunty and indifferent manner, as if he had been engaged in interesting business all the while—and not hiding from disgrace and miserable, O! dear no!

Jack's pranks were not, as a rule, unforgivable, but he could lose his temper and try to be nasty, and then he generally succeeded. One spring morning there was a great planting out of annuals, and Jack's officiousness in fetching and carrying was becoming wearying, especially as he generally fetched what was not wanted and carried away what was. So someone pounced upon him ruthlessly and shut him up in his bedroom—the old disused laundry—for a while. That person forgot that the laundry window was wide, and that jackdaws' eyes are keen. All the morning the planting went merrily on: little clumps of asters, zinnias, &c., were dibbled in, a neatly-written label put to each clump, and large pots inverted over the young plants to shade them from the scorching spring sun. And all that lovely morning Jack spent in his bedroom (the resources of which he had quite exhausted the first wet day he spent indoors) watching and waiting. Presently the luncheon bell rang, and I went out of the house, where I had been occupied since breakfast, to see what had been done in the out-of-door world. "Where's Jack?" "Shut up in the laundry. He was such an awful plague, we could not get on with him loose about." "Oh! poor boy, such a lovely morning too! It was hard upon him. Come out, old fellow!" And out Jack came, in as vile a temper as a bird can be in and live. "Come and have some luncheon, Jack." "Sha-a-ant," and with a sulky swing of his whole body he disappeared into a guelder rose bush just outside the back door.

After luncheon the family strolled round to the scene of the morning's operations. What a sight met their eyes! Every pot had been laid over carefully on its side; every label was pulled up and piled in a neat heap at one end of the border; every young plant was bitten off just above the ground! There was but one opinion as to the identity of the culprit. "That's Jack's revenge for being shut up all the morning in the laundry." "Jack!" "Wha-a-at?" and a small black imp appeared on the scene out of the shrubs near by. "Come here! What have you been doing, sir?" But Jack was not sorry for his sin, and he was not going to confess. Stepping on to the flower-bed he investigated the damage done, with a "Dear, dear, what a pity" sort of air, turned some of the pots upright again by inserting his bill into the hole at the bottom, looked at the heap of labels and the withering plants, made a few remarks under his breath and walked off again; and it was one of his few sins, if not the only one, for which he never expressed any contrition.

Jack had now been formally made over to me by his proper mistress, who declared there was little pleasure in calling a pet hers if he did not care in the least for her. He had grown a new tail, re-grown most of his broken bill, regained his self-respect, and was a very smart jackdaw indeed. One wing was still clipped, but when it grew in the autumn moult we did not cut it again, knowing his devotion to me to be too strong to allow him to desert us altogether. Indeed Jack would fly a mile to talk to another tame jackdaw in a cage at the mill, and come straight home after his gossip. There was no fear of

losing him.

One of Jack's most unfailing sources of amusement was pulling worms out of their holes. He would apply one eye to a worm hole, pull up the occupant with a jerk, throw it down by the side of the hole, then stand by to watch. There was much wriggling and tying into knots on the worm's part, and then presently, all being quiet, the creature would begin to slip slowly home again. Nearer would come Jack, and more eager became his expression, and just as the last ring of the worm was disappearing down his hole there was a pounce from Jack, and the worm found itself once more wriggling in a heap by the side of its hole, with all its work to do over again. I never saw Jack attempt to eat a worm, and I never could discover that he hurt them. If I happened to notice Jack teasing a worm for more than half-an-hour at a time, I would send him on to another—but I could not bring myself to think that the worm minded much.

About this time Jack fell a prey to jealousy for a while—most unnecessarily. A sailor cousin brought home a green, long-tailed, pink-collared Brazilian parakeet, and his immediate relations failing to appreciate the gift, it was passed on to me. Never was such a feathered idiot hatched into the world before. Everything frightened it into fits. The sight of me in the distance was enough to send it banging and screaming round its cage—I, who looked after it, and consulted its Brazilian tastes

in the matter of nuts, capsicums, and other delights!

Like all idiots, the bird had an enormous appetite, and when not engaged in gorging itself, it would shriek for ten minutes together, and this seemed its only other enjoyment. But idiot as it was it had to be fed, &c., and Jack thought even this amount of attention a great deal too much for such a fool, and perhaps doubted whether I should be true to his little black coat, with such superior attractions of pink and green always being flaunted before my eyes. It is a proof of what an absolute nonenity the bird was, that even in our bird-and-beast-loving, pet-name-giving household, it never acquired a name, never was called anything but "the parakeet," or in moments of irritation, "that shrieking green goose." Still Jack was jealous of the creature; and one day the strain of pent-up feelings became too great to be borne patiently any more, and the temptation of several inches of the Brazilian's magnificent green tail protruding from the bars of his cage suddenly presenting itself in front of Jack's jealous beak, he seized the tail and the opportunity of revenge, and held on! The Brazilian's voice was raised in a storm of shrieks and oaths, inarticulate but quite unmistakable. I rushed to the rescue, to find the foreigner bending forward on his perch, his wings outspread and fluttering, in the vain attempt to wrest his tail from Jack's firm hold, and rapidly swearing himself into a fit.

Jack, meanwhile, hind claws firmly driven down into the soft deal table, was leaning back straining at the tail, I fear me in the vain hope that it would come off; and uttering a series of delighted "Jacks" as well as a beakful of green feathers would let him. One word of reproach from me, and Jack let go his hold with such suddenness that the parakeet fell up against the front bars of his cage, and Jack fell over on the table behind; but feeling uncertain as to the light in which I should view this prank, he picked himself up with marvellous promptitude, and hitched himself off sideways out of the reach of punishment, leaving me to soothe the parakeet. As the imp went off he may have seen I was laughing, and perhaps argued from that— "I was a fool to be jealous. She can't really care for the creature, because he is almost in a fit and yet she is laughing." Anyway something made Jack feel magnanimous, and just as I had succeeded in soothing the parakeet a little, Jack suddenly made his appearance with an enormous pink worm neatly coiled round his bill, and before I could interfere he had dropped his peace-offering of a plaything over into the sanded bottom of the parakeet's cage! Then arose a scene baffling description. The fine sand was death to the worm, which tied itself into double knots trying to free itself, and this increase of energy on the worm's part delighted Jack. He kept running round the outside of the cage chuckling with laughter, and calling to the parakeet to "come along" and watch the worm's antics. But the parakeet was quite beyond being amused. The worm suggested snakes to his Brazilian mind, and he was terrified; then he suspected Jack—still trotting round his cage—of further designs upon his tail, and altogether it was long before matters calmed down again. But there was this good result—Jack's jealousy died; never again could he condescend to be jealous of such a

hopeless fool!

Ah me! It must be nearly twenty years since Jack died. One day, while we were from home, he had come to the kitchen door several times and pecked to be let in, then had run away directly the maids opened it, calling to them to "come along" up a high tree in the garden! The maids tired of the game, and when at last they opened the door Jack was not there. Next morning his body was found in the little tank we had together so often drawn water from for watering the garden. It was a sad homecoming, and life felt empty for a long while after. I have never had another pet of my own since. Jack's possession of a soul of some kind was proved by his power of loving. His dainties, his treasures, were dust and ashes to him if I were not with him. His first thought in the morning, his last thought at night, was for his mistress. This it was that proved Jack to be no ordinary bird; and remembering how rare is such power of loving in man or bird, this little sketch of a loving life has been written down by Jack's friend.

ELLA F. CONYBEARE.

TO THE SOUTH DOWNS.

I.

O GRACIOUS downs! God's garden near the sky
Where flowers bloom, and shadows softly lie.
O glorious curves! that grandly sink and swell,
There winds blow purer, there the sunbeams dwell.
O wondrous hills! ten thousand tiny shells
Have built your lines, beneath whose shade man dwells;
Beauteous and silent, 'neath the drifted snow,
When winds blow keenly, and the clouds hang low.
Thrice blessed slopes! the air is with you still;
A bird, a flower, lives yet on every hill;
O solemn downs! your sky is ever near
And all its glory gathers round you here.
O perfect downs! your outline, noble, true,
Is blending with the ocean's distant blue.

II.

I love you with a love that shall not end,
I love you purely, as a childhood's friend;
I reverence you, for in your silence lies
The secret of a life that never dies,
A life made gladder by the flowers fair,
A heart all-trusting though the snow is there;
A life whose every hour its tiny shell
Is adding to the curves that nobly swell.
A mind laid open to the glorious air
Where God's own sunshine lingers still and clear.
A soul whose sky is near, whose silence calms;
And underneath, the Everlasting Arms;
A life made perfect where the sunbeams glide,
In that bright sea, whose praises echo wide.

A. M. IBBS.

THE SPARROW AGAIN.

O much has been, of late, written about the sparrow in NATURE NOTES, that I too, think I want my say! Poor bird! he hardly gets fair play in all this controversy. His opponents are too bitter; and they make no allowance whatever. Personally I rather dislike sparrows; it bores one to set a breakfast in the garden every morning all winter long, and to find scarcely any birds except sparrows come to eat it. And yet there is something rather pathetic in the instinct they evidently have that some one is unsympathetic. The poor little things don't make half the jolly fuss and noise they made once—in the old days before they found out about it. Yet they are not without friends. One day I remarked to my gardener, "I do hate those sparrows." "Do you?" said he, "I like them, they are so clever." And so they are, brimful of cleverness, most amusing to watch in their cunning ways and manners. Your correspondents differ so much, that one has to believe sparrows' dispositions vary in various localities. For instance, I never saw a single bird of any other species driven away by them from our breakfasts. never, on any occasion whatever, have seen a sparrow even speak to any other bird, much less fight him! and since the "feed" is on the gravel walk, in full view of my window, whence I don't fail to keep an eye on the birds, and on all that goes on, I can hardly be mistaken. As a rule we have about fifty sparrows for the feed; four robins, three hedge-sparrows (I beg pardon, I mean accentors), half a dozen blackbirds, the same number of thrushes off and on, with a chaffinch or two. They all seem to eat about the same quantity, according to their size, the sparrows gobbling up perhaps twice their share. The "other birds" are shyer, of course, but I can say with truth, I never observed one of them appear consciously to avoid any one of the sparrows. Overhead, six cocoa nuts dangle on strings from so many wire rose-arches. These for the tit-mice and nuthatch (probably they would greatly prefer fat bacon, but I don't). The holes in the nuts have to be cut on the under side just to circumvent our heroes. One unlucky day they happened to pick up some cocoa crumbs that had fallen, and liked them so much that they looked up at the nuts and instantly "went for" them, the holes being at that time on the upper side. A titmouse will sit and look on and say nothing while a sparrow devours its own pet morsel. But the great tomtit (Ox-eye) will fight and beat off in no time any number of coles or blues. As for the crocuses and primroses and pears and fruit buds, we know, of course, all about them. They want management—care and trouble—like everything else in a garden, and if we love our gardens they are worthy of all the care and trouble we can possibly bestow upon them. Crocus and all spring flowers are easily saved by a few yards of black thread wound along the tops of little sticks stuck in amongst them. Wire guards save seed and young peas. Threads or nets effectually protect all manner of fruit bushes. As for the fruit trees, we have never missed an apple or a pear through the birds; there always appears to be enough for us all and for the wasps besides. Cherries, however, disappear by rooks, or starlings, if you don't look out, directly they begin to redden; but I never saw sparrows after them.

Poor sparrow! the careful gardener need fear nothing so very dreadful from him, with all his wicked cleverness! He is so wonderfully wary that he suspects a deadly snare in every inch of all that harmless black thread! I should like to verify the theory that "sparrows feed their young, after the first week, upon peas and young wheat." I know that now and again green food is considered by old birds of all kinds to be necessary to the health of the nestling. Thrushes have been seen to gather up grass left by the mowing machine on the lawn, and take it to the nest. Surely everyone ought to know that the sawfly (gooseberry caterpillar) cannot be swallowed by birds owing to a certain hairiness of its outside. The same objection exists for birds, in many other caterpillars which we say they ought to eat. By one of your correspondents, the merciful operations of the "poisoned grain Act," appears to be deplored. Had your correspondent beheld as I have, lanes all strewed with the dead bodies of greenfinch, yellow-hammer, blue titmouse, linnet, &c., &c., besides those of the hated sparrow—I think even he would have felt the Act had been passed none too soon. We knew a farmer who regularly, in spring and autumn, used to drive to the nearest village, procure a bag of poisoned wheat, and drive gaily home

again along the lanes letting the wheat run out of the back of his gig as it went. Besides small birds, one fatal year the rooks, who to our delight were at that time just establishing a small rookery in our group of old elms in the field, suffered also. Many old birds lay dead on the ground under their nests, and the new rookery was finally abandoned. (It is rather gratifying to remember that a little boy who was on one occasion sent out to pick up what he could of the poisoned grain—threw it over the paling into that farmer's own poultry yard; so he informed us afterwards. We never heard what happened after that exploit!)

The martens are a very sore subject. For years, up to 1885 or '86, they used to build on our south side, while the red-throated chimney swallow appropriated the north porch. There were always two broods in the year, and to watch them (the whitebreasted martens in the south porch) was my joy and delight; they were never afraid, and they would swoop down with a scream close by the cat's ears, when she went out to take her walks abroad. I cannot blame the sparrows, I know they had no hand in it, but the martens have long since ceased to build here. Once, not long after their desertion, a pair of martens sat on a rose-arch and looked at the old place. I thought they would come back to the nest, but they didn't, and I have not seen them since. I think of one possible reason. Some foolish person had advised the nests to be taken down in the winter, "his father had done it every year to encourage the swallows," so I reluctantly let one be taken away. It did not encourage ours. Just once, after they were gone, I caught a sparrow prying about the forsaken nest. He was immediately scared away and never has ventured near it since. The chimney swallows remained with us longer, but they grew timid and came no more. I am convinced that the miscreants who shoot them for women's hats and bonnets, on the other side, as they rest on telegraph wires before crossing the straits, are alone to blame for the undoubted decrease of our martens.

There is no such trouble with the swifts, at least not hereabouts in South Bucks. It has been their habit for no one knows how many years, to breed among the inside rafters of the old roof of a dwelling-house at the end of the garden here. They creep in under the eaves and make themselves at home in the roof, and there is never any apparent diminution in their numbers. It is a large and prosperous and noisy colony. And every season, in the long summer evenings, in clear or clouded weather, our swifts collect together by scores, mount up on high, and sport gloriously in the open firmament of heaven.

Huntercombe Manor, Burnham, Bucks.

E. V. B.

NOTICES OF BOOKS.

Island Life, by Alfred Russel Wallace. Second and Revised Edition. Macmillan & Co., 1892. Pp. xx. 563. Twenty-six maps and diagrams. Price 6s. In writing a notice of any book by Mr. Wallace, the first impression to be recorded is one most shortly described by saying that its contents are literature. The man must be a dull fool who reads any such book merely for the facts, &c., and akin to the brainless creatures who read Sir Walter Scott for the plots of his novels. The publishers have done well for the public, and it is to be hoped, well for themselves, in issuing these cheaper editions of the works of this great writer. Malay Archipelago is to be bought for 4s. 6d; the Travels on the Amazon for 1s. 6d. There are doubtless greater works on Natural History with narratives of travels, e.g., the author's Malay Archipelago, Darwin's Voyage of the Beagle, Hooker's Journals; but Wallace's Travels on the Amazon, as a book of travel, is surely without a rival. A distinguished man of letters has been known to rejoice that Mr. Wallace's collection of that expedition was burnt at sea, for the double reason, that, if they had come safely home, his book would have been too much trammelled with natural history, and literature would have lost the tragic conclusion. Needless to say, our sympathies are with Mr. Wallace in that matter; but the saying doubtless explains the charm of his book in its literary effect. In Island Life there is not the sustaining effect of narrative; but we have the equal mental charm of argument, clearly set forth in faultless language, and a subject of singular fascination to naturalists. This enquiry into the phenomena and causes of insular faunas and floras has had joined with it an attempted solution of the problem of geological climates, which in many respects is an inseparable part of the same subject. Those who have read the first edition of this book will be glad to have the excellent excuse for reading the present one, that it has received so many important additions, and so much revision, that, some chapters especially, wear a new aspect, and carry modifications of previous arguments, owing to the acquisition of new facts and the general gain in accuracy produced by recent researches. In some portions of the book this is, of course, more marked than in others, notably in the discussion of the causes of glacial epochs and mild arctic climates, owing to the work of Dr. Croll—but possibly one notices this chapter in particular, since the interest in the subject is of such momentous character and the exposition of it so wonderfully lucid. The additions to the account of Madagascar are also extremely noteworthy, since so much activity has recently been displayed in its exploration, and anything that helps to elucidate the physical and biological history of this most interesting of the ancient continental islands, may safely claim particular welcome.

The great value of such a book as this to Selbornians consists in the light it throws on the phenomena of nature in which we take delight. The plants and animals of our excursions gain new interests when we know their past history. We are dwellers in an island, and though Great Britain is of recent origin, it is in Mr. Wallace's opinion "perhaps the most typical example of a large and recent continental island now to be found upon the globe"—an additional and blameless reason for complacency on the part of the 'happy English child.' A study of the portion devoted to the British Isles gives an excellent insight into the methods and arguments employed by Mr. Wallace in the making of this great book—it is a model of such enquiry—and it invests so many of our animals and plants with a new interest that it extorts a special claim from the hearty gratitude of all Selbornians.

G. M.

We are probably not far wrong in thinking that the great and deserved success which attended the publication of Canon Atkinson's *Moorland Parish* and *The Last of the Giant Killers* has caused him to re-issue two of his earlier works. More than thirty years ago, he published for the delectation of youth, the *Walks, Travels, and Exploits of Two Schoolboys*, and a companion volume, *Playhours and Half-Holidays*; and these are now reproduced for the benefit of another generation. There is such a constant demand among boys for stories of schooldays, that there can be little doubt that these books will find a ready sale; and they are especially suited for young Selbornians, inasmuch as a large amount of

natural history is woven into the narrative. The illustrations give an unnecessarily old-fashioned air to the volumes, and might, we think, have been omitted with advantage. The books are published by Messrs. Macmillan, price 3s. 6d. each.

Mr. John Wilkins has put forward a plain unvarnished tale in his Autobiography of an English Gamekeeper (T. Fisher Unwin, 6s.). It must be confessed that this beautifully printed book is not altogether delightful reading for Selbornians, although it contains an interesting record of a life which is typical, of that led by the class whom Mr. Wilkins not unfavourably represents. It also throws a curious light on the ethical or moral code by which the life of a gamekeeper is governed and regulated; and it affords one more proof that a man may be brought into daily contact with nature without being one whit moved or softened by her marvels. Farmers whose crops are destroyed by hares may like to know how this result is secured. "You take a pound or more of parsley seed and sow in the night time all over the field. Let no one know anything about it, but take the seed in your large pockets, and scatter it broadcast all over the field; the hares will then feed in that field in preference to any other. I have done the same thing on land sown with clover, near the cover, that is, home fields, not those a long way from your woods. This is one dodge to make the hares feed at home, and take to that particular field for feeding. The hares will keep the parsley down, and even if the farmer does find a sprig of parsley in the clover, he will think that it slipped in amongst the clover seed." "The farmer in question, be it noted," adds a reviewer commenting on this passage, "paying our master rent for the field, putting his own capital into it, and being convicted of poaching if he kill a hare."

Messrs. F. Warne & Co. send us a re-issue of Dr. M. C. Cooke's Fern Book for Everybody (1s.), a cheap and handy account of British Ferns, with many woodcuts and twelve coloured plates. The same publishers are responsible for English Wild Flowers, by Mr. J. T. Burgess, which may fairly claim to be the very worst volume yet put together upon a subject to which many bad books have been devoted.

SELBORNIANA.

An Exemplary Sentence.—The following extract from the Gardeners' Chronicle of April 9 will interest Selbornians, and specially our correspondent who asked (o. 57), "What is to be done?":—"At the Axminster Petty Sessions, on Tuesday, James Dorey, of the West Quarter, Exeter, was summoned for doing damage to underwood on land belonging to Sir W. Pole. Mr. Tweed, of Honiton, stated that the defendant was one of a gang of pilferers who, by their depredations, did much damage to the grounds of country gentlemen. The offence at present under consideration was committed on March 19. In broad day, P.C. Gervis came upon defendant at Morwenhayes Copse, pulling up ferns, and two acres of land were laid bare, and 1080 fern-roots extracted. This flower and fern pilfering, Mr. Tweed continued, was become a general nuisance, and he hoped an exemplary punishment would be inflicted. P.C. Gervis bore out this statement. Defendant was sent to prison for a fortnight. A second charge was preferred against him for damage to the fence by creating a gap, and evidence having been adduced by the constable and gamekeeper, a fine of 15s. inclusive was inflicted."—Devon Weekly Times, April 1, 1892.

Apropos of the above condemnable practice, our correspondent sends the following (we purposely omit the names and addresses), culled from Exchange and

Mart, March 21, 1892:-

"Fernery.—Beautiful varieties of Devon and Cornish Ferns, 40 good roots, free, 1s. 6d.

"Hardy Dorset Fern roots, various varieties, carefully packed in moss, 50 is.,

100 Is. 9d., free.

"Magnificent assortment of Devon and Cornish Ferns, elegant varieties, 40

healthy plants, free, 1s. 3d.

"Ferns from Cheviot Hills, mixed sorts and sizes, some evergreen, all hardy. English and Latin names attached, one of each kind, 25 Is., 50 Is. 6d., 100 2s. 6d., sent post free, with hints on growing.
"Forty rare hardy Devonshire Fern roots, Is. 2d., carriage paid, 10 varieties,

Maidenhair, Ceterach, Adiantum, Polystichum, Rutamuraria, Scolopendrium."
"Everyone is waking up to the fact that the strong arm of the law has become necessary for checking reckless fern pilfering. The sentence passed by the Axminster magistrates will, we think, act as a salutary warning to persons who wander about from place to place, rooting out and destroying wherever they go, the most interesting plants of the country-side."

Hints for Selbornians.—The Rev. M. G. Watkins has a kindly reference to the Selborne Society in Longman's Magazine for May. "What can be more beautiful than an English spring? The very prodigality of its beauty causes country lovers to become amateur members of the Selborne Society. Here the wayfarer finds roots of primroses ruthlessly torn up by children enamoured of flowers, on their way to school, or ferns pulled up in idle mischief by the passer-by, and these he lovingly replaces. There grows some such variety in the hedgerow as Leontodon pardalianches, and he contents himself with gathering only one or two of its pretty yellow flowers. A cow, in forcing her way through the hedge, has trampled down several roots of violets; these can be regained and planted out of danger for the future. Young birds, similarly, may be assisted into safety; heedless toads moved off the public road, and the like. Indeed, the lover of the country is very kind to its animals and flowers." Mr. Watkins's sentiments are unexceptionable: but what is Leontodon pardalianches?

Browning's "Sole Streak."—The paper on "Browning's 'three-leaved bell'" (p. 85) has much interested me, particularly the latter part, referring to the "sole streak" puzzle. I had never thought of a plant that would answer to Browning's description, until I saw your suggestion of the Purple Orchis, and it at once struck me that (seen when the flower-spike was just bursting through the clasping upper leaves) this was probably the plant intended. We had a plant of Orchis mascula growing in the garden, where I have just had a good opportunity of noticing it, and it certainly carries out very fairly what is required, excepting that the spike, in this case at all events, is rather pale in its upper portion. Clearly, however, it is far more satisfactory than Polygonum Persicaria.

R. F. TOWNDROW.

Extermination of Badgers.—I venture to send you an advertisement which appeared in the "Bazaar" of May 11th: -

"BADGERS.—Live badger, just caught, weight over 25lb. Any number caught to order for any given date at 21/- each, packed."

Badgers have become very scarce in most parts of the country, and it seems to me a great pity these interesting animals should be still further reduced in number by any such wholesale means as this.

G. T. ROPE.

Ravens in the Isle of Wight.—It may be of interest to Selbornians to know that a pair of ravens nested this year on the Culver Cliffs, Sandown Bay, in the Isle of Wight. On May 1st the young birds were still in the nest, but on that day one of them found its way to the top of the cliff and was captured. The man who caught it said that he had an order for the young birds at £2 each, and that he intended early the next morning to reach the nest by means of a rope. I am afraid therefore that the other birds were also taken. It seems a great pity that a bird so interesting, not only in itself, but also from its associations, should not be preserved from the extinction with which in this country it is threatened. The Wild Birds Protection Act practically affords it no protection, for, as it is not included in the schedule, the only result of a first conviction is a reprimand, and the payment of costs. It should, I think, be one of the special aims of the Selborne Society to obtain the passing of an efficient Act, and to see that it is properly enforced. In the present Act the penalty is too small to act as a deterrent

even in the case of several of the scheduled birds, the chough for instance; and it contains no provision against the taking the eggs even of our rarest birds.

R. F. M.

Good Work.—The Kyrle Society has done excellent work during the past year in the promotion of open spaces, and in flower distribution. Space will not at present allow us to do more than call attention to the report, which contains much matter of interest to Selbornians, and may be obtained from the Hon. Secretary, 49, Manchester Street, W.

A Reasonable Request.—I enclose a cutting from the *Echo* of April 13. It is not asking very much of smokers to refrain from carelessly throwing about matches, &c. A great deal of mischief is undoubtedly done by such thoughtlessness. Within the last fortnight I have read of two fires on Hampstead Heath, one in the undergrowth of Highgate Woods, and another on Stannore Common. The serious damage caused by the last I dread to behold—some thirty acres having been alight, I read—and this, it seems, the result of the deliberate act of one wilful being. It is very distressing, and I hope the Selborne Society will not only take some notice of such occurrences, but endeavour to prevent them by issuing similar appeals to the one I enclose.

"Would you kindly publish a request to those who propose visiting our heaths, commons, and open spaces during the ensuing holidays, to be careful not to throw down their pipe-lights, &c., on to the dry grass, bracken, heather, or gorse—as the case may be? Owing to the drought and dry wind, a spark may cause a bonfire which cannot be put out; and already serious damage has been done to Hampstead Heath by careless or mischievous visitors. If the people would only realise that their own property and pleasure were at stake, and would act as their own police, mischief-makers might be deterted, or detected and punished."

A Botanical Field Class, under the direction of G. S. Boulger, Esq., F.L.S., has been formed for the organised study of plants in the field, the excursions being confined to the neighbourhood of London. Two have already taken place, those yet to come being Claygate, June 4th; Rickmansworth, June 11th; Epsom, June 18th; Perivale, July 2nd. Prospectuses may be obtained from the Editor of the Educational Review, 2, Creed Lane, E.C.

A Good Example.—Mr. Louis Davis sends us a beautifully printed circular addressed to the children of Pinner, who are invited to join the Selborne Society. A small library of books is being formed for their use, and lectures are in course of arrangement, the first, on "Wild Birds and their Habits," having been given in the Parish Hall, on April 30th, by the Rev. H. D. Gordon. Our readers will do well to write to Mr. Davis for his model prospectus. The leaflet is also printed in Child Life for May; in this form it will reach a large circle of readers, and will, we hope, be productive of good results.

Pictures for Schools.—In our issue for December last, we called attention to the excellent flower-pictures issued by the Art for Schools Association. An addition to the series forms part of this year's publications—a group of garden poppies. The size of the picture is 22 in. by 30; its price, to subscribers, 2s., to non-subscribers, 3s. The offices of the Association are at 29, Queen Square, W.C.

A Bird of Prey.—Under this admirable title Mr. Linley Sambourne caricatures the fashionable lady in the guise of a harpy descending upon a helpless kingfisher. Whether the "ladies" who have already been proof against the instincts of humanity, the claims of decency, and the dictates of good sense, will be affected by Mr. Punch's satire, is, we fear, doubtful. The following sentences are appended to the picture: "Despite the laudable endeavours of The Society for the Protection of Birds, the harpy Fashion appears still, and even increasingly, to make endless holocausts of small fowl for the furnishing forth of 'feather trimmings,' for the fair sex. We are told that to obtain the delicate and beautiful spiral plume called the 'osprey,' the old birds 'are killed off in scores, while employed in feeding their young, who are left to starve to death in their nests by hundreds. Their dying cries are described as heart-rending.' But they evidently do not rend the hearts of our fashionable ladies, or induce them to rend their

much-beplumed garments. Thirty thousand black partridges have been killed in certain Indian provinces in a few days' time to supply the European demand for their skins. One dealer in London is said to have received, as a single consignment, 32,000 dead humming birds, 80,000 aquatic birds, and 800,000 pairs of wings. We are told too that often 'after the birds are shot down, the wings are wrenched off during life, and the mangled bird is left to die slowly of wounds, thirst, and starvation.'"

A Gentle Remonstrance.—We are always glad to see the facts recorded

by our contributors brought before a wider circle than our own by reproduction in other journals; but in such cases courtesy, to say nothing of honesty, would suggest an acknowledgment of the obligation. Such acknowledgment, however, is by no means always forthcoming; the *Daily Graphic*, for instance, on April 11th, and again on April 13th, utilised two of our contributors' communications without making any reference to NATURE NOTES.

NATURAL HISTORY NOTES, QUERIES, AND ANSWERS.

The Ruddy Sheldrake.—On the 28th March a beautiful specimen of the Ruddy Sheldrake came to a piece of water here, which is perfectly commanded from the windows of the house. Never having seen the bird before, I was at first at a loss even with the assistance of "Yarrell" to know whether it was a duck or a goose, for it was the size of the latter class. It had a golden neck and head, toning down to white near the bill, which was lead colour. The body was light cinnamon, except the rump, which was golden like the neck. The upper tail feathers were cinnamon, with jet black under, and jet black tips to the wings. The black showed much more when on wing. Its legs were black. It stayed very quietly for a fortnight with other wild fowl, but one morning it was gone, and I have not heard of its movements since. I have, however, received a letter from a gentleman near Guildford, telling me that he purchased a pair in Leadenhall Market about a year ago, and they remained on his water until they disappeared about a month ago. Doubtless this was one of them. In all the illustrations which I have been able to find of this Sheldrake a black ring round the neck is shown, and some white feathers on the wing coverts. The bird in question had neither of these markings, probably it was a female. Its extreme rarity would point rather to its being a foreigner than a British bird. When the gentleman whom I mention bought the pair of these Sheldrakes he was assured that they had just been received from China.

Ringwood.

W. CLEMENT D. ESDAILE.

Owls and Pigeons. —I understand that some people are under the mistaken impression that owls destroy young pigeons. Now a friend of mine has for many years kept pigeons which rear their young in boxes hung in a loft, and in one of the adjoining boxes a pair of Barn Owls regularly make their nest. These two species of birds have got on, it seems, in perfect harmony, the pigeons suffering no E. G. WOODD. harm.

Carrion Crow chasing Heron.—One day last March, whilst I was waiting for wood-pigeons in a plantation, two herons, evidently paired, alighted on a neighbouring fir tree. After a few minutes had elapsed, a carrion crow swooped down upon them, driving them in different directions and chasing one round the plantation and then a considerable distance away, the heron in the meantime uttering cries of alarm. An old man who lived in the vicinity has since told me that the crows for some years past have interfered with the herons nesting in the plantation. It is a curious fact, that herons, although so wary and difficult to approach during the day, are singularly stupid when roosting. I have frequently fired off in close proximity to them when settled for the night, and they have taken but very little notice, at the most shifting on to a neighbouring tree; in this way they often fall a victim to that ruthless enemy of nature, the keeper. FARMER. Dorchester.

Moles Swimming.—It is not generally known that moles are excellent swimmers. Whilst in the water meadows shooting, last December, I perceived a mole crossing the then swollen and rapid river, and swimming with wonderful vigour. I captured the little creature on landing, and a waterman who was standing by wished to kill it; this of course I would not permit, but putting it in my pocket, conveyed it some distance away where it could do no mischief.

Dorchester. FARMER.

Some More Pets.—On one very cold day near Christmas, a box arrived. On opening it, I found it contained a very fine specimen of the green monkey (Cercopithecus callitrichus). The animal was very much alarmed, and dashed about its cage in a most frantic style. Next morning, I found he (for it was a male) had a very bad cold and cough, so I kept him very warm, and gave him Balsam of Aniseed; in some days he was all right again. He is tame, and will take fruit, &c., from your fingers. One day when I was out, he escaped from his cage, and one of my girls hearing a noise, went out to see what it was, and to her terror found "Master Sambo" coolly sitting on the table eating bananas. As soon as I came back, she informed me of the fact; I went to where he was, and ordered him into his cage again; he went in without giving more trouble. Nearly all my visitors admire him, for his jacket is very pretty; this is the species which is termed the beautiful-haired monkey; he comes from Senegal.

Another pet is a "Caracal"; this animal is certainly one of the most graceful of the Felidæ. In its native state it feeds on the lesser animals, birds, &c.; mine is fed on raw meat, fowls' heads, rabbits, &c. One thing strange about it is that it does not drink more than, say, three times a week; I suppose its coming from Persia, which on the whole is a dry climate, accounts for it; no doubt in its own country it quenches its thirst with the blood of the animals, &c., it kills. The colour of its fur is a soft velvety fawn, its ears are largely tufted with hair

colour of its fur is a soft velvety fawn, its ears are largely tufted with hair.

One more pet. This was a baby "Moua monkey." For making a perpetual noise this one would have taken a first class prize. It was very passionate and greedy. It would eat potatoes (boiled) ad libitum. One day it was bleeding from its head. It must have come in contact with the wire of its cage with some force: it never recovered this.

R. M. J. TIEL.

The Orleton Swifts.—The Orleton Swifts were only two days late. I have just been weighing and measuring one. Its weight was just under the usual one and a half ounces, and the spread of its wings was sixteen inches, half an inche more than the usual measurement. I would ask all Selbornians who live in Swift-haunted places to note and report upon the sunset soaring of these delightful birds, and if possible to find out at what hour they return to their nests. Readers of the early numbers of NATURE NOTES for 1891 may remember that it has been shown that they certainly stay out until after eleven p.m., and probably don't "come home till morning, till daylight doth appear."

AUBREY EDWARDS.

The Rufous Sedge Warbler.—The Rev. F. O. Morris sends us the following note, received on the 27th of last month from Mr. Louis Huth. "The bird," he says, "had no doubt come over on its migration":—"On looking out of my dining-room window just now (April 25th) I noticed a bird pecking at something on the grass, the like of which I have never seen before. Having been a close observer of birds all my life, I was naturally much excited and immediately ran for my binocular with which to examine it more nearly. It remained but a very few minutes, but I nevertheless succeeded in so thoroughly impressing my mind with its peculiarities as at once to come to the conclusion that it was the rufous sedge warbler. Once convinced that I was not mistaken I resolved to write to you and report it. I am in Sussex, though my post town is in Kent and fourteen miles off, and I face the Downs, nineteen miles East of Brighton. I may add that I am confirmed in my opinion on referring to your book, as likewise that of Mr. Gould."

Strange Freak of a Blackbird.—At spring-time, when birds of the male sex are often seized with an irresistible desire to display their gallantry by picking a quarrel with their neighbours, it is common enough to witness many a hard-fought battle between feathered combatants of a chivalrous spirit, thirsting for

glory at the shrine of the little god of love; but it is a rare occurrence to see a bird make a desperate and persistent onslaught on his own image reflected in a window. Such an unequal contest I had the opportunity of observing in our garden a short

time ago.

Trustworthy witnesses at work near the spot observed a male blackbird, probably a year old, making repeated attacks upon his own shadow which were renewed at short intervals from six o'clock in the morning until five in the evening. My attention being called to the fact, I saw the bird repeatedly dart at his imaginary foe reflected in the window, pecking, and fluttering his wings in the most furious manner, until fairly exhausted, when he would return to a near resting place until sufficiently refreshed to renew the one-sided combat. Early on the following morning he was observed to recommence the attack, but fearing he would persist in his mad career until he accomplished his own destruction I placed a blind on the inside of the window, which had the desired effect of putting a stop to his insane delusion.

Abbotsfield. J. K. S.

A Blackbird's Egg.—The other day, I found in a blackbird's nest four eggs, one of which was no larger than that of a tit. It was identical with the other three in colour and shape, but was less than half the size. Is this a very unusual thing? M. V. MARCHETTI.

[Dr. Bowdler Sharpe informs us that the occurrence is not very uncommon.

 $-\mathrm{Ed.}$, N. N.

E. H. H.—The orchis is Serapias laxiflora. The Potentilla is P. splendens. The other plants are Saintfoin (Onobrychis sativa) and Kidney Vetch (Anthyllis Vulneraria. Mr. Arthur Bennett, who has made a special study of Orobanches, says: "The stout one with the long spike is the purple form of O. minor. The other is O. cruenta, Bert., which is very like our O. caryophyllea, but has yellow stigmas, not purple.

J. H.—We shall be glad of such a list.

M. E. V.—Hayward's Botanist's Pocket-book may perhaps suit you.

R. C. C .- It is a sedge, Carex pracox.

C. H.-We have submitted your queries to Mr. Robert Holland, who has kindly promised to reply to them in the form of an article, the subject being one of considerable interest.

J. M. W.—Was it not a chaffinch?

A. B.—The plant, having been sent to the Society's office instead of to the Editor in accordance with the directions given in every number of NATURE NOTES, was delayed in transit, and arrived in an undeterminable condition. We are not easily discouraged, but we are beginning to despair of making our readers understand that all matters relating to the Society, as well as all subscriptions, should be sent to the Secretary, 9, ADAM STREET, ADELPHI, LONDON, W.C.: while contributions for NATURE NOTES, and specimens for determination should be addressed to THE EDITOR, 18, WEST SQUARE, LONDON, S.E.

ANNUAL MEETING OF THE SELBORNE SOCIETY.

THE annual general meeting was held on May 4th, 1892, at 9, Adam Street, W.C., when Mr. Otter was elected to the chair.

The report of the Council was as follows:-

"The Council of the Selborne Society begs leave to present to the members

its report for the year ending May 1st, 1892.
"New branches have been formed at Sutton, in Surrey, of which Mr. R. Hill Blades is secretary; at Malden, of which the Rev. F. H. Fowler is secretary; at Cambridge, of which Mr. F. A. Hort, of Emanuel College, is secretary; and for the neighbourhood of Worthing, entitled 'the Richard Jefferies branch,' of which Miss H. Urlin is secretary.

"By the death of Miss Wyatt, the founder and secretary of the Rape of Lewes branch, the Society has lost a valuable supporter. Her place has been taken by Mrs. Hayne, of Cuckfield. The Society has also to lament the death of Mrs. Beale, secretary of the Weybridge branch. Her place has been taken by Miss de Michelè.

"Mrs. Smith has resigned the Secretaryship of the Birmingham branch. Her influence and exertions have been rewarded by the signal success of that flourishing

"By the death of the Rev. Percy Myles the Society has lost, not only a most able and energetic editor of its periodical, NATURE NOTES, but an enthusiastic advocate of its principles. Mr. James Britten has been so good as to undertake for a limited time the work of editing NATURE NOTES.

'The officers to be elected for the coming year are a President, Vice-Presidents,

and twelve members of Council.

"Notice has been given of three proposals, to be made at the general meeting affecting the rules, namely:—
"(1) That rule 8 shall be so altered as to empower the Council to elect

additional members of Council.

"(2) That in rule 23 the words, 'on the first Wednesday in May' be omitted, and the following substituted, 'during the month of May, on such a day as shall be fixed by the Council.'

"(3) That a new rule be added to the effect 'that the Editor of the Society's periodical, for the time being, shall be ex officio a member of the Council.";" The following is the balance sheet of the Society for the year ending December 31st, 1891:-

1801 -GENERAL FUND OF THE SELBORNE SOCIETY

1891.—GENERAL FUND OF	THE SELBORNE SUCIETY.
Dr.	Cr.
f, s. d.	£, s, d.
To Balance from 1890 12 0 8	By Rent 22 10 0
" Subscriptions 106 13 9	" Secretary 25 0 0
,, Sale of Magazines to	,, Postage and Office Ex-
Branches 128 1 10	penses 14 3 7
,, Sale of Magazines	,, Subscriptions returned
through Messrs. Soth-	to Branches 8 II 3
eran 11 0 8	,, Bale & Son, "Nature
,, Miscellaneous Receipts 4 13 10	Notes" (paid and
", Special Magazine Fund 12 2 6	owing) 243 13 5
,, Advertisements in	,, Bale & Son, General
"Nature Notes" 26 15 0	Aecount (paid and
,, Advertisements in	owing) 17 2 7 ,, Editorial expenses 8 2 0
"Nature Notes" un-	
paid 10 15 0	,, Balance subject to pay-
"Contributions by	ment of the £10 15s.
Branches 36 19 4	owing to the Society 9 19 9
£349 2 7	£349 2 7
2349 2 7	2347 2 1

Examined and found correct,

ALFRED T. CRAIG.

26, Theobalds Road, Grays Inn.

On the motion of Mr. Wakefield the report was adopted.

Lord Tennyson was re-elected President. The existing Vice-presidents were re-elected, and in addition F. Dillon, Esq., R.I., Professor F. E. Hulme, F.L.S., J. L. Otter, Esq., Hon. Treasurer, and T. F. Wakefield, Esq., were elected Vicepresidents. Archibald Clarke, Esq., H. Barry Hyde, Esq., A. Holte Macpherson, Esq., B.C.L., M.A., F.Z.S., and W. D. Wickes, Esq., F.L.S., were re-elected members of Council, and in the places of those retiring, Miss Isabel Fry, Miss Agnes Fry, Mrs. Myles, Miss Wallis, H. Aldom, Esq., Dr. Dudley Buxton, Louis Davis, Esq., A. T. Craig, Esq., were elected.

The alterations proposed in the rules were agreed to.

OFFICIAL NOTICES.

Drawing Room Meeting .-- We desire to call the special attention of all members of the Society who live in, or near London, or who may be in town during June, to the drawing-room meeting (to be held by kind permission of Lady Fry,) at I, Palace Houses, Bayswater Hill, W., on Wednesday, June the 22nd, at 4 o'clock, for the promotion of the objects of the Society. The Earl of Stamford, Mrs. Brightwen, the Rev. H. D. Gordon, Prof. Hulme, and Mr. James Britten have kindly consented to address the meeting. The attendance of Selbornians is cordially invited. The slip at the beginning of the magazine should be filled in and presented at the door.

Such meetings have been successfully held in several provincial towns, but in the London branches, where members are often so scattered, it has hitherto seemed difficult to arrange them. By having a more general meeting for all the London and suburban branches, it is hoped that these scattered members, as well

as others, may be able to attend.

It may be of convenience to mention that the Queen's Road Station, on the Metropolitan Railway, is within three minutes' walk, and the Royal Oak, on the District Railway, within ten minutes' walk of 1, Palace Houses, also that omnibuses

from Regent Circus, and Uxbridge Road Station pass the house.

OUR VOLUMES.—We desire to call the special attention of our readers to the volumes of NATURE NOTES for 1890 and 1891, which may be obtained at the offices of the Society, 9, Adam Street, Adelphi, W.C., at the cost of three shillings each, or by post, three shillings and fivepence. By the variety and interest of their contents these volumes are admirably adapted for the school or parish library, and we would urge upon our readers not to neglect so excellent a means for advancing the interests which they have at heart. Cases for binding the numbers for 1890 and 1891 may be obtained from the Secretary at the above address, price Is. each; or the numbers will be bound and the case supplied by Messrs. Bale & Sons, 87, Great Titchfield Street, W., at the cost of 1s. 3d., or with gilt edges, 1s. 1od. The name and address of the sender, with stamps to the above amount, should be forwarded with the magazines in order to prevent mistakes or delay.

Wanted, by the Hon. Treasurer of the Kensington branch, the numbers of the Selborne Magazine for January, April, July, and December, 1888. Address Thos. Grey, Esq., 5, Kensington Crescent, W.

NOTICE TO CORRESPONDENTS.

Contributions for any number should reach the Editor, JAMES BRITTEN, F.L.S.. 18, West Square, London, S.E., not later than the 15th of the month. When it is particularly requested, MSS. not accepted will be returned, if

stamps sufficient to pay the postage are sent for that purpose.

Queries on any points connected with Botany or Zoology will be answered if possible, and advice will be given as to the best books for students in any department of Natural Science; but all questions must be accompanied by the names and addresses of the writers, not for publication, if this is not desired.

Specimens sent for identification will be named, if sent carefully packed and in good condition, and if sent to the Editor, but we cannot undertake to return

any specimens.

We shall be glad to notice any books bearing upon natural history in any of its branches, and to direct attention to magazine articles of the same kind, if these are sent to us. Publishers will confer a favour upon our readers if they will always state the *price* of any volumes they may send, in order that it may be quoted in the notice. This addition is much appreciated by our readers, and is desirable in the interest of the volumes themselves.

It is particularly requested that subscriptions and letters connected with business should not be forwarded to the Editor, but to the Secretary of the Selborne Society, 9, Adam Street, Adelphi. Editorial communications, specimens, and

books for review should be addressed to Mr. Britten, as above.

'Mature 'Motes:

The Selborne Society's Magazine.

No. 31.

JULY, 1892.

Vol. III.

HINTS FOR THE HOLIDAYS.

HE time of the annual exodus is approaching. Those who have not already done so will be planning where to spend their summer holiday. At home or abroad, by mountain and stream, by the sea-shore or the lakeside, folk are betaking themselves in search of "fresh woods and pastures new," and the population of London will be reduced to the millions who somehow or other are to be found there when there is "nobody in town." Now is the time for Selbornians to put their principles into practice; and a few hints on various

ways of doing so may not be out of place.

Perhaps the wild flowers, both at home and abroad, are in most need of protection, as they are the most defenceless against the attacks of depredators. The botanist is not always discreet, especially if his zeal for collecting is greater than his love for science; but after all he is the least dangerous of the enemies the flowers have to encounter. There is the fern-grubber, for instance, both amateur and professional; there are the young ladies—we have seen them in Switzerland—who trudge down from the mountains with baskets and handkerchiefs crammed with flowers, or rather with plants, which is far worse. Little harm, indeed, is done by plucking flowers, but towards the top of the mountains, where the Gentians, Androsaces, and the like, gain but slender roothold among the loose stones, and are more easily pulled up than gathered, serious mischief may be, and is done. Remember, ladies, that these delicate and fragile little flowers are not very likely to grow, even if you take them back to England with you, which you very seldom do. If you want to grow them, put yourselves in communication with Mr. Henri Correvon, of Geneva, of whose garden some account was given in NATURE NOTES for September, 1890. He will supply your wants, and will even give you (for a consideration) Edelweiss, now so reduced in its native haunts by the depredations of tourists that laws have had to be made for its preservation, as for the beautiful *Disa grandiflora* of Table Mountain.

The poor Gentians! Not only the tourist, but the native, is their enemy, and their collection has become a branch of commerce. Of this an interesting account will be found in the

Cornhill Magazine for June last.

"There is a class of men and women" says the writer, "who make it their profession to pursue and root up the Gentianella, and this class exists throughout the whole chain of the Alps, in Tyrol, the Bavarian Alps, and in Switzerland. This is the Enzianklauber." They go out away up the mountains, for months at a time, from the time when the snows melt until they begin to come again. From the roots of the Yellow Gentian (Gentiana lutea), and also, says our author, from those of the beautiful blue Gentiana acaulis, is distilled the "gentian brandy," which "may be said to be the very elixir of life to the mountain folk," and is credited with the cure of all the ills that flesh is heir to. The result of their action is thus described:—

Formerly, when the 'gentians grew common as do daisies on our meadows, upon every Alpine pasture, the root-digger was able to realise a good income, but it is otherwise now. These beautiful mountain flowers have been so persecuted, so driven from one vantage ground to another, that they are becoming annually more scarce, more difficult to find, and consequently the business has become more unremunerative whilst becoming more hazardous. But this is the fault of the men themselves. If they would but leave the lower portion of the root in the ground, the plant would recover and grow again. To such a pass has it come, that Alps which were at one time blue with gentians are now entirely cleared of them.

But it is not only the flowers of the Alps that are in danger. The ferns of the Forum have at this time of year a respite from the visits of the tourists, but in the spring the beautiful Maidenhair, which springs from every crevice and throws a pale green robe over these monuments of antiquity, is in urgent need of a protector, or of the enlistment of a public feeling on its behalf. The love of money is the root of all evil, and the love of flowers, and still more of ferns, is in too many cases the prelude to destruction.

Those who do not go abroad for their holidays may find ample scope for self-denial at home. They will spare at least some of the ferns they meet with on their country walks; they will yield to the appeal which has lately been made to refrain from stripping the Thames of its Water-lilies; they will not divulge indiscreetly where they found the Osmunda, or reveal the roots of the rarer orchids. If they find a rare plant, they will pluck it in moderation and spare its roots; and they will discourage "root-grubbing" of all kinds. And they will also hold in detestation a line of conduct diametrically opposed to root-grubbing, but one equally to be abhorred of all faithful Selbornians—we allude to the introduction of plants into localities where they may become naturalised, and apparently

form part of the indigenous vegetation. The problems connected with plant-distribution, and Nature's ways of working them out, are full of interest; but if human agency is deliberately employed, the interest ceases. Yet this is sometimes done, even by members of Natural History Societies, who certainly ought to know better. Quite lately the flora of Hampstead Heath and the botany of Keston Bog have been enriched in this manner; and we were ourselves unwilling spectators of the "planting out" of Butterwort and Grass of Parnassus in a New Forest bog. (We also had the satisfaction of following in the tracks of the planter and of endeavouring to remove the traces of his unholy

work—but this by the way.)

We hope also that Selbornians will do their share towards extending to others the benefits of the country holiday which they themselves so keenly appreciate. In this connection we would earnestly commend to those who are not yet acquainted with it the admirable "Children's Country Holiday Fund," which has now for many years sent London children to country villages for a fortnight or more at a time, and in 1891 extended its benefits to no fewer than 25,615 children. If holiday-makers would, as part of their holiday expenses, send fifteen shillings to the Secretary of the Fund (Mr. Cyril Jackson) at the Offices, 10, Buckingham Street, Strand, W.C., the work of the organisation would be greatly promoted; or they may obtain from him the Report for 1891, the perusal of which will, we think, certainly result in the forwarding of a donation. We have not space to summarise this here, or to give any account of the excellent arrangements made: the following paragraph is all we can find room for:—

Each year that the Fund grows more children learn about the country, and there must be fewer left who have never seen a cow inilked or fruit grow. There are still, however, many who know nothing of rural life but from books, and there must be in every village tales to be gleaned from the cottagers of their little visitors' amazed wonder in the discovery of the new realms of nature. It is pleasant to read of the children picking fruit, and coming back laden with country produce, or bringing flowers for the lady in London who sent them away, or a present for the school museum. It is gratifying to find how London parents begin to appreciate the holiday. In Camberwell a number saved the whole sum through the Committee, and were enabled to send their children away themselves; and in East St. Pancras a grateful mother saved £1 for her own child and for some poorer one; while from Notting Hill comes a touching story of a coachman's child, who knew the country delights herself, saving 7s. 9d., all in pence, for a poor child who had never been.

Yet one more suggestion. Those who have large gardens can give more pleasure than they can imagine, by sending from time to time a basket of flowers to some hospital or workhouse.

"Those that can wander at will where the works of the Lord are revealed, Little guess what joy can be got from a cowslip out of the field: Flowers to those 'spirits in prison' are all they can know of the spring, They freshen and sweeten the wards like the waft of an angel's wing."

The Kyrle Society, and many other organisations, take up this work: but we are sorry to gather from the last Kyrle Report that it is not making much progress. We read:—

The work of the flower distribution continues—the love of flowers and the appreciation of them seems ever increasing—but, unfortunately, the number of donors has been smaller this year. This may have been partly owing to the death of the late Secretary and the comparative lateness of the season when the work was again taken up, as also to the wet summer, which made flowers scarce; but it is earnestly desired that the friends of the Society would interest themselves in this branch, as a few flowers or plants, hardly missed from a large garden, may cheer a dreary worker and send a breath of sweetness and light to some of the darkest places of this dark city. It is much to be regretted that the funds of this Society did not allow for the usual sum of \pounds_3 3s. for bulbs, which will be sadly missed by the many to whom, through Messrs. Barr and Son's liberal supply, the long winter was thus brightened.

We hope that many of our readers will take up this work. It is best to send flowers that will travel well—Oxeye Daisies, Asters, Sunflowers of all kinds, and the like, are beautiful in form and colour, and last for a long time in water. Miss Lilian James, 49, Manchester Street, London, W., will give all information as to the Kyrle Society's Flower Distribution Branch; and we shall ourselves be grateful to any reader who will help us to provide some large workhouses and infirmaries in South London with floral brightness.

One more hint, on so trivial a subject that one almost apologises for mentioning it. But Mr. William Morris, in his lecture on "The Beauty of Life," has already drawn attention to it;

and we will introduce it in his words:

I will now speak of a minor nuisance which it is in the power of every one of us to abate, and which, small as it is, is so vexatious, that if I can prevail on a score of you to take heed to it by what I am saying, I shall think my evening's work a good one. Sandwich-papers I mean. . . . When we Londoners go to enjoy ourselves at Hampton Court, for instance, we take special good care to let everybody know that we have had something to eat; so that the park just outside the gates (and a beautiful place it is) looks as if it had been snowing dirty paper. . . This sluttish habit is the type of many another in its way—I mean such things as scrawling one's name on monuments, tearing down tree boughs, and the like.

Yes, this is a little matter we can all attend to; and if every Selbornian who goes up the river for a picnic during the bright summer weather we are all hoping for in July will see to it, and impress it on his (or her) companions and friends, a good piece of work will have been done. We have seen—in the beautiful Quarry Woods by Marlow, for instance—so much débris of paper, broken bottles, tins, and the like, remaining after picnics, that, to compare small things with great, it could only be compared with the congeries of hideous things—black sheds, rusty rails, forgotten trucks, broken-down carriages and the like—which seem inseparable from a railway junction. There is much devastation of beauty going on all around us which we are powerless to prevent; but we can at least burn our sandwich-papers when we have eaten our sandwiches, even if we have to take them home for the purpose.

^{* &}quot;Hopes and Fears for Art," p. 101.

That some at any rate of these hints will be acceptable to Selbornians, and suggest to them new ways of propagating their principles, is the sincere wish of

THE EDITOR.

NATURE NOTES IN TENNYSON'S POETRY.

POET attains popularity because he translates into ordered and beautiful language the ideas of his time, and he is only popular in so far as he is the child of his time. He may wait for recognition, or his fame may wane, and yet he will be at either of those periods as great a

poet as at the hour of his fullest acceptance.

What may be Tennyson's place in literature it is obviously as yet impossible to say, but of two facts there can be no sort of doubt; he has been for very many years the most popular English poet, among the learned and unlearned alike; and next, while all admire his dexterity in the use of words, and his gracious melody of verse, he is less popular than he was among the more thoughtful and literary readers. This second fact would seem to show that in some degree the problems of our age require a new poetic interpreter, and makes it possible to consider, without attempting ungracious comparisons, what it is that has given Tennyson the place which he holds in the estimation of his countrymen.

The ideas which have most affected the mind of the age now passing away are those of science, and of the aspects of Nature, and in both these fields Tennyson has translated the thoughts of men's minds into ordered words. For instance, when what is now known as Darwinism, and the doctrine of evolution, was only beginning to be, the poet put the whole into four beautiful lines. He has now suppressed them, probably because his English ear revolted against a rhyme which to a Frenchman

would have been absolutely correct-

All Nature widens upward; evermore
The simpler essence lower lies,
More complex is more perfect, owning more
Discourse, more widely wise.

And again when he speaks of the birth of man we have the remarkable lines:—

A soul shall draw from out the vast, And strike his being into bounds, And, moved through life of lower phase, Result in man, be born and think, And act and love, a closer link Betwixt us and the crowning race.

The popularity of the whole of "In Memoriam" appears to arise mainly from the touches of science, from the descriptions

of nature, and from the fact that in an age which tends to reject revelation, and yet craves after a knowledge of the future, it gives the best hope of a life to come, which can be attained without a revelation. But this is by the way, and only a hint for the student of Tennyson that his poems bristle with modern science transmuted into poetry, and translated into ordinary language.

I wish here especially to note his view of nature—the sights, sounds, scents of the country—believing that he has taught us much when we have looked through his eyes and heard with his

ears

No doubt most of us remember the delightful old farmer in *Cranford* to whom Tennyson had taught so much; and who declared that until the poet revealed it, no one had observed that ash buds were black—

More black than ash buds in the front of March;

and in the same way he has been the first to draw the attention of thousands to minute facts and processes always open to notice, but rarely noticed before he wrote. Take the wonderful lines, easily verified any hot day in summer by the margin of a still pool:—

To-day I saw the dragon fly Come from the wells where he did lie.

An inner impulse rent the veil Of his old husk: from head to tail Came out clear plates of sapphire mail.

He dried his wings: like gauze they grew: Through crofts and pastures wet with dew A living flash of light he flew.

Let us take our Tennyson, mark each passage referring to nature, and ask ourselves whether we knew it all before, or if the poet has not given us a new fact, or a new interpretation of the fact?

But not to dwell too closely on details, which each can examine for himself, it may be interesting to get certain broad principles to explain how the poet looks on nature. It is often said that no sense is more full of memories than the sense of smell. Tennyson is much aware of the subtle perfumes of the country, and especially of the garden—

The air is damp and hushed and close
As a sick man's room when he taketh repose
An hour before death.

My very heart faints and my whole soul grieves
At the moist rich smell of the rotting leaves,
And the breath
Of the fading edges of box beneath
And the year's last rose.

Again:

The yellow-banded bees Through half open lattices Coming in the scented breeze; Blossom-fragrant slipt the heavy dews Gathered by night and peace.

Buzzings of the honied hours,

and a hundred such lines will, when we have realised them, come back to us in country lanes when the honeysuckle and wild rose send forth their scents, and the dews are heavy with the flower of the lime.

Perfume too is subtly suggested when vision only is named; as:—

Like two streams of incense free From one censer in one shrine.

Who does not smell as well as see the twin columns of the sweet vapour, one on each side of the acolyte, as his censer swings rhythmically at Benediction?

Then all the sounds of the country are set forth in Tennyson, sometimes, it is true, with an over-abundance of imitation, where a mere suggestion would have been better. For instance:—

Birds in the high Hall-garden When twilight was falling, Maud, Maud, Maud, They were crying and calling,

is somewhat too realistic. A lover must have but slender sense of the melody of his lady's name who fancies he hears it in the noisy cawing of the rooks. But as a rule we find a keen sense of the beauty of country sounds—

Then, while a sweeter music wakes, And through wild March the throstle calls, Where all about your palace-walls, The sun-lit almond-hlossom shakes.

Or-

or

She heard her native breezes pass
And runlets babbling down the glen;

or the magnificent song of the echoes at Killarney, in which the guide's bugle takes the whole tone of the grand and sweet nature around, and becomes

The horns of Elfland faintly blowing.

But of course the sense above all others by which we know external nature is that of sight, and here it is most interesting to find what Tennyson can teach us, and where are his limitations. He can show us, as perhaps no other can, the delicate minutiæ of what he can take in his hand—the black of the ash buds, the flower out of the crannied wall, the veining of a leaf, the little speedwell's darling blue, the moss on flower pots, the spots at the bottom of a blossom, the arrow seeds of the dandelion; and we understand the gain which compensates for much of the loss to shortsighted eyes lying in this microscopic minuteness of vision. If we did not know from a thousand portraits that Lord Tennyson was very near-sighted we could

gather it from his verse, and it would be interesting to any student to work out the indications in detail.

We look again through his eyes at the distant landscape, and the same fact is apparent. He shows us little detail save what is quite close and had impressed itself upon him by constant repetition, as—

The seven elms, the poplars four That stand beside my father's door;

but he gives broad effects of light, masses of colour, which do not depend on any special power of vision if they are visible at all. The hills are always "purple," the sky "golden," or "rosy bright:" the moon is "dim red," and we see "scarlet shafts of sunrise." The series of pictures in "The Palace of Art" are all great sweeps of colour:—"One seemed all dark and red, a tract of sound," "Realms of upland, prodigal in oil, and hoary to the wind," and the like. There is no middle distance, or if there be it is picked out by specks of colour: "The red cloaks of market girls," "or long-haired page in crimson clad." If the poet notices a lady's work, it is when she adds "a crimson to the quaint macaw."

But we have said enough. Our aim is not to analyse Lord Tennyson's nature notes, but to lead others to do so. There is no better way of studying a poet than to take one subject, and trace it through all his writings. To ask ourselves how Tennyson looks on the outward world, and what he can teach us of the birds, the sky, the sea, the flowers, will be, when we can answer the question, no bad fragment of a liberal education.

C. KEGAN PAUL.

SOMETHING ABOUT ROOKS.



CORRESPONDENT asks whether it is usual for rooks to bury their food. I may say that we have had three rooks coming about this place for the last five or six years, and these habitually bury their food. They

are perhaps as tame as rooks can be. They first began to come during one of those hard and severe winters which have been of late years. The snow lay some three or four feet deep in the neighbourhood of these hills about Delamere Forest. It was interesting to see how they made their first approaches. First one appeared, and, alighting upon the ridge of a stack within thirty yards of the house door, surveyed with great caution the doings and whereabouts of the inmates. The same being a quiet family—and a gun never used about the place—the cautious bird appeared well satisfied with his scrutiny, and soon invited another rook, which we took to be the wife, to bear him com-

pany. The two sitting frequently on the ridge of the stack for several weeks at intervals, after a while became bolder and ventured nearer the house. They would take up pieces of bread or mutton fat and fly quickly back to the stack, as a safe haven. It was droll to see these two, sitting patiently through a storm of wind, hail or snow, their glossy black feathers covered with a patch of white, and then bread or meat thrown out, down they came from their high perches, and, floundering through the deep snow, made short work of such welcome provender. After a while we noticed that the surplus of a meal was hidden in the top of the stack or buried in a hole in the grass. The least appetising part of the food seemed to be that buried, as by the aid of an opera glass we had found it was white bread which was disinterred.

Now that the rooks have become more tame it is generally the nearer vicinity of the house which they choose as a resting place, squatting like hens on the top of the low stone wall or making living escutcheons of themselves on the posts of a five-barred gate. Both gate and wall are not more than eight or ten feet from the door and windows. There they sit persistently watching and waiting, and especially towards four or five in the afternoon, when apparently that seems to be the last meal of the day. After pertinent enquiry, turning their heads from time to time to the door and windows, and saving as plainly as words can say it, "Bring out that mutton-fat and cheese." Nothing forthcoming, they seem to give us up for the time being, and fly off to the stack or the hole in the field, and there take out the fare for a "rainy day." Next morning, at five or six o'clock, there they are again, remaining with us or near to, almost the whole of the day. Strange to say, when an elderly woman came to keep house during our absence at the sea-side last summer the crows entirely absented themselves; and as singular, when on an early foraging expedition an ordinary flock of crows pays our wheat crop a morning call, our rooks being among them, the former will fly, on being driven off, in an opposite direction, but those we call ours come flying nearer to the house for protection, alighting on the gate posts or near the door.

It should be mentioned that the winter following the one the rooks made our acquaintance, they brought with them another rook, a younger one, which we took to be the son. He, in his turn, has become more tame than his parents, not troubling himself to move from the gate post, but simply scrutinising and contemplating the quality of the food taken out. There is no doubt but that cheese and roasted mutton fat bear the palm. Lately, a young black retriever dog belonging to a farmer near, and coming over to play with our dog, has, being somewhat active and nimble of limb, found out the rooks' larder on the top of the stack. A fine commotion and call to council took place among the three at this juncture. Such a cawing

and jerking of heads and tails back and to, as this occurred, was laughable to see. "Bell" made a hasty retreat, and has not been since seen after such "high game."

SARAH CASH.

I should like to relate my experience of a tame rook which I brought up from the nest some years ago. Its breakfast always consisted of bread and milk with a few worms, but the favourite food was light pudding or blancmange, of which it partook every day after luncheon, being fed with a fork in most approved fashion. After filling his crop and beak to repletion, Master Dick would hop off with what he could not swallow, scratch a small hole and hide each piece separately—looking round cunningly the while to see that he was not watched. Then if there were still more pudding on the plate he would come back and again go through the same process until he had buried it all. During the afternoon he would dig up each piece and eat it with evident pleasure, judging from the satisfactory "caw, caw," which followed each gulp. Dick was a most amusing bird, and I could relate many little anecdotes of him, notably one of his friendship for a tiny moor-hen, his only feathered companion, but I fear to take up too much of your valuable space.

L. WHITELY.

HAREBELLS.*

Blue bells, on blue hills, where the sky is blue, Here's a little blue-gowned maid come to look at you; Here's a little child would fain, at the vesper time, Catch the music of your hearts, hear the harebells chime. "Little hares, little hares," softly prayeth she,

"Come, come across the hills, and ring the bells for me."

When do hares ring the bells, does my lady say?
Is it when the sky is rosed with the coming day?
Is it in the strength of noon, all the earth aglow?
Is it when at eventide sweet dew falleth slow?
Any time the bells may ring, morn, or noon, or even;
Lovebells, joybells, earthbells heard in heaven.
Any time the happy hills may be lightly swept
By the ringers' little feet; any time except
When by horse and hound and man chased and frighted sore,
Weak and panting, little hares care to ring no more.
It must be upon the hills where the hunt comes ne'er,
Chimes of bells ring out to greet touch of little hare.
Harebells, blue bells, ring, ring again!

Set a-going, little hares, the joyaunce of the strain.

^{*} Reprinted by permission from "Michael Villiers, Idealist; and other Poems." Smith, Elder & Co., 1891.

Not a hare to ring the bells on the whole hillside? Could she make the harebells ring, if my darling tried? Harebells, harebells, a little child blue-gowned Stands and listens longingly; little hands embrowned Touch you; rose mouth kisses you; ring out! Is a little child a thing any flower should flout? Child's hand on poet's heart makes it bloom in song: Let her hear your fairy chimes, delicate ding-dong. Let her hear what poet's voice never caught nor sung; Let a child ring the bells little hares have rung. Soft she whispers to the flowers, bending o'er them there, "Let me ring your bonny bells! I'm a little hare! No, I'm only a little child, but I love you so! Let me ring your little bells, just to say you know." Harebells, blue bells, ring, ring again! Set a-going, little child, the joyaunce of the strain.

O the look upon her face, for the music heard!
Is it wind in fairy soughs? Is it far-off bird?
Does the child hear melody grown folk cannot hear?
Is the harebells' music now chiming in her ear?
Father, give this little child, as she goeth on,
Evermore to keep the gift by this music won;
Gift which makes this earth of ours very Paradise
For delight of opened ears, joy of opened eyes.
Harebells, joybells, lovebells, dear and blest,
Ring in the sacredness of her happy breast.

E. H. HICKEY.

A NEW BIOLOGICAL STATION.

ATURDAY, June 4th, was a red-letter day in the annals of the Liverpool Marine Biological Committee, for it was the date of the formal opening of their new Biological Station at Port Erin, at the south end of the Isle of Man. Five years ago the Committee established a small biological laboratory on the shores of Puffin Island, Anglesea, of which I gave a short account in the pages of NATURE NOTES (vol. i., p. 95), on the occasion of a Whitsuntide excursion to Puffin Island in 1890. Since the foundation of the station, two bulky volumes of researches made on the flora and fauna of the neighbouring seas have been published under the able editorship of Professor W. A. Herdman, F.R.S.; and the Biology Committee, of which Dr. Herdman is chairman, believed that the time had arrived for the transference of the centre of work from Anglesea to some other more easily accessible part of the district, where a fresh area might be investigated. After a careful consideration of several sites the Committee ultimately decided upon Port Erin, and a new Biological Station was forthwith erected on the beach immediately below the Bellevue Hotel.

Port Erin, as the readers of NATURE NOTES are doubtless aware, is a small fishing village situated at the head of a deep circular bay facing the Irish coast, almost opposite Greenore, which is distant about forty miles. There are several hotels, for the village has a large holiday population in the season. A steep cliff rises to the level of the main shore-road from the sandy and shingly beach. At the foot of the cliff beneath the Bellevue Hotel, a small cove, protected on three sides by overhanging rocks, and communicating with the roadway above by a steep zigzag path and flights of concrete steps, was chosen as the site of the new station. A platform of concrete and stone, fifteen feet above high water-mark, was first constructed, and on this a substantial slated stone house was built. The main door opens from the stairway into a short corridor, from which there opens off on one side the secretary's office, and on the other a small private laboratory for the use of the director and members of the Committee. The main laboratory is 22 feet long by 20 feet wide, and lighted by five windows, three facing the sea, two facing the cliff. Ample accommodation is thus provided for at least six students. A doorway communicates with a small courtyard, convenient for the storage of dredging tackle. In the courtyard and under an overhanging rock a large concrete cistern has been made, into which fresh water from a natural spring in the cliff continually falls. The water is conducted by piping to a sink at the gable end of the laboratory, so that a continual supply of fresh water is obtainable. Salt water is of course close at hand, and a long stout table running down the centre of the room is provided for marine aquaria. The walls are lined with shelving, book cases, and glazed cupboards for microscopes and microscopic apparatus. There are two fire-places, one at either gable, and it is hoped that by this means it will be possible to work comfortably at the Station even in the depth of winter. A plentiful supply of boats is available, and the Committee anticipate at an early date having a boat specially adapted to the necessities of the naturalist permanently at the service of the Station.

On Saturday, June 4th, a large company of naturalists from Liverpool, Manchester, Sheffield and elsewhere, assembled at Port Erin to receive the Lieutenant-Governor, the Bishop, and members of the House of Keys, and Council of the Isle of Man, who had been invited to be present at the formal opening of the Station by his Excellency the Governor. The town was en fête with bunting, and the inhabitants turned out in force to welcome the invading biologists. The Liverpool Salvage Association lent their steamer, the "Mallard," for the occasion, under the command of Captain Batchelor. A luncheon was provided by the Bellevue Hotel, whose proprietor, Mr. Clague, had exerted himself to the

utmost to render the day's proceedings a success. The Station is built on the grounds of the hotel, and Mr. Clague himself undertook the building of the laboratory, from plans provided by Prof. Herdman. Fortunately brilliant weather prevailed, and the dredging expeditions in the Irish Sea were eminently successful.

To local naturalists the foundation of the Port Erin Station offers a splendid opportunity for research on marine biology, whilst naturalists from other parts of the kingdom may combine a pleasant holiday with ample convenience for biological investigation by becoming members of the Association. In case some readers of Nature Notes may be desirous of making acquaint-tance with the rich and varied fauna and flora of the seas round the Isle of Man, I may add that a subscription of £1 is. per annum and upwards entitles the subscriber to the use of the Station and all its appliances, provided always there be room. Early intimation of desire to work at the Station should be made to the Director (Professor Herdman, University College, Liverpool), or to the Secretary, I. C. Thompson, F.L.S., Waverley Road, Liverpool.

To the geologist the district is of great interest, and perhaps not the least curious phenomenon in the vicinity is the wonderful "chasms" near Spanish Head. It would perhaps come within the province of the Selborne Society to enquire how it comes about that these tremendous clefts in the cliff are closed to the public save on payment of an admission fee—small it is true, but still a fee. Perhaps the ways (and laws) of the little Manx nation differ from those of the neighbouring islands in respect

of property, as they undoubtedly do in other respects.

Bradda Head and its copper mines, now disused, the Calf of Man, and the lovely Feshwick Bay, with its brilliantly tinted sponge-lined caves are within easy walking distance. The land flora is apparently rich and varied, and will well repay investigation. Altogether the lover of nature's beauties, to whom those of the Isle of Man are still unknown, might do worse than pay a visit to this, the first Biological Station founded on the shores rendered sacred by association with the name of Edward Forbes.

R. J. HARVEY GIBSON.

A BOOK ABOUT WORDSWORTH.*

It is difficult to say why this book has reached a second edition, except by calling to mind Carlyle's saying, that the population of England is so many million people "mostly fools." It would not be easy to find, on its own lines, a

more worthless, a less critical book.

If Mr. Sutherland can go wrong in a fact he does so. This is not an easy feat, as the facts of the book are mainly taken from other people who have verified them; but errors remain, even in a second edition, which five minutes' care would have removed. For instance, we find "Crewkerne, in Dorsetshire" (p. 34). Crewkerne is in Somerset. On p. 103 we are told that John Wordsworth was buried at "Wythe, near Weymouth." There is no such place; the ship was lost off, and the body was interred at, Wyke. There are plenty of others, but they lie

on the borderland between critical judgment and fact.

The general style of the book may be described as provincial, or even parochial. What has struck the author, at once assumes a prominence little less than ludicrous in the eyes of those who have seen or read more. Mr. Sutherland quotes with approval the pretty lines "She was a phantom of delight," introducing them with these amazing words: "A beautiful tribute—to our mind the highest ever paid to avoman—was rendered by the poet to this sterling lady in these immortal stanzas." One would think the man had never even heard of Dante and Beatrice, to say nothing of the Blessed Virgin and St. Lucy, whose praises are sung in the Divina Commedia. There was, too, a lady named Laura, immortalized by Petrarch; and "a fair vestal throned in the west" had lines unlikely to die addressed to her by one William Shakspere. But these gentlemen and ladies lived beyond the bounds of Mr. Sutherland's parish.

In the same foolish vein of provincial brag we are told of Rydal Mount: "This beautiful residence, next to Shakespeare's the most celebrated from a poetical standpoint in the world, which has since become immortalised." Yet a house in Florence bears the inscription: "Here the divine poet was born." Milton's cottage at Chalfont St. Giles's is not unknown to fame; nor Pope's Villa at Twickenham; nor Newstead Abbey. It is not we who make comparisons, nor do we disparage a great poet, as Wordsworth surely was; but when one in the attitude and tone of a young man from Birmingham pours forth these idle sayings, irritation cannot but call to mind that other roofs have sheltered other

poets-and greater.

In the same way we hear that Mr. Irving is "the greatest of living actors"—possibly, but we should like to know if Mr. Sutherland is acquainted with the French and German stages; that Mrs. Sigourney is "the most charming of American poetesses;" and almost every one, even Mr. Matthew Arnold, who has taken Mr. Sutherland's fancy, is belittled by excessive laudation. We say not a word of his criticism, because all that is of merit is borrowed from other people, and their judgments, as quoted, generally contradict the author's own, so that he has to "hedge," and endeavour to say that black and white are, after all,

very much the same.

The book is larded with most inapt quotations. He says of Southey: "Death came with friendly care"—when all the world is at once reminded that the words were written on the death of an infant; and of Wordsworth, "God's finger touched him and he slept," without knowing, apparently, that the "touch of God's finger" is an almost technical phrase applicable to the mode of Hallam's death, and not in any degree to that of Wordsworth. But the worst quotations in the volume are those from Holy Scripture. We have seen nothing like them since the "State Services" happily disappeared from the Book of Common Prayer. In the Service for the Death of Charles I. a cento of quotations from all parts of the Bible were diverted from their original meaning to the king, who was spoken of as though he were Christ Himself. "O my soul, come not into their councils, for in their anger they slew a Man." Mr. Sutherland places Wordsworth on the same

^{*} William Wordsworth: The Story of his Life, with critical remarks on his Writings. By James Middleton Sutherland. Second edition, revised and enlarged. London: Elliot Stock, 1892.

pinnacie. "It is discouraging to read how Wordsworth was, for the most part, regarded by his contemporaries, but there are parallel cases, and their name is legion, to be found from the Christian era, to go no further back, downwards. We read of a greater than Wordsworth that 'He came unto His own, and His own received Him not.' The effect of the critiques on the Excursion," &c., &c., (p. 135). "The highest authority tells us that when the Divine Exemplar died 'the veil of the temple was rent in twain from the top to the bottom,' &c. . . . With regard to the death of Wordsworth, we are not told that even the ominous raven croaked" (pp. 204-5).

We had intended to say a few words on the language in which the book is

We had intended to say a few words on the language in which the book is written, but that is surely plain enough from the few extracts already given. We can only warn all lovers of nature, of literature, and of Wordsworth against this

volume.

SELBORNIANA.

Scaring away the Gray's-inn Rooks.—F. T. W. Goldsmith writes to the Star of May 16th, from Verulam-buildings:—"For hundreds of years these beautiful gardens have boasted a colony of rooks. These rooks have just been driven from their old home by an act of the benchers. The Society is erecting a corrugated iron monstrosity in the part of the gardens where they have built, and the unfamiliar noises attendant upon the work, added to the glare of the corrugated roof and walls, have so frightened the birds that they have all taken flight. The injury to the rook colony is greater, inasmuch as the yet unfledged birds are starved owing to the eviction of the older ones. The question is, how to get the birds back? A similar exodus took place some years ago, when a few of the older trees were felled, but owing to the hue and cry raised the felling was stopped, and some of the birds fortunately returned. If the corrugated iron shed now being put up were at once pulled down, and the gardens restored to their normal condition, it is very possible that our rooks would come back. The Society have in late years done so much to beautify the Inn that all who, like myself, are dwellers here are amazed that such a blot should ever have been begun, or even contemplated."

"Beware of Man-Traps and Spring-Guns."—Such was the ominous warning fastened to the trees which bordered the woodside copses, and other places where as a child I loved to wander, to watch the squirrel as he nimbly jumped from tree to tree, or listen to the carolling of birds and the soft cooing of the turtle-dove as he sat by his mate on her two glossy white eggs. I longed to enter the little wicket-gate used by the keepers in going through the narrow ridings of the wood, and learn more about the beautiful creatures which had filled my mind with admiration; but the thought of tripping against a secret wire of a spring-gun, or stepping on the trigger of a man-trap, to be held in mangled condition until discovered by one of the dreaded keepers, always had the desired effect of keeping me at a respectful distance from the forbidden ground. But as I became older I began to regard these notices as we do the fairy tales of our youth, and I have since often accompanied the keeper on his rounds through these same woods. Not long ago, while sitting under the shade of some trees in a mossy and secluded nook of a little copse of one of the pretty villages in Kent, I became interested in watching the graceful and delicate form of the sweetest I became interested in watering the graceful and deficate form of the shocker, minstrel of the grove, the nightingale, as he flitted in and around his shady bower, often bursting into snatches of wild and ravishing melody. My attention was drawn away to the stump of a large tree, cut to within three to four feet of the ground. Beautiful green moss appeared to be growing upon it, on which were laid four or five thrush's eggs. I was about to examine further when my suspicions became aroused, and, picking up a stick from the ground, I touched one of the eggs. Up sprang the naked jaws of a strong steel trap, which cut the strong stick asunder. This trap had no doubt been set by some cruel person to catch jays and other birds accused of destroying pheasants' eggs, &c., and would assuredly have severed my hand from my arm had I placed it on the eggs. Children and

grown-up people often visit these copses (which are not fenced off, nor is any warning notice written up) for wild flowers, and a most serious accident might easily occur.

J. E. Whiting.

[Perhaps some reader of Nature Notes will inform us whether traps of this

[Perhaps some reader of NATURE NOTES will inform us whether traps of this kind are legal when placed in a wood which is open to the public. We should also be glad to know whether the use of barbed wire is subject to any restrictions. Two or three weeks since, near Epsom, we saw a footpath across which were pieces of barbed wire supported by two posts, at a height nicely calculated so as to catch the foot of the intruder. The footpath was probably private, but public paths ran through the same park, and a dog might easily stray on to the forbidden ground and become seriously injured by the barbed wire—one of the most barbarous (no pun intended) inventions of modern times.—ED. V. N.]

Protection of Birds.—Mr. W. A. Nicholson, the Hon. Sec. of the Norfolk and Norwich Naturalists' Society, sends us the following excellent letter,

which has been published in various newspapers:-

SIR,—The Committee of this Society are very desirous of bringing under the notice of landowners and agriculturists the great desirability of affording more efficient protection to useful birds, particularly those which, as destroyers of vermin and injurious insects, render immense service to the farmer and the community at large.

Frequent comments and letters have recently appeared in the public journals as to the disastrous effects resulting from the indiscriminate slaughter of many useful species, not only in this country but also on the continent, and it is hoped that the publicity given and the attention drawn to the subject will lead to a more

judicious course of action.

The importance of this matter, in view of the great devastation caused by the plague of field voles (mice) in some parts of Scotland, and past experiences in Lincolnshire, cannot be overlooked, and the opinions of the Scotch farmers in the districts affected, quoted from the reports to the Board of Agriculture, point to

the folly of destroying owls, hawks and weasels.

The barn owl, a true farmer's friend, is much persecuted, but a more useful bird, as a destroyer of vermin, does not exist. It has been computed, by competent observers, that when it has young it will bring a mouse to its nest every twelve or fifteen minutes, and as many as twenty good-sized rats, perfectly fresh, have been counted in a single nest. A recent communication to the daily papers states that a nest containing five young ones, being taken and placed under a hen coop about a mile distant, no less than twenty-four rats, large and small, brought there by the parent birds, were found lying outside the coop the following morning. The owlets were at once returned to the place from whence they were taken. The kestrel hawk, a great killer of mice, is another bird which merits protection, and it is much to be desired that game preservers would give their keepers stringent orders not to molest it.

It is greatly to be wished that some steps could be taken by those who have the control of the rivers and waterways of Norfolk to check the cruel and dangerous practice of shooting swallows and martins, which has of late become so frequent in this county, more especially in the neighbourhood of Norwich.

To such an extent is the destruction of our native birds carried on, that it is

To such an extent is the destruction of our native birds carried on, that it is not improbable further legislation in the matter will be called for, and it is to be hoped the Board of. Agriculture will continue to prosecute their inquiries into the

pecuniary loss accruing from such destruction.

My committee earnestly trust that all lovers of nature will by their own example and influence with others, not only extend their protection to these our feathered friends, but will also do their best to aid in the circulation of information which may dispel prejudices leading to their destruction.

A Bird of Prey (see p. 115).—What is the feather which milliners call an "osprey?" Of course it has nothing to do with the real osprey. I thought it was only a bit of ostrich feather disguised, and, therefore, an innocent thing to wear, but according to the quotation in *Punch*, to obtain these "ospreys" the old birds are killed off in scores, while feeding their young. What birds?

M. S. J.

[Dr. Bowdler Sharpe has kindly answered this question as follows:—"The osprey or 'spray' feathers are the long breeding plumes of the small egrets or

white herons (Herodias). To obtain them these birds are being shot by thousands while they bring food to their nestlings, who are left to die of starvation. I do not know of a more horrible and brutal exhibition of wanton destruction than I witnessed here [in Florida]."—W. E. D. Scott, in the Auk, 1887, p. 2144. "Birds were killed and the plumes taken from the head, body and breast, and the carcase thrown to the buzzards."—Ibid, p. 140. "The old Frenchman, A. Chevallier, came in with a boat and deliberately killed off the old birds as they were feeding their young, obtaining about one hundred and eighty of them. The young, about three weeks old, to the number of several hundred at least, and utterly unable to care for themselves in any way, were simply left to starve to death in the nests, or to be eaten by raccoons and buzzards."—Ibid, p. 218.]

Scilly Notes.—The seals around our coasts are so few that it seems a pity any should be destroyed, and Selbornians will hear with regret that they are not better protected at Scilly. Several were shot last winter by so-called sportsmen for the sake of one skin. The lessee-proprietor of the Scilly Islands is said to pay 5s. each for every skin brought to him. If this be true, the payment is probably made purposely insufficient to tempt the fishermen to take the trouble to capture them in the remoter isles, where the few which remain are to be found. It is difficult to imagine that Mr. Dorrien-Smith wishes the seals to be exterminated.

Lovers of birds who have not visited Scilly will find the uninhabited isles delightful. Happily they are not so attractive to the few cheap trippers who venture across the sea as St. Mary's and Tresco: hence the birds are comparatively unmolested. Wild birds' eggs will, however, continue to reach a profitable market until public opinion discourages their use. Members of the Selborne Society, when travelling, might with advantage provide themselves with a few copies of the "Notes" for distribution, and also of the Wild Bird Protection Act.

Birds breed in these isles in thousands, but they are not too numerous, and were they less protected our coasts would not be so pleasantly enlivened by their presence during the remainder of the year. From April to August Anneto is the home of the puttin, Manx shearwater, and razorbill, and the island is honey-combed with their holes. It is a sin to walk about there in May and June, for each step may crush an egg or imprison a young bird. The burrows are commonly two or three feet in length. One feels like an intruder on ground sacred to them, and the scolding gulls and screaming oyster-catchers do their best to drive you away. The holes are mostly made with their feet, the sharp beak cutting the roots of the sea-pink. On Gorregar, the kittiwake makes its seaweedy nest in the interstices of the steep rocks, and a pretty spectacle the birds make. On Rosevean and Rosevear the cormorants, on Menewithen the black-backed gull, on Rugged Island other gulls and the graceful Arctic tern, which may be seen in pairs playfully soaring together, breed in some of the lesser islets.

St. Mary's. THOMAS POLE.

Hackney Marsh.—All those of our readers who take an interest in the momentous question of open spaces will be glad to hear that, thanks to the action of the Open Spaces Committee of the London County Council, Hackney Marsh is in a fair way towards being purchased for the best purpose it could be, to form what in fact it has a long time been—a noble recreation ground for dwellers in northeast London. Certain financial matters with regard to its acquisition are not yet settled, but it is abundantly worth the price to be paid for it, £75,000. Hackney Marsh is never so much seen at its best as on a bright day in May or early June, when the broad green expanse has become yellow and white with buttercups and daisies. The fresh green foliage of the willows, and the wavelets of the river Lea dancing in the sunlight, all enhance the cheerfulness of the scene, and combine to make it well worthy of being the subject of the landscape painter's canvas. So suddenly and completely does the view change from town to country, when seen from the train after it emerges from the tunnel at Clapton, that one would imagine the boundaries of London had been once and for ever crossed in this direction. Such, indeed, was the case twenty years ago, but the cheap daily fares of an enterprising railway company have turned the once quaint old country towns of Stratford, of Low Leyton, and of Walthamstow, that lie on the other side of the marsh land, into mushroom cities. They are now well-nigh united, and comprise a population of over 150,000. Here are rows upon rows of crowded streets, as

close together almost as anywhere in the centre of London. Some passing interest in this locality has been forced upon the general public by the fact that nearly all those who met with their death or were injured in the recent sad railway accident at Bishopsgate were inhabitants of Walthamstow. This forms the northernmost of these great working-class towns that stretch southward to the Thames, to the east of the river Lea. Thus Hackney Marsh will prove of lasting benefit, not only to east and north-east London proper, but to the vast population that has sprung up on its further side. Nothing but evil could result from building over the Marsh. The nature of the soil and the low elevation above sea level would make it unhealthy as a dwelling place for a large number of people, and the fine current of fresh air that passes over it between the densely crowded districts on either side would be gone for ever. If it has escaped building over during all these years the best wish we can express is that it may continue as it is, and that the project of the London County Council may be carried to a successful issue.

Archibald Clarke.

The New Forest Scheme.—Most of our readers will have learnt by this time that the report made by the Hon. T. W. H. Pelham on the advisability of employing the 800 acres of the New Forest as a rifle range, has practically decided against the outrageous proposals of the War Office. From a military point of view Mr. Pelham finds the site suitable. Suitable of course it is; if it had not been so the War Office would never have cast longing eyes at it. He states that there are serious drawbacks in the way of safety, and that local feeling is most strongly opposed to the establishment of the range; at the same time recommending that if another site can be found in the southern district outside the New Forest, the latter should be left alone. Having gone to the expense of authorising a report to be made, there can be no other alternative for the War Office than to abandon their obnoxious and unpopular scheme, and thus make some tardy amends for their attempts to tamper with the public and private rights of the fellow-countrymen whom they serve.

ARCHIBALD CLARKE.

Crowded Out.—We regret that want of space compels us to defer several interesting communications, as well as many notices of books. In addition to those mentioned on p. 97, we have received the following: The Foresters, by Lord Tennyson (Macmillan & Co., 4s. 6d.); Kalm's Visit to England (Macmillan & Co., 12s. net); Birds and Flowers, by Mary Howitt (Nelson & Sons); The Dewy Morn, by Richard Jefferies (Bentley & Son, 6s.); Science Ladders (5), by N. D'Anvers (Philip & Son, 1s. each); Wood Notes Wild, by J. P. Cheney (Boston, Lee & Shepard, 2 dollars). These we will notice as soon as possible. Several papers are also held over, including one, "Concerning Marl-pits," by Mr. Robert Holland, which will be printed in our August number.

NATURAL HISTORY NOTES AND QUERIES.

Squirrel Attacked by Birds.—From my window I saw a squirrel vigorously chased from the fir and pine trees by thrushes, blackbirds, and a wood pigeon. Would a squirrel molest birds' eggs, or was this scrimmage merely to resent his gymnastics in their colony?

Newport-on-Tay, N.B.

L. L.

The Sparrow and the Sawfly.—In the article on the Sparrow (p. 110), the writer remarks, "Surely everyone ought to know that the sawfly cannot be swallowed by birds owing to a certain hairiness of its outside." This statement is likely to mislead, as the hairy caterpillar is the special food of the cuckoo, the indigestible portions being thrown up in pellets. Here, where the gooseberry caterpillar is often numerous, a cuckoo is a welcome visitor.

Swanley, Kent.

EDWARD LAURIE FOGO.

Greenfinehes.—For some years past a pair of greenfinehes have had their nest in a box tree on our lawn. This year two pairs are building in the same tree apparently. They appeared the other day underneath the dining room window, all four together, searching for materials for lining the nests, which seems to consist of the fine fibre off a clematis on the wall. The two male birds kept

guard whilst the hens worked, and then they all flew away together to the nest. We have noticed them many times since, and they always come together. Is this perfect concord and unity of action a peculiar or an ordinary occurrence among greenfinches?
Oakley, Brill, Bucks.

A. M. GREENWOOD.

Buckbean.—The Welsh name for the Buckbean (Menyanthes trifoliata) is Ffa'r gors, i.e., Bogbean. Is Buckbean a corruption of Bogbean; if not, what is the derivation of this word?

Aberystwyth. G. Rees.

[The older writers (Lyte, Gerard, &c.) use the name Buckbean, not Bogbean, of which some have thought it a corruption. Dr. Prior considers Buckbean to be derived from the Dutch Bocks-boonen (Germ. Bocksbohne) as it is considered to be a remedy against the scharbock, or scurvy.—ED. N. N.]

- J. G. B.—Field Madder (Sherardia arvensis), Heath Bedstraw (Galium saxatile), and Common Speedwell (Veronica officinalis). You will find it more useful to hunt out such very common plants for yourself.
- Mrs. M.—Water Avens (Geum rivale), Goatsbeard (Tragopogon pratensis), Meadow Saxifrage (Saxifraga granulata).
 - G. W.—A form of Salix repens, perhaps S. fusca.
- G. B.—Mr. Howard Saunders's Manual of British Birds (Gurney and Jackson), noticed in this Magazine for July, 1890, will probably suit you. Your other questions are scarcely suited for discussion in these pages.
 - S. J. S.--The suggestion shall be brought before the Council.

Botanical Pictures.—We have received a further instalment of the excellent series of botanical diagrams published by the S.P.C.K., to which we made a brief reference in last year's NATURE NOTES (p. 202). They are admirably adapted for the walls of the schoolroom, and their simplicity and accuracy make them intelligible to any one who has any acquaintance with our common flowers. The dissections of the parts of the flower, if not of the high level and minute detail expected by the scientific botanist, are amply sufficient for the general public. The diagrams cost only a shilling each; twenty-four are now ready.

E. M. C.—The orchis is apparently O. maculata, but as, in spite of the directions which we give every month, it was addressed to the Secretary instead of to the Editor, it arrived at West Square in too withered a state for determination.

OFFICIAL NOTICES.

At the Meeting of the Council on June 1st, Mr. J. L. Otter was re-elected Treasurer, and Mr. A. J. Western Secretary for the ensuing year. The following resolution was adopted: "That the Council desire to express their deep sense of gratitude to Mr. Britten for editing NATURE NOTES during the year, and to place on record their appreciation of the valuable services rendered by him to the Selborne Society."

The Bath Chronicle of June 16th gives an interesting account of the Annual Meeting of the Bath Branch at Claverton Manor, by the invitation of the President, Mr. H. D. Skrine. From the Annual Report, presented by the Secretary, Mr. W. G. Wheatcroft, it is evident that the Branch is doing good work, and Mr. Skrine's record of observations, made by himself and others, confirms this estimate. The Society, like most others, has felt the effects of epidemic disease in the diminution of the public gatherings of members. The Committee have done their best with the funds available to promote the study of natural history and science, by making valuable additions to their library. They wish to call special attention to a gift, by the Hon. Miss Jervis, of a complete edition of Sowerby's English Botany, with the supplemental volumes and appendix. This valuable work, comprising forty-three volumes, has been bound in half morocco, and placed on the Society's book shelves. The thanks of the members are also due to Mr. Mitchell and Miss Pattison for the gift of valuable books to the Society. The Committee have added to their store of books, amongst others, Nicholson's Manual of Paleontology and Manual of Zoology. The Book Committee, having regard to the apparent popularity of the geological lectures recently given in this city, thought it desirable to afford those who cared to follow up their studies, standard works on subjects so intimately associated with geology as paleontology and zoology. The Committee think that those outside the Society can scarcely be aware of the valuable collection of books on most of the subjects connected with natural science and history this branch now possesses, otherwise they would avail themselves to a larger extent than they have hitherto done of the opportunities for study and amusement which the Selborne Library affords. A pleasant room at the Royal Literary and Scientific Institution is available for the use of those members who wish to study or consult the works of reference. The balance in the hands of the Treasurer is £12 7s. 11 d. The President concluded his remarks by saying that each member should take some individual interest in the proceedings of the Society, and endeavour to increase its numbers and influence for the protection of rare birds and plants, and the preservation of pleasant places for the public, as well as the promotion of natural history. He asked the members to make more use than they did of the works in the Society's library, to make notes of rare birds and plants when seen, and above all not to dig up the latter by the roots. Water-colour paintings of the specimens of fungi collected by Mr. Baker, and illustrated, after being magnified by Mr. Wheeler, of Clevedon, were handed round.

On June 15th, the members of the Lower Thames Valley Branch met on the Surrey side of the Thames by Twickenham Ferry for a ramble to Teddington Lock, with the object of studying the wild flowers. Upwards of seventy species (excluding sedges and grasses) were noted, and an extremely pleasant evening was spent in this way. A full account of the ramble appears in the *Thames Valley Times* for June 23rd. It is proposed to hold the next field meeting at Barnes Common on Wednesday, the 6th July. The start will be from the Common Station as nearly as trains permit to six p.m. On Wednesday, the 20th July, it is proposed to meet at the same hour at Brentford Ferry Gate of the Royal Gardens, Kew,

and walk thence to Richmond.

A new Branch is about to be formed for the Croydon district. Intending members are asked to send their names to Mr. Edward A. Martin, Ravenswood, Carew Road, Thornton Heath, who has for the present undertaken the Honorary Secretaryship. A meeting will be held at an early date to decide whether the formation of the Branch is to be in any way specially inaugurated.

We are compelled to hold over until our next number the report of the very

important Drawing-room Meeting held at I, Palace Houses, Bayswater, at Lady

Fry's kind invitation, on the 22nd ult.

NOTICE TO CORRESPONDENTS.

Contributions for any number should reach the Editor, JAMES BRITTEN, F.L.S., 18, West Square, London, S.E., not later than the 15th of the month. When it is particularly requested, MSS, not accepted will be returned, if

stamps sufficient to pay the postage are sent for that purpose.

Queries on any points connected with Botany or Zoology will be answered if possible, and advice will be given as to the best books for students in any department of Natural Science; but all questions must be accompanied by the names and addresses of the writers, not for publication, if this is not desired.

Specimens sent for identification will be named, if sent carefully packed and in good condition, and if sent to the Editor, but we cannot undertake to return

any specimens.

We shall be glad to notice any books bearing upon natural history in any of its branches, and to direct attention to magazine articles of the same kind, if these are sent to us. Publishers will confer a favour upon our readers if they will always state the frice of any volumes they may send, in order that it may be quoted in the notice. This addition is much appreciated by our readers, and is desirable in the interest of the volumes themselves.

It is particularly requested that subscriptions and letters connected with business should not be forwarded to the Editor, but to the Secretary of the Selborne Society, 9, Adam Street, Adelphi. Editorial communications, specimens, and

books for review should be addressed to Mr. Britten, as above.

'Mature 'Motes:

The Selborne Society's Magazine.

No. 32.

AUGUST, 1892.

Vol. III.

A GLEANERS' QUEEN.

HE readers of NATURE NOTES may be interested in a short account of the gleaning customs in a village near Nottingham, which I had the pleasure of seeing four years ago, when I stayed with friends at G.—. I went with the children and their governess to see the proceedings

from the beginning, and afterwards I was taken to pay a visit to the old lady who had first borne the rank and style of Queen of the Gleaners.

The gleaners assembled in the market-place, at the public fountain, where the queen stood with her bell. The women and children walked together to the fields, waiting at the gate until the signal for entering was given by the ringing of this bell. But before this signal the subscription of a penny for each person was paid to the queen, and the laws were proclaimed which all the gleaners were to promise to observe. They were -not to interfere with the turnips, not to break down hedges, and to shut the gates. Assent was given in the formula "Oh yea, and oh yes!" The penalty, I was told, for breaking a law was the scattering of the offender's corn. There would be a tea at the end of the gleaning, paid for by subscriptions from the farmers. The women wore aprons with large pockets, and either a knife or a pair of scissors hung from the waist. A large bag was tucked into the waistband behind, which elicited "chaff" as to dress-improvers. Royalty was not spared, for I heard a farmer who was driving by call out "S- doesn't want one," S—, the queen, being a very portly person indeed. The ceremonies were less imposing than in the days of the first queen, for she had been crowned year by year!

"Why don't they crown the queen now?"

"Oh, the old gleaners is gone, and I suppose the new ones don't care to kape the old laws."

Of course we went into the fields and assisted in the glean-

ing, and chatted with the women; and a very pretty sight it was, as they scattered themselves about the pale gold fields. The babies sat in perambulators or sprawled about, munching apples, ripe or otherwise. And the broad sweet sunshine fell on the corn, and on the hedges with their fair greenness, from among which we paused now and then to pluck the dainty "robin's cushion."

The first queen, who had abdicated some time before I saw her, had reigned for twenty-three years. She told me she had been made queen by consent of the farmers, the rector, and Mr.——, who "had such a beautiful way of life, and had died worth £23,000." She had been the only candidate whom they had nominated. She said they thought it would be a good thing to have a woman over the others. I think she said she had been elected "on account of her principles." It was a very grand day, she told me, and she was crowned with flowers. "I had white satin butes, and chevened [clocked] silk stockings (here she raised her gown), and I had a ball dress."

" Was it white?"

"No, coloured, but very nice, and a cap, and a black veil. It was silk, and very good. I was carried round in a cheer, and there was a great tea. All the farmers were theer, and the farmers' wives poured out. I was theer, at the head, and if any of them went wrong I rung my bell—I had it in my lap—and it was hush at once. You might have heard a pin drop. I put my name to a paper, saying I was to be queen all my life. I made the laws—not to hurt the game, or break the hedges, or pull a turnip. Once they knocked down a leveret—I saw them—a boy put it in his gleaning apron. The boy and his mother, when I said 'What have you there' show me!' said 'Nothing.' I said they must. Then I said, 'If ever you do that again, I'll report you, and you'll be sent to Nottingham, and persecuted according to law."

"You never told about the leveret?"

"No, I never made mischief."
"Did your subjects obey you?"

"They all obeyed me. Ye see what's needed is strictness,

an' when ye say a thing to stick to it."

The ex-queen, as is not unusual under similar circumstances, did not consider her successor's "ways" as good as her own. "She comes home to dinner, and takes a bit, and then nips off, without telling 'em, or ringing her bell. I used to go out at nine, come back an hour for dinner, and then go back again till six. S—, if they see a nearer field than the one she towd them to go to, let's 'em. [Implication, "I never did."] They often stopped at a turnip field, 'Oh I should like a turnip!' 'No, no; here's the queen, and she'll see you!' I went round the village with my bell and cried out the laws."

The ex-queen told me of the irregular proceedings at the tea in the second year of her reign. "They spent seven shillings in rum; they mixed it up in the cream-jugs, and got shut on it like dyke-water. There was great robbery going on; there was a stone of plum cake—it was rather heavy, but not bad—and we found a skepful of the pieces under the table; so the waiters and me, we got some flour and seme [lard], and made a cake and had our tea. They'd take a quarter of a pound of tea and a pound of sugar, and hafe a pound of butter; and I said, 'They shan't have no more tea.' And all the gleaning time they'd call after me, 'Queen! queen! when are we to have our tea?' And I said, 'You may buy it for yourselves, I'll never ask for a penny for it.'"

The old queen's fees were lower than her successor's—a half-

penny for women and nothing for children.

I think I must add what this old lady told me about herself, apart from her official capacity. Words like hers need no comment in their suggestion of courage and force, with a great pathos lying underneath:—"I've been a woman, I can tell ye, though I say it myself. I've done a man's work. I've worked wi' horse power and wi' machine power, an' the wind blew my petticoats round. I was like a man." She told me, too, of her "beautiful rosemary," which she had been so proud of; the rosemary which "gentlemen would stop and ask me for a bit of; for it grew like lelock [lilac]"; the rosemary which grew in the 'odd place' (place to itself), where she had lived in the old working days.

E. H. HICKEY.

SEED'LING TREES.

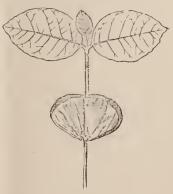
MONGST the many interesting subjects for study which may be taken up by young people living in the country, hardly anything is more delightful than collecting and drying seedling trees. Let us go for a ramble in the

woods and see what can be found

in this month of July.

Under the beech trees we shall soon light upon the beech-nuts of last year, coming up through the moist rotting soil in the form of two broad green leaves called cotyledons. As they often retain the dry three-cornered husk upon them for a time, we can easily see that they are young Beeches, otherwise, as the two first leaves are so unlike the perfect form, it might be rather difficult to name our specimens.

A little stalk grows up from between the cotyledons, crowned



YOUNG BEECH.

with two perfect young beech leaves, and this is all the baby tree can do the first year. In autumn the leaves drop off, and the

stem gradually becomes woody. Next spring the seedling will throw out several delicate young leaves with brown scales at their base, such as we find on the mature beech tree; where we find these scales, therefore, we may be quite sure we have a seedling in, at least, its second year. The cotyledons of the Lime are curiously notched, and so unlike the adult leaves that we shall hardly guess what they are until they are old enough to have the second pair of leaves, which are like those of the parent tree.



YOUNG LIME.

After some careful search and study, one may learn to recognise at a glance the seedlings of all the forest trees. We shall not find cotyledons on the young Oak, Horse-chestnut, or Sweetchestnut seedlings, because these normally remain below the ground, forming a storehouse of nutriment for the young tree.

It is interesting to watch the growth of acorns and the two kinds of chestnuts, when placed in damp moss in a saucer. After a few weeks the plumule will be seen rising up and gradually developing into leaves, and the radicle grows into the moss and absorbs water through its numerous white rootlets. Three years ago I placed a Horse-chestnut thus in moss, with a little coco-

nut fibre, and kept it well watered. The first year it bore two leaves only, the next year four leaves appeared, and now it has fourteen, and is a handsome little tree eleven inches high with a

woody stem.

I remember, many years ago, seeing a Scotch Fir growing out of a mass of house-leek on the top of a wall; it grew into a healthy, vigorous young tree about fourteen inches high, and in spite of its starved condition it contrived at last to bear an

abundant crop of fir-cones.

A collection of seedling trees, carefully dried between sheets of blotting paper in a press or under a weight, then fastened into a blank book with strips of gummed paper, with the English and Latin names to each, and a note of the age of the seedling, will form a pleasant memento of our forest rambles, and probably may lead on to further studies of the same kind. Lemon and

orange pips will grow readily in damp moss, so that seedling trees are attainable even by those who live in towns. I was much surprised to find that tamarind stones taken out of the jam would grow very quickly in coco-nut fibre if kept moist and placed near a hall stove. The secret appears to be that the tamarinds are packed in barrels and hot sugar is poured over them, but owing to the thickness of the seed-coat, the life principle is not destroyed. To make the collection complete there should be seedlings of the other great division of plants, namely the monocotyledons or plants with one seed-leaf. A few datestones kept in moist earth near a hall stove (if we have no greenhouse) will supply these specimens. The Date-palm comes up with one long cotyledon, and out of its centre grows the second leaf, and each successive one is sheathed by its predecessor after the manner of the grasses. Indian corn or Canna seeds grown in this way will supply other examples.

In reading Canon Kingsley's delightful book At Last I was specially interested in his graphic description of the growth of a young Coco-palm. He relates how a small stem, seemingly helpless and soft as a baby's finger, pushes its way through one of the three black marks at one end of the coco-nut and grows and hardens into what will be a stem. The roots pierce through the hard outer covering of the nut, and in time a young palm tree is developed and feeds upon the milk and substance of the nut, much as an embryo chicken is nourished by the yolk within the egg. Now I much desired to see this curious growth with my own eyes. I could not go to the West Indies as Kingsley did, and watch the baby nuts in all the stages of their growth, but I thought it would be possible to obtain a newly imported coco-nut, which might be coaxed to grow in my warmest stove house.

On making enquiries I found that the fruit importers often throw aside coco-nuts that are beginning to sprout as being unsaleable, they being known in the trade as "growers." This was delightful news, and before long, for a few shillings I was able to obtain a huge nut with a promising little "baby's finger" of a shoot appearing at one end. My gardener placed the nut upright in a pot of good loamy soil, leaving the end where the shoot was, three or four inches above the earth, and kept it well watered in moist heat of not less than 70° Fah. In a few weeks the roots began to find their way through the outer husk into the soil, the shoot grew into a huge green leaf, and for eight years I watched the growth of my big child with great delight. When this palm was eight feet high it was sent to several flower shows, and gained some prizes as a wellgrown specimen. The Coco-palm is, I must own, a very unwieldy plant, taking up more space than can usually be spared in a greenhouse, and, sad to relate, my cherished specimen was at last "helped not to live" by a gardener who had become heartily tired of the trouble of re-potting and tending such a huge plant.

ELIZA BRIGHTWEN.

HAREBELLS.*

The bells are ringing and ringing
Little low bells on the earth;
Sweet as a woodlark's wild singing,
Little clear laughter and mirth.
The sunshine breaks, and all around
A streak of sky runs over the ground
Where the poor man's way is open still,
The bells of England on heath and hill.

Lie and rest on the dry turf here,
A soft, soft flutter comes rustling near;
One eye-level of dazzling blue
Dances and streams the wind's way through.
Slumber steals through the nodding band
So, for an hour, dost thou dream, and say,
"I shall have my heart's desire to-day:"
Then rise and go, thou hast thy way;
These are the bells of Fairy Land.

The statelier flowers may keep their pride, We fear no footsteps, we do not hide; On the trodden turf of the waste roadside

We are blown and beaten in breaths of blue; The wings of the gnat are not so thin; But we smile in singing the wild days through,

We are here for any who care to win. Close by is the city's smoke and din;

Even its children can walk so far, The poor, the sick, may reach where we are. We too are lowly, we too are frail, Therefore we too outlast and prevail.

Here, high up on the open hill
The air of autumn is rude and chill:
The great star-thistle, the tormentil,
Purple and gold on the bare hill-side,
Cling to the earth with arms clasped wide,
As though they might never else abide;
But the wind that sweeps the down on high
Scatters our light as it passes by,
Shakes out our peals of melody,
These are the bells of Eventide.

The gold and the white open the year,
The iris and rose are no longer here,
The green of the woods is turning sere,
The lily has bowed, it could not stand.

^{*} Reprinted by permission from "Ballads of the North, and other Poems." London: Kegan Paul, Trench, Triibner & Co., Limited.

But the year's last flowers are tender and blue, The flowers that are faithful when flowers are few, We guard the path till the harvest is through: These are the bells of Holy Land.

Finest and frailest of all the flowers,
We are left alone in the autumn hours,
To bear the brunt of the storms and showers;
The skies above us are grey and sad:
But the hue of heaven to earth we bring,
But the heart of heaven in our bells we ring;
Low, low,—are you listening?
The heart of heaven is gay and glad.

Come away, come away!
The eyes of the angels are blue and grey.
There is one coming down the crowded street,

He is passing out, he is coming this way, Here, up here, where the winds are at play;

At the turn of the road you cannot but meet: You will know his face, you will understand, He need not speak, he will reach his hand. Oh, the surprise, too sweet to say! The bells are ringing in Angel Land.

One to go, and many to stay:
Each his turn,—you have come this way.
Why are we dancing here so gay?
Why has the music just begun?
Like a peal of church-bells down they run,
Down, down, down, from a height away,
Thousands on thousands, one by one,
Each a spirit—off and away!
Do you not know, do you not see,
Blue as the breadths of the sky and sea,
The light of love, of eternity?
The bells are ringing in Heaven to-day!

HARRIET ELEANOR HAMILTON KING.

CONCERNING MARL PITS.

OME interesting questions have been raised by Mr. Collingwood Hope concerning the numerous "gravel pits," as they are locally called in the neighbourhood of Eastham in Cheshire, which place is situated in that portion of the county known as "The Wirrall." This part of Cheshire is often spoken of as "The Wirrall Peninsula." It is a strip of land some twelve miles long by six miles wide, which extends from Chester to New Brighton, and lies between the Mersey and the Dee. Thus it is surrounded by water on

three sides; but if you look at a map of Cheshire, you will see that it is scarcely a peninsula in the geographical acceptation of the term.

It would seem, from what Mr. Hope says, that in that part of Cheshire the fields are, as a rule, small; but almost every field has one of these so-called gravel pits. And, by the way, the name gravel pit would itself be very misleading to a southerner. No doubt he would understand that dry excavations from which gravel was obtained were referred to. This is not so. In our Cheshire dialect, and indeed mostly in the north, we speak of a pond as a "pit;" and the Wirrall gravel pits are really ponds full of water. Some are round, some square, some oblong, but they are generally shallow at one end, and rather deep at the other—often eight or ten feet deep. For the most part they are fringed with aquatic plants, frequently of a rare character, always beautiful; and often, also, waterlilies, white or yellow, float on their surface. Thus they are very attractive to botanists; and I remember that in the old days of the Manchester Field Naturalists' Society, when I was a good many years younger than I am now, and when I accompanied almost every excursion, it was always a joke against me that if there was a pit in a field, I was sure to steer towards it. In fact pits were, and are still, to me irresistible. The pits, too, very often swarm with small fish, and other living creatures, from rotifers upwards, so that it is not the botanist alone who finds them so attractive.

Mr. Hope suggests, and (although I know less about the Wirrall district than about most parts of Cheshire) I think he is quite right, that "gravel" pits is a misnomer altogether, and that they are in reality old marl pits, the clay from which has been used on the adjacent land, gravel being conspicuous by its absence, as Mr. Hope says, not only in Wirrall, but in most parts of Cheshire. The fact of these pits being shallow at one end and deep at the other (and I assume that such is the case in Wirrall, as in other parts of Cheshire) almost conclusively proves them to be marl pits, the marl having been hauled from the deeper end up the inclined bottom of the pit. It is, however, difficult to say when these pits ceased to be used as marl pits. And this brings me to Mr. Hope's first question: "When was this method of treating the land discontinued, or in other

words, what is the age of these pits?"

Marl, of which there are several varieties, such as chalk marl, clay marl, rock marl, shale marl, &c., is a combination of carbonate of lime with clay or with clay and sand. The Cheshire marl is mostly friable clay, containing but little, if any, lime, yet it acts very beneficially when applied to soil of a totally opposite character. The practice of using marl as a fertilising agent has been known almost from time immemorial. Pliny mentions marl as having been found in Britain and in Gaul, and says its use was known to the Greeks. There was a

statute passed in 1225 (10th Henry III.) which gives every man leave to sink a marl pit. There are leases on record, granted in the reigns of Edward I. and III., which compel the tenants to make use of marl. The white chalk marl of Norfolk appears to have been in use for centuries, judging from the size of oak trees growing in old (of course, dry) marl pits. The use of clay

marl is supposed to have been of much later date.*

Now, although clay marl may not have been used for so long a period as the Norfolk chalk marl has been used, I am disposed to think that our pits are of considerable antiquity. They are to be found not only in Wirrall, but in every part of Cheshire where clay forms the subsoil. In some localities the number of these pits is astonishing, and the quantity of marl obtained must have been enormous, and its use must have extended over a long period. Many fields contain not one pit only, but three or four. In my younger days I knew a field that was so completely excavated with pits that they covered several acres, and very little land was left. They have been since drained and levelled into good land. Although it has, strictly, nothing to do with the subject of this paper, it may interest some of the readers of Nature Notes to hear that one of the pits I speak of was full of white water-lilies, and that the first year after it was drained (not quite dry, for a quantity of wet mud remained at the bottom) the lilies, instead of being killed, as one would have expected, actually seemed to revel in having the water taken from them, for a complete jungle of luxuriant leaves and flowers grew up which were quite self-supporting, and which stood erect to the height of at least three feet. It is strange that any plant should be benefited, even temporarily, by being taken so completely out of its natural element; but I have seen the same thing happen with the yellow iris, which being transplanted from the water's edge into a garden, flourished amazingly, and grew nearly five feet high, producing a profusion of flowers.

I have known these marl pits for more than half a century, and not one new one has been opened during my recollection, nor have the existing ones altered in the slightest degree. They were old pits fifty years since, and were probably old pits a hundred years before that. Many of them are delineated on old maps; they have given names to fields, such as Pit Field, Pitsteads, Starpits, Marl Field, Marled Heys, &c., and the use of marl on the land has even given rise to one or two quaint old sayings, and to some interesting rural customs which obtained when marling was at its zenith, but which are even now quite obsolete, and, indeed, are nearly forgotten since marling went out of fashion. It went out of fashion at least fifty or sixty years since, partly because it had been carried to such an extent that much land was marled that did not require marling, and, therefore, but little benefit was derived from it, and partly

^{*} Abridged from "Morton's Cyclopædia of Agriculture," vol. ii., p. 371.

because it was a very costly mode of manuring land. No marl has been got from the old marl pits that Mr. Hope describes for fifty or sixty years, but there is still a little marling done occasionally in a few localities where marl can be obtained from the escarpment of a hill without much expense.

Although marling in Cheshire is a thing of the past we still

make use of the old saying-

He who marks sand May buy the land,

because marl is so beneficial on sandy soil that he who so used it would be sure to grow rich. Then at rent dinners, club feasts, and such like gatherings, when drinking a man's health is followed by cheering him, it is still often called "marling him," which is derived from one of the old marling customs of the county, where a gang of marlers, after receiving any small present from a chance visitor, used to stand in a ring and cheer the donor.

Marl was dug (or, as was locally called, "yowed") from the pits by gangs of men who were called "marlers." They elected a chief man or ganger who was designated "Lord of the Pit," and one of his duties was to receive and disburse all money given to the gang. Any one who chanced to pass the pit was stopped, and a donation was demanded, which was seldom refused. But they had a very curious way of magnifying the gifts they received. Thus, if it was sixpence or some smaller coin, the lord of the pit announced it as "part of £500"; if half a crown were given, he would call it "part of £1,000." The men then stood in a ring and cheered the donor, shouting "lorgesse, lorgesse." The very use of this word, which of course is merely the early English "largesse," points to the antiquity of the customs attendant on marling. I have already said that marling generally had ceased before my time; but I remember a very old man in Mobberley, who had been a great hand amongst the marlers in his time, who to the day of his death went by the name of "Lord" Lowndes.

I have also said that the customs connected with marling are now almost, if not quite, forgotten. So completely is this the case, that in 1881 I tried the experiment of marling a piece of ground at Norton, and opened a small marl pit. I went to the men and stood talking with them for some time in the full expectation that they would ask me for drink money according to the old custom—in fact, I went partly to see if they would do so. But they made no sign, and appeared to be quite ignorant

of the usage.

Probably Mr. Hope has observed what is quite common throughout Cheshire generally, that there are very often two or even three pits close together, and only separated from each other by very narrow strips of land, perhaps not more than half a yard wide. These strips are called "mid-feathers," and for a

long time I could not conceive why they had been left. They are, however, without doubt, walls between old and new pits; and they were required because by the time a new pit was wanted the old one had become filled with water, and could not be again worked; but the same seam of marl was worked as near the old pit as possible, the mid-feather being left to dam

the water out of the new pit.

Mr. Hope's next question is "How did these pits acquire their stock of fish? Will it be said that the landowners stocked them when fresh water fish, like carp and tench, figured in the daily menu?" Yes, I think so. There is no doubt that they generally do contain a vast quantity of small fish, chiefly dace, or roach, or perch, sometimes tench, and now and then carp; eels frequently. The pits have no communication with streams or with other pits, therefore they must have been stocked, in the first instance, artificially with all fish, except perhaps eels, which can, it is said, migrate from one piece of water to another. They were probably stocked at a time when such kinds of fish were more valued than they are at present, which again points to the antiquity of the pits. In most old Cheshire leases the fish are reserved to the landlord as strictly as the game, and the clause doubtless refers to the fish in the pits, for it is inserted in leases of farms where there is no possibility of any other kind of fishing.

Mr. Hope also draws attention to the small size of the fish. He says, "Recognising their presence, I would ask the further question, is there such a thing as degeneration of stock in such enclosed areas? I assume these pits have existed for fifty years, as none of my friends remember their formation, during which time, probably, there has been no fresh importation in the majority of cases. Would such a set of facts affect the stock

and account for the average smallness of the fish?"

I have no doubt that such conditions affect the size of the fish; but I hardly think it can be called degeneration, because if these small fish are removed into large sheets of water, or where there is a constant supply of fresh water, they speedily grow to their normal size. At any rate I can give a case in point where they did so. I was fishing one evening in a very small pit, which appeared to be stocked almost entirely with tench. They were just in the humour for being caught, and I took home with me between one and two hundred fish (I do not remember the exact number), each not more than three to four inches long. I put them into a shallow pond, in no part more than a yard deep, containing no weeds of any kind, but through which a stream of clear water, brought from a spring by a pipe, constantly flowed. In two years the fish had grown to a foot in length, and probably weighed a pound each. I attributed their rapid growth to the unlimited supply of fresh water. I take it that the small fish of our pits are the offspring of the original ones that were put there; and that they remain small,

partly because the pits are overstocked, but chiefly because there is no supply of fresh water. The pits are really stagnant. They are only gigantic aquaria. They are filled by rain and a small amount of land drainage. In wet weather the water rises, in dry weather falls, and in extremely dry summers evaporates almost entirely away, when the poor fish have bad times of it. Possibly in some future generation these circumstances may so affect the fish as to produce a permanently stunted race; but at present, I think, they are only stunted for want of space and change of water. I should, however, add that there are generally just a few large-sized fish in most pits; and this also is one of the mysteries connected with the subject. If a pit be dragged with nets, there are generally caught some halfdozen really fine fish, and some hundreds, or it may be thousands, of the small fry. The larger fish are doubtless the parents of the smaller ones, but they can scarcely be the original fish placed there so long ago. Perhaps they grew to their present size before the water was overstocked.

I think I have nothing more to say concerning marl pits, except that Mr. Hope has opened a subject which I trust may be as interesting to the readers of NATURE NOTES as it is to myself. And I think we may even be grateful to our forefathers, who used so much marl, for having left us all these pits that have in time become so attractive to us as field naturalists.

ROBERT HOLLAND.

TWO BOOKS ABOUT WILD FLOWERS.

Two books of very different stamp come before us for notice. The first is one which should accompany every Swiss traveller who wants to identify the plants he meets with on his upland excursions. It is not adapted for everyone, but those who have been in the habit of using any one of the text-books for the British flora will find it an invaluable companion. Three years ago, at its first appearance, we had the pleasure of commending Gremli's Swiss Flora for Tourists (D. Nutt, 7s. 6d.) to the notice of botanists, and now that we have had further opportunities of testing its value, we are glad to bring it before a different circle of readers.

English speaking botanists have reason to be thankful to the translator, Mr. L. W. Paitson, for having rendered accessible to them a work which has already been translated into French, and of which four German editions, extending to 6,000 copies, have been disposed of. They will also thank the publisher for having brought it out in the convenient size and shape so familiar to all who find "Bædeker" their best travelling companion—their gratitude, however, may be a little damped when they find that, mislead by the similarity, they have brought down one in mistake for the other from the top of some lofty Swiss hotel. This inconvenience, which we know from experience to be more than a possibility, might be avoided if the Flora were bound in blue; and an edition printed on thin paper would be a boon to those who, not unreasonably, desire to travel with as few impedimenta as possible.

The plan of the work is very simple and sensible. After a brief introduction, explaining the use of the tables, the meaning of abbreviations, &c., we have a

"tabular view of the Natural Families," followed by a "table for determining the genus," this latter being arranged on the Linnean system. Then follows the descriptive portion of the book, or "tables for determining the species," occupying about 400 of the 445 pages which the volume comprises. This is arranged on the analytical method, with indications of frequency, geographical distribution, &c., all of them of value in making the book of practical use. The critical student will find such genera as Salix, Centaurea, Hieracium, Euphrasia, and the like, carefully worked out.

The only points for unfavourable criticism are to be found in the somewhat frequent misprints in the spelling of the Latin names, and in the somewhat unfamiliar words which do duty for their English equivalents—such as "Heliosperm," "Helminth," and others constructed on the principle familiar to British botanists from its employment in Bentham's Handbook. We must repeat that this Swiss Flora will not supply the empirical knowledge of plants which sometimes contents the tourist; but to the botanist who knows how to use his Bentham, his Babington, or his Students' Flora, it will be of the greatest possible service.

A reviewer's duty is not always pleasant. It is pleasant enough, of course, to recommend good books, and to feel that by so doing one is helping to extend their sphere of usefulness; but it is not so agreeable, although equally a duty, to condemn bad ones, and to dissuade folks from purchasing them. And yet the latter must be our course with regard to Miss Plues' Rambles in Search of Wild Flowers, of which Messrs. Bell and Son have just published what they call a "fourth edition, revised." We have not been able to consult the original work, which was issued in 1863, and we are therefore able charitably to suppose that the reviser, and not the author, is responsible for the errors with which the book teems. Even if the blunders are not of recent insertion, the reviser who passed them over is blameworthy; but without them the book would be none the less incomplete-indeed, a harsher term would not be out of place. Miss Plues makes little attempt to describe the plants she mentions, nor does she give any account of her rambles. Following the sequence of the natural orders, she enumerates the various wild flowers, adding the locality in which she found them. There is a good deal of agreeable gossip interspersed, which, like most gossip, is often inaccurate; and also a fair sprinkling of poetical quotations (sometimes misapplied), but of aid towards the identification of our British plants there is very little indeed. The coloured plates are, we are compelled to say, the worst we have ever seen, some of the figures-e.g., the Fumitory on plate 1, the Milkwort and Tamarisk on plate 2, the Cornel on plate 6, and many more—being unidentifiable save for the names printed beneath them, and the cuts in the text are in some instances wrongly lettered; thus the Enchanter's Nightshade is named Germander Speedwell (p. 229); while two plants are figured as the "Wall Speedwell" (p. 231), "Veronica muralis and V. arvensis," the former name being foreign to the British flora.

It is necessary to give two or three examples in support of the charges made, and for these we need not go beyond the first chapter. The "Feathered Columbine" of gardens is not our wild Meadow Rue, but a foreign species. We should like to know on what authority healing properties are assigned to the Wood Anemone; A. apennina is certainly not found in Wales, nor anywhere as a British plant; and it was not in Herefordshire but in Hertfordshire that the Yellow Anemone was at one time stated to occur. The Pheasant's-eye cannot be said to "frequent" cornfields, though it sometimes occurs in them; "Ranneulus alpina" (alpestris), so far from "frequenting the summit of our higher mountains," has only been reported from Forfar by George Don, and has long since disappeared from our books; the Marsh Marigold was not in olden time "called Mary's Gold, after the Blessed Virgin." We take these from the first chapter, from which many more inaccuracies might be extracted; and the book is full of similar errors and worse, as when the Myrtle is described as "a foreign member of the olive tribe" (p. 201). As to the poetry, both Shakespere's and Tennyson's "Long Purples" are identified as Sedges (p. 323), "which we know is not the case" (to quote the Pirates of Peuzance); and neither Shakespere nor Keats intended the Yellow Oxcye when they spoke of Marigolds (p. 186). "Miss Barrett" (p. 89) is better known as Mrs. Browning; and the "Twamly" with

whom Miss Plues associates the male pronoun (p. 28) was a lady of that name

(spelt "Twamley") who still lives and writes as Mrs. Meredith.

We are very sorry to speak thus severely, but our remarks are intended not so much for the author as for the person who has pretended to "revise" the work. When we spoke on p. 113 of Mr. Burgess's book on wild flowers as "the worst of its kind" we had not seen the present volume.

BOOKS FOR NATURE LOVERS.

Mr. F. A. Knight has reprinted another selection of his papers from the Daily News under the title Rambles of a Dominie (London, Wells Gardner & Co., 5s.) In this form they will reach a wider circle of readers, and many who perused them with pleasure on their first appearance will be glad to have them in this collected edition, adorned with two beautiful photo-gravures and

other illustrations.

The first essay, a genial sermon on the text "Eyes and No Eyes," is thoroughly Selbornian in spirit; it might have been written, as we have half a suspicion that it was, as a tribute to the memory of Richard Jefferies, and is more in his style than any other in the book. Then comes "Jack Sparrow," in the course of which Mr. Knight discusses the questions which recently raged in these columns, summing up in favour of this "follower of man." The analogy between the London sparrow and the city arab has been pointed out before, and Mr. Knight extends it to the "sharp and scurrilous notes, savouring of profanity" in which his feathered friend indulges. The kingfisher and the magpie are next described, followed by a chapter on the "Fair Maids of February," in the course of which the author speaks of "monkish legends," which say that "it blossomed in the winter in memory of the Virgin's first visit to the Temple with the Infant Christ." We should be glad to know more of these legends, but we must take exception to some of Mr. Knight's examples of plants associated with the Madonna. Then we have careful descriptions of hills and hollows in the Mendips, after which come three chapters which take us to the Orkneys. Then we find ourselves in Bavaria, hunting (and we are sorry to say killing) a chamois; then we go to Dartmoor, the Thames, Naseby, and other places, to all of which the author is a pleasant guide and companion.

Mr. Knight is not Richard Jefferies, and his writing only occasionally gives that sense of photographic accuracy which the latter author always contrived to convey. He has quite evidently read more, and his pencil is applied with greater artistic skill. There is no need to contrast the two, but the comparison seems almost inevitable; and we may be allowed to think that if Jefferies had not written, we should have heard but little of Mr. Knight, and the world would have been the poorer. But it is only in his essays and in the two stories which portray his own early life that Jefferies is charming; his novels and tales are in every way unsatisfactory. Mr Bentley has sent us a reprint of The Dewy Morn (6s.) which cannot fail to disappoint his admirers, while it will give an unfavourable impression to those who read it as a specimen of Jefferics's work. The story is of the slightest kind, the characters are unnatural, when not purely conventional; and the minute descriptions of scenery and other details, even when they remind us of Jefferies at his best, seem tedious and irrelevant as accessories to a tale, assuming as they do a magnitude entirely disproportionate to their importance. Of Jefferies the naturalist we can hardly have too much; but Jefferies the novelist is a different

person, with whom we do not wish to extend our acquaintance.

We are glad to welcome two more volumes by the "Son of the Marshes," who still chooses to veil his identity beneath this somewhat cumbrous nom de plume: and Mrs. Owen, the lady who edits his books, and to whom, if report speaks truly, his discovery is due, also merits our thanks. The analogy between this writer and Jefferies, to which we referred on a former occasion, is borne out by these recent volumes. In Annals of a Fishing Village (William Blackwood & Son, 7s. 6d.) we have a counterpart of Bevis, while Within an Hour of London

Town (same publisher and price) suggests by its very title Nature near London. The latter work of this author, as its amplified title tells, is limited to "Wild Birds and their Haunts," and is thus less comprehensive than Jefferies's volume-Jefferies, indeed, usually took a wider range of view than his successor, notably in the direction of wild flowers and trees, which had for him a more individual interest than they seem to possess for the "Son of the Marshes."

It is pleasant to know that to the seeing eye there is so much nature to be met with within an hour of what we style "the metropolis"—pleasanter still that we need not even go so far as this to meet with wild life. Not much more than half that time will put us down at Epsom station, when a very few minutes will bring us on to the Downs, among birds and insects and flowers. The "Son of the Marshes" takes us farther afield-to Leith Hill and Dorking, to the Tillingbourne, and on to the Essex Marshes. Everywhere he is the same genial and observant companion-everywhere he makes us feel that he is determined to replace Jefferies as far as he may, and well he succeeds. Not only in the field but in his own home he knows the birds—the account of his pet owl "Patch" (pp. 40-47) is in every way charming, and we should regret that space will not permit us to reproduce it, were it not that we would rather our readers obtained the book for themselves. Like Mr. Knight, he takes up the cudgels for the sparrow, and it must be confessed that he brings strong evidence in support of his case—indeed, the chapter on "The Farmer's Feathered Friends" might well be reproduced in some standard school-reader, or spread broadcast as a penny tract. Other birds, however, come in for his censure :- "In those districts of Surrey where peas are grown, hawfinches are a perfect plague, more especially if wood or copse landsare near;" as to bullfinches "it is nonsense to assert that the buds of which bullfinches and other birds make such havor have insects in them;" and "some members of the finch tribe do a great amount of mischief in a garden." There is an admirable chapter on "The Good Old Times," which contains much worthy of attention in these days when "the agricultural labourer" is becoming of political importance, although we may feel that a writer who prefaces his remarks with a denunciation of "those interested agitators who, in their crass ignorance, speak of our true agricultural population as if they were down-trodden serfs" is likely to be somewhat of a partisan.

We should like to dwell longer upon the contents of this delightful book, but the demands on our space forbid, and our notice of the Annals of a Fishing

Village must stand over till next month.

A DRAWING ROOM MEETING.

A drawing-room meeting of the Society was held on June 22nd, at 1, Palace Houses, Bayswater, by the invitation of Lady Fry, and was very numerously attended. Sir EDWARD FRY, who presided, briefly opened the meeting by an explanation of the objects of the Society as set forth in its prospectus. It seemed to him that the easiest way of promoting these objects was to discontinue the wearing for ornaments the skins and feathers of birds of plumage. That was a matter which rested very much with the ladies, and he hoped the movement against this cruel custom would extend amongst them. He read a letter of regret for absence from Mr. Bryce, who was called away on election business, and called

Mr. T. H. WAKEFIELD, who moved a resolution setting forth the objects of the Society, and declaring that those objects deserved support. It might be said that the attainment of these objects might be left to Nature to work out for herself by the "survival of the fittest," but unfortunately it was not always the gentlest and most beautiful that survived, but frequently the cunning and cruel. There was in man an instinct of destruction, and this was especially prominent in children. The work of the Selborne Society was one of culture. It recognised the right of life, and denied to man the right to take away life except for some good and sufficient purpose. The Society had already done good work in pursuance of its objects.

They intervened successfully under the Wild Birds' Protection Act in the case of the unnecessary destruction of the gannets on Lundy Island. He referred to the wholesale destruction of ferns and wild flowers by collectors and excursionists, which it was the object of this Society to prevent. Its third object was to promote the study of Natural History, which they did by means of their magazine. They must all appreciate the manner in which that magazine was conducted.

(applause).

Professor W. H. FLOWER, Director of the Natural History Museum, said he came there without the slightest intention of making a speech, but he wished to show his sympathy with the Society and its objects, and had therefore very great pleasure in seconding the resolution. Another reason for his attendance was to show his respect for their chairman, with whom ever since the year 1849 he had been in competition as a naturalist. In that year they both went in for honours in zoology, and Sir Edward came out first, whereas he (Prof. Flower) only got a second, and for this he had owed Sir Edward a grudge ever since (laughter). He must own to being the head of a rather large school of collectors of stuffed birds, and felt some qualms when the last speaker condemned the practice. However, what they did in that way was so infinitesimally small that he thought the object with which they worked would absolve them even in the eyes of the Society. A lady in the Museum once spoke to him on the subject of the humming-birds in their cases; but he drew her attention to the head-dresses of the ladies, and told her she could see catalogues of thousands of these birds to be sold in the City for those purposes. He would take the opportunity of disabusing people's minds of the idea that the Museum required a kingfisher's nest. Ever since Mr. Kingsley made a statement to that effect they had had a number sent every season; they had one, and did not require any more. The propensity to destruction was a remnant of those days when man depended for his living on the chase. It was curious that it was possessed only by boys. It had been said that if a number of children were all dressed alike you could divide the boys from the girls by turning a mouse loose amongst them; the boys would at once start in chase of it, and the girls would run away, and mount on chairs in fear of it (laughter). Societies like this, by influencing public opinion and influencing children might do much in saving pain to animals, and in saving them for their legitimate purpose of contributing to our enjoyment and happiness.

Mrs. Brightwen, who next addressed the meeting, pleaded as her apology for speaking, her love for nature ever since childhood, and the happiness the study and observation of natural objects had afforded her throughout a long life. She was very glad to belong to the Society because it promoted these objects. She had been struck by the ignorance which prevailed on these matters, even amongst people who lived in the country. Mrs. Brightwen related some anecdotes in connection with her "pet spider," and of insects she had observed around her own house, and then referred to the destruction of birds of plumage. She made a pathetic appeal on behalf of the exquisite little white heron from which the "egrets" were obtained, and gave a touching description of the cruel manner in which the plumage is torn from the living female bird whilst sitting on her nest. She appealed to those who had gamekeepers to urge them to discrimination in the destruction of so called birds of prey, and especially in regard to the kestrel, a most harmless bird, which lives almost entirely on mice, and the wholesale destruction of which, and of the jays, no doubt accounted for the plagues of mice

from which many localities had recently suffered.

The Rev. H. D. Gordon gave particulars of the work done by the Society, and instanced lectures delivered to the cab-boys at Brighton, which had been attended with good results. He trusted they would be able to count upon the able editorship of Mr. Britten for some time to come, and that they might also depend upon the efforts of each individual member to further the interests of the Mr. Gordon spoke at some length on the approaching centenary of Gilbert White of Selborne, and thought something should be done to raise a fitting memorial to the memory of the great naturalist.

The EARL OF STAMFORD said he spoke as a representative of Gilbert White, several of whose great-nieces and great-nephews he saw in the room. soon as the work of the Society was put before him he felt bound to support it. We found ourselves in this beautiful world surrounded by so many charming and interesting objects which lent such an attraction to life. If we could understand them fully, we should find that the law of love pervaded the universe, although we might at times be blind to the fact. There were many ways in which the object proposed by the resolution he had to move might be promoted. Mothers of families, for instance, might inculcate in their children a love of animals and insects and a habit of observation of natural objects. He spoke very highly of Nature Notes, and considered if it could be made more widely known the work of the Society might be greatly extended. He moved "That this meeting pledges itself to endeavour to promote the work of the Society and to increase the number of its members."

The Rev. H. D. RAWNSLEY seconded the resolution. He advocated the extension of the work amongst the poor folk amongst whom they lived, and who would find a great delight for their few leisure hours in the study of nature. Much might be done if memhers would undertake the teaching of Natural History in evening schools, and in establishing little gardens for school children and interesting them in seeding and planting and watching the growth of the plants. We wanted gentle English men and women, and he urged that everyone present

should take a real living interest in the work of this simple Society.

Mr. J. L. OTTER thought there was no doubt of the great need for the work of the Society, and there was fortunately no doubt of the success of that work. He referred to the aid the Society had received from the Press, and gave particulars of the work of some of the more successful branches. It was a catholic Society, and asked everybody interested in Nature to join in a fight against a common danger.

A cordial vote of thanks to Sir Edward and Lady Fry for their hospitality, proposed by Mr. Britten and seconded by Mr. White, concluded the proceedings.

SELBORNIANA.

Barbed Wire (see p. 136).—I may point out that by the Offences against the Persons Act, 1861, section 31, it is made an offence punishable with five years' penal servitude to place or set any spring gun, man trap or other engine calculated to destroy human life or inflict grievous bodily harm with intent that the same may destroy or inflict grievous harm upon a trespasser or other person coming in contact therewith, but by a proviso in the same section, it is said not to be illegal to set—for the purpose of destroying vermin—any gin or trap, such as is usually set for that purpose. The trap discovered by your correspondent would seem to come within this proviso, and whether any person injured by such an instrument could recover compensation, would depend so much upon the special circumstances that it would be rash to attempt to give a definite opinion.

Dangerous as it is, barbed wire would hardly be held to be included in the words, "other engine," in the earlier part of the section, and I am not aware of any special restriction with regard to its use, and if placed in an ordinary manner upon private land, there would be a difficulty in establishing a claim for damages

for any injury done to person or property.

4, Crown Office Row, Temple. FRED. W. ASHLEY.

I think that the owner of the wood referred to was acting within his rights in setting the trap. Although it is unlawful for a person to set traps calculated to cause grievous bodily harm, with the intent to inflict bodily harm, it is lawful to use traps for the purpose of destroying vermin, and no liability exists for injuries inflicted by them, except in cases where dogs are enticed from adjoining highways or footpaths by meat placed on the traps.

As to the use of barbed wire, it has been held in several County Court cases that an owner of land who fences his land adjoining a highway or public footpath with barbed wire, placed in such a position as to inconvenience the public, creates a nuisance, and renders himself liable to damages for injuries caused by it.

Hampstead. R. F. McMillan.

A Good Example. - Last Thursday, July 7th, I saw a sight which gladdened my eyes as a lover of nature. I was staying with my sister in Northamptonshire, near the home of all the earlier part of my life. She took me for a drive through Fawsley Park, the seat of Sir Rainald Knightley, which used to be such a delight to us to visit when we were children; and after watching the deer in the park, and having a look at the house to see the alterations that had been made since I recollected it, I lingered on the banks of the large and beautiful ponds, which were always a shelter for so many wild-fowl. While I was looking at the pond in front of the house, I saw on the water, very close to me, a large bird, which, as I first caught sight of the back of its head, seemed to me from its colour and crest to be like a bittern, but with a longer and thinner neck. While I was looking at it it dived, but after a few seconds it reappeared again, and I got a full side view of it, and then I could see plainly that it was a lovely specimen of the great crested grebc. My sister also saw it plainly, and at once agreed with me that that was what it was. It was evident from the season of the year that it must have been breeding there. I mentioned the circumstance the next day to a clergyman, a friend of mine, in the neighbourhood, and he said that he had heard that these birds do breed in that place occasionally, and that Sir Rainald does not allow any wild fowl or wild birds to be shot or interfered with in any way on any of his ponds throughout the year, either in summer or winter. And here I had the opportunity of seeing the good result of this protection. If landowners generally would follow the good example how much our British fauna might be increased, and what an additional interest would be given to many a lovely spot throughout our land! I had seen Sir Rainald a few days before, but I did not see him again before leaving that part of the country, or I should certainly have told him of the delight which such a sight had given me, and I thought that this little narrative of the occurrence would be interesting to the readers of NATURE NOTES. The only other time that I have seen the large crested grebe during the breeding season was towards the end of June, the year before last, as I was visiting the Norfolk Broads with my brother, when we got a good view of one on Wroxam Broad.

Modbury Vicarage, S. Devon.

G. C. GREEN.

A Flower Brigade.—The Editor of the column "For Lassies and Laddies" in Hearth and Home is enlisting the sympathies of her young readers on behalf of their less fortunate fellow-creatures. She has formed a "Flower Brigade," the object of which is to supply fresh flowers to hospitals and other institutions and also to make little books of dried specimens for distribution among the patients. The latter task will be somewhat difficult, as dried plants soon become brown and chippy: ferns, so far as colour goes, are best for the purpose. Fuller details as to method of work will be found in Hearth and Home for July 21st; or may be obtained from the office, 6, Fetter Lane, E.C.

NATURAL HISTORY NOTES AND QUERIES.

A Puss Moth Caterpillar (Cerwa Vinula).—I reared one of these caterpillars from the egg last summer. The egg was found on a willow tree at Hammersmith, and the caterpillar came out on June 17th, and was then quite black. On the 19th a small red speck appeared at the ends of the filaments in the tail. On the 21st the caterpillar changed its skin, and yellow marks appeared on the body. The yellow marks gradually became brighter, and on the 25th the caterpillar again changed its skin. The yellow marks were now much larger, and the head was squarer. On the 25th the yellow marks changed to green, and on the 28th the caterpillar changed its skin again. This time I saw it crawl out of its skin. The top of the head and the filaments of the tail were quite a light colour, but in an hour they were a dark plum colour. On the 2nd of July the caterpillar left off eating, and for two days it seemed very ill, but on the morning of the 5th I found it had changed its skin for the fourth time, and was eating ravenously. There was now a pink line round the "face;" the green marks were

very light, and the top of the head was also pale green. It was now a very beautiful caterpillar, and very interesting to watch. When it was touched it put out the filaments of the tail, and waved them about, and it raised its head, as if it were looking angrily at one. On the morning of July 16th all the bright colours had changed to a dirty brown, and the caterpillar crawled on to a piece of poplar bark and began to spin. First it put some threads over its body, and while it was spinning it bit off tiny pieces of bark, and wove them into the coccon; every few minutes it put something sticky out of its mouth on to the cocoon, as if to make the scraps of bark stick on better. By the evening the caterpillar was quite covered, but could still be seen moving. When the cocoon was finished it looked like a brown lump on the bark. I fed the caterpillar on poplar leaves, and gave it fresh food three times a day. The cocoon remained in the breeding cage all the winter, and on the 1st of May, 1892, a beautiful female puss moth came out of the cocoon. JANE GRAHAM.

A Helpful Toad.-Miss M. Clark, of Devizes, has sent me the following anecdote:—"This spring our gardener, while moving a pile of sticks, saw a toad crawling from the spot with another on its back. The next day he noticed it again, and his curiosity being aroused he took the toad from the other's back, and found that its two fore legs had been lost as far as the first joint. Since then he has not seen them, but thinks they may re-appear in damp weather."

P. A. FRY. Some more Pets (see p. 99, 117).—Another pct was a very fine Occlot (Felis pardalis) this animal was not very fierce, although his play was of rather a rough nature. He would knock against the wirework of his cage, rub himself and purr like a cat, if he thought you were going past without taking any notice of him; but when it came near dinner hour, his temper became anything but pleasant, and one had to be very careful how his food was given him, or one would get their fingers severely bitten. He would eat raw flesh, fish and fowl, and rabbit heads; quite opposite to the coracal, he would drink a very large amount of water. In looks he was a perfect leopard, only in miniature; his walk the same, his coat if anything, more handsome than that animal. The Ocelot comes from South America, but he does not appear to require a very high temperature, 10 to 16 centigrade suits him well. He was exceedingly lively, and was continually going up and down his cage. He used to sleep in a zinc box full of hay, which was put in his cage every evening, and taken out every morning. One day a man from Bostock's collection came and made a fair offer for him, and as he smelt rather strong, I sold him to them: they were very glad as they had not one there. R. M. J. TEIL

"Marie's Heart."-A writer in the National Observer for July 2nd (p. 167) writes:-"Those curious flowers to which tradition has given the name of 'Marie's Heart,' spread their creamy tendrils and blood-coloured flowers in every direction." What plant is referred to? G. S. R.

A Cuckoo Query.—In his article on Wimbledon Common, Mr. Charles Worte, speaking of cuckoos (p. 103), says:—"There are vastly more females than males." I do not know whether this statement is made advisedly or not; but, if it is, it would be very interesting to hear on what evidence or authority it is made. CUCULUS.

Swifts.—If the temperature remains much longer at 20° below the average for July, many of these birds will shorten their stay this year. I saw them in large numbers to-day, circling high over the valley between Bath and Keynsham, where, later, the swallows often assemble prior to their departure.

T. POLE. Weston-super-Mare.

Shelley's "Tall Flower.5'—A writer in the Athenaum of July 16th complains that the references in a recent Lyrical Concordance to the works of Shelley are insufficient. "Would it not be a comfort to find under jonquil, or daffodil, or narcissus, or under all three-

That tall flower that wets-Like a child, half in tenderness and mirth-Its mother's face with heaven's collected tears, When the low wind, its playmate's voice, it hears?" In answer to this question I have no hesitation in saying that it would not "be a comfort to find" this passage under any of the flowers named, inasmuch as it does not refer to any of them, but to the Crown Imperial. The aptness of the description will be recognised by every one who knows the plant.

G. S. R.

Miss E.—(1) Thalictrum, probably a form of T. minus. (2) Cerastium alfinum, probably. (3) Specimen insufficient. (4) Safonaria ocymoides. (5) Dryas octopetala. (6) Galium, perhaps G. helveticum. (7) Gentiana acaulis. (8) Veronica Teucrium. (9) Vincetoxicum officinale. L. L.—Leyeesteria formosa. Miss H.—Both are Saxifrages; the smaller is S. stellaris, but the other specimen is insufficient for determination. Northants.—(1) Aira flexuosa. (2) Agrostis alba. (3) A. vulgaris. E. M. C.—It is the Purple Toad-flax (Linaria purpurea) which sometimes occurs as an escape from gardens.

OFFICIAL NOTICES.

At the Meeting of the Council on July 6th, the formation of a new branch to be called the "Markwick," for the neighbourhood of St. Leonard's Forest was authorised. The Honorary Secretary is Miss Borrer, of Brook Hill, Cowfold, Horsham, grand-daughter of the well-known botanist of that name. It was resolved that the thanks of the Council be given to Sir Edward Fry for taking the chair at the recent drawing-room meeting of the Society, and to Lady and the Misses Fry for their kindness and hospitality to the members who attended. The Council were glad to hear that it was proposed to form an association for the study of Natural History in connection with the Lower Thames Valley Branch to be called "The Selborne Field Club." With reference to several appeals from ladies for leaflets, the Secretary was directed to ask the S.P.C.A. for copies of those issued by them, especially to one referred to on the Wild Bird's Protection Act. The resignation of Miss A. Taylor, Honorary Secretary of the Dorking Branch, was accepted with regret, and the thanks of the Council were given for her past services. The Secretary of the Society will be glad to hear of any one willing to act as successor to Miss Taylor.

The drawing-room meeting, to which reference is made above, was so important a gathering that we think it well to give a full and special report of the proceedings thereat (p. 155). Much good can be done by meetings of this kind, and we hope that Lady Fry's example may be followed, and that similar gatherings may be arranged from time to time in other parts of London, and also in

country districts.

The junior section of the Clapton (Lower Lea Valley) Branch made their annual excursion on Saturday, 16th July, to Chingford, accompanied by several of the adult members, and had a most enjoyable ramble through Hawk and Bury Woods, returning to tea at the Royal Forest Hotel. The chief object of the ramble was a competition for one of the prizes offered by Dr. Daly, the President of the Branch, for the best arranged and named collection of cut plants gathered during the afternoon.

NOTICE TO CORRESPONDENTS.

Contributions for any number should reach the Editor, JAMES BRITTEN, F.L.S. 18, West Square, London, S.E., not later than the 15th of the month.

Specimens sent for identification will be named, if sent carefully packed and in good condition, and if sent to the Editor, but we cannot undertake to return any specimens.

It is particularly requested that subscriptions and letters connected with business should *not* be forwarded to the Editor, but to the Secretary of the Selborne Society, 9, Adam Street, Adelphi. Editorial communications, specimens, and books for review should be addressed to Mr. Britten, as above.

Mature Motes:

The Selborne Society's Magazine.

No. 33.

SEPTEMBER, 1892.

Vol. III.

A PLEASANCE WITH BIRDS.

HE lover of birds often feels a twinge of conscience when he confines in cages other species than such domestic ones as the canary and ring-dove. Most wild birds so caged appear too often to make restless efforts to

escape, but in roomy aviaries or volaries it is rare to see a bird make any effort to liberate itself, and when they can be allowed full liberty to roam at will with the complete use of their wings, the ornithophilist feels that by taking the bird under his protecting care, and furnishing it with regular supplies of food, he is positively benefiting it, by screening it from danger and saving it from hunger. There are but nine domestic birds usually kept in this country which can have perfect liberty, and yet as a rule do not desert the homestead: even our two cagebirds, which are habitually reared in confinement, viz., the canary and ring-dove, cannot be given their full liberty without the greatest risk of their straying.

It was therefore with no small pleasure that, through the courtesy of Mr. W. Ingram, M.P., whose residence at Westgate I have lately visited several times, I was enabled to see this difficult matter satisfactorily dealt with. That gentleman in his grounds has birds living most happily in every variety of condition; in confinement in very large cages, in spacious volaries, in the walled-in pleasance, and lastly, with perfect

liberty and unclipped wings.

This note is not written for the ornithologist but for the Selbornian; it will not, therefore, be necessary to describe the numerous choice species which form the collection; but there is one class of birds in which Mr. Ingram is particularly rich—he has ten albinos, viz., three white jackdaws, three white blackbirds, a white thrush, a white starling, a white hedge sparrow, and what I believe to be a pure white variety of the herring gull, caught in the neighbourhood. Of these, one of the blackbirds

and the hedge sparrow have pink eyes.

As a proof of the health of the birds, one of the white blackbirds has made two nests this year, but no young have been reared. The snowy whiteness of this bird, its vivacity and fearlessness, are most delightful. Others have nested altogether eleven times. Further, it is probable that none of these birds would long have survived in the wild state, even if they had not

been wantonly shot.

It is of the jackdaws I wish to give an account. These are most sagacious birds, and have their full liberty and perfect power of flight; they are singularly lively, their soft blue eyes are very conspicuous against the whiteness of their heads, but they differ very much in disposition. On my first visit to Mrs. Ingram, the tamest of these birds, "Darling," also the most inquisitive, seeing I was a stranger, flew after me into the drawing room, and sat on the pole of the curtain, eyeing me in a knowing manner, then flew on the table, picked up a letter, examined it, and apparently seeing no more to excite her curiosity, flew out of the door. If you appeared to be investigating anything in the grounds, in a fraction of a minute she was at your side; if you sat down she at once occupied one of the arms of the seat; if you went up a tower in the pleasance, as soon as you reached the top of the staircase she was there; she would go with the members of the family to the sea shore and follow them about. What is even more wonderful, this affectionate bird is taken by Mr. Ingram in the autumn to Over Silton, in Yorkshire, where she takes long walks with Mrs. Ingram, flying from tree to tree. Upon the whole I deem this white jackdaw to be the most charming bird it was ever my good fortune to meet with.

The other two white jackdaws are not so interesting; one is rather morose, and though it is perfectly tame and follows one about, it resents being touched; the third is rather more under restraint, as it is apt to roam. Although the white blackbirds have not reared any of their own young, one has brought up

nearly a dozen normal blackbirds and thrushes.

Mr. Ingram's son, Mr. Collingwood, has a subtle power over birds, and appears able to make them love him. He took me into a room where he had some blue tits; these sweet little birds flew on to my hand, and in the most fearless manner looked in my face, then flew on to his hand and devoured a cherry.

There is a beautiful specimen of the Australian piping crow in the garden, which, although its wings are not quite perfect, could easily escape if it tried to do so, but it seems quite content to

remain.

Another feature of the pleasance is the ample food supplied for the wild birds, which nest there in great numbers; as many as fifteen turtle doves may be seen on the lawn at one time; from early morning till late in the evening these beautiful birds are continually arriving, and departing with food for their young some miles distant, as they are not known to nest in the imme-

diate neighbourhood.

All this to me, a septuagenarian naturalist, was most enjoyable. What progress the extension of kindness to animals has made in my day! When I was a child the newspapers had a column, with two birds fighting at the top, for advertisements for cock-fights, and accounts were given of dog-fights, badger-drawings, and bull-baitings. All these cruel sports, as they were called, are now illegal. I well recollect the outcry that was raised when two lions, Nero and Wallace, were baited by bull-dogs, so that even then the feeling of the public was increasing against such brutalities.

There can be no doubt that our Society is materially helping on the good work, and that never in the history of this country has cruelty been more detested than at the present day. Let us all then by precept and example inculcate a spirit of kindness to animals, which does not end with them, but causes those who practise it to be more tender towards each other, and in the words of the Latin quotation, which will be familiar to those who learned as I did through the old Eton grammar,

Emollet mores nec sinit esse feros.

J. JENNER WEIR.

OLD FIELD NAMES.*

Y general names I mean such as are more or less in use all over England; words which we may call generic, applied to a vast number of fields, and marked off to special fields by some distinguishing adjunct. I mean such words as field, meadow, close, leaze, tyning, paddock, barton, hayes, etc. These all sound very simple words, not worth dwelling upon, but they are all old English words, each with its own history, and each worth stopping with for a short time.

Field is of course the largest of all. It is a genuine old Saxon word, found in all the northern nations of Europe in the different forms of field, feld, veld, velt, etc. It is generally joined with some word showing the size or shape, as ten-acre field, six-acre field, long field, broad field (corrupted as a placename to Bradfield), three-cornered field, etc.

Meadow, or mead, is another very old English word. It occurs in several of our oldest authors, and in the different vocabu-

^{*} The following notes on field names are taken from a very interesting paper by the Rev. Canon Ellacombe, one of our members, recently read at a meeting of the Bath Field Club. The paper deals especially with the names found in Canon Ellacombe's parish of Bitton, but we have selected only those passages which refer to names in general use.—ED. N.N.

laries it is always given as the translation of pratum, and in them we also find mention of the meadow-sweet or meadow-wort, which I have no doubt is the same plant which we now call by that name. The English meadow was exactly the Latin pratum, cultivated ground for grass only, and not brought under the plough and so always green (Cicero speaks of pratorum herbescens viriditas). And this was certainly the English meadow, which in its A. S. derivation is the mowed ground. meadow was always a pasture of large extent ("wide-skirted meads" is Shakespeare's description), yielding a quantity of rich but not very superior grass. In our part of the country the meadows are all lowland pastures, and hay-dealers draw a

wide distinction between upland and meadow hay.

Close is also an old English word, though it is derived directly from the Latin clausura, or locus inclusus. It probably almost always meant a place enclosed with walls (the Promptorium has "cloos or yerde, clausura," and yerde is the yard or garden), and so Shakespeare makes Timon say, "I have a tree which grows here in my close" (Timon of Athens, v. 2). It was also near the house, sometimes in it, and then it was reduced in size, and becomes a closet. As applied to buildings the name still survives in Cathedral close and Vicar's close, and I believe is now confined to cathedral buildings; as field names we have long close, broad close, and cling close, which if it means anything probably means that it was the field that lay nearest to or joined the house.

Leaze is entirely an old country word. I once thought it might be the plural of lea, a meadow, but in some parts, Oxfordshire for instance, the plural leazon appears, and it is certainly the same as the old A. S. lese, or leswe, a pasture. We have several leazes in Bitton, as east leaze, crooked leaze, middle leaze, cow leaze, bean leaze, little leaze, long leaze, beach leaze, pigeon-house leaze, wheat leaze; these all explain themselves, and Nanny's leaze, Hart's leaze and Bright's leaze are clearly named from former owners; but I cannot explain lark's leaze or

pill leaze.

Tyning as a field name is a very curious survival of a very old word, now only known as a field name. It comes from the A. S. tunen, to hedge in, and in the old authors it is not restricted to field work. In the Ancren Riwle (13th century) a nun is advised to "tunen" her eyes against wicked sights, but in the Promptorium (15th century) the word seems strictly confined to hedges. "Tynyd or hedgydde-septus;" "Tynin or make a tyninge-" "Tynynge, drye hedge—sepes." Originally, therefore, sepio; meaning the hedge itself, it came to mean a hedged-in enclosure, and that meaning only it has retained. We have in Bitton long tyning, lower tyning, upper tyning, Robin's tyning, Bath Road tyning* and wall tyning, and this last is of interest as a

^{*} This is a very curious instance of corruption. In an earlier survey it is Bath Way Tyning, but in older deeds it is Blathwayt Tyning.

case in which the word was not restricted to a hedge proper, but went back to its older meaning of enclosure, however, enclosed. It is on the high ground near the station, where stones are abundant and near the surface, and so the owner would naturally enclose with a stone wall, and the field would

be a wall tyning.

Barton is the enclosure for holding the ricks, originally chiefly barley ricks—whence its name, beretun, the ton or tun coming from the same word as tyning.* The word is still in common use for a farmyard, but formerly in some cases it stretched further, and a barton was the manorial farm not let out to tenants but retained in the lord's own hands. This accounts for the name Barton Farm (we have one in Bitton), and near Bristol was the large royal demesne of Barton Regis, which still remains as the name of the Hundred, though perhaps better known as the name of the Poor Law Union. In Bitton the name only occurs otherwise as part of the surroundings of a farmhouse, though in some cases it is sufficiently large to be

separately named, as Mow Barton.

Paddock is a word that has much puzzled the etymologists. In its present form it does not appear in English literature till the latter half of the 17th century, and its earlier form was parrac, or *pearroc*. In that form it is a very old word for an enclosure. almost of any sort. King Alfred speaks of the world as a parrok, † and as parrock it probably lasted till changed into paddock, though very few examples, or none, can be found after the beginning of the 16th century. It is this change that puzzles the etymologists, the change from the double "r" to the double "d," of which no other examples can be found except in the Lancashire use of poddish for porridge. Park is the same word etymologically, but the park was always a large enclosure for keeping game for the lord's hunting, while paddock was a small enclosure, often and generally within a park, for the training of horses, greyhounds, etc. Wherever the name paddock appears as an old field name I should suppose it would mark the near neighbourhood of an ancient house of some importance.

Hayes is another old word for a hedge or enclosure. It forms the first syllable of hawthorn in its other form of hawe, and is well-known in Bath as a place name, East Hayes and Upper

Haves.

All these generic names that I have mentioned have one feature in common; they all mark enclosures, and so they carry us back to the time when enclosures were the exception and not the rule as they are now: it is not so long ago that by far the greater part of England was unenclosed.

H. N. ELLACOMBE.

^{*} Barn comes from the same root. It was originally bern or bernes, and bern=bere-ern, a storehouse for barley.—Ayenbite of Inant, Glossarial Index.
† Thisum lythum parrocce.—King Alfred—trans. of Boethius.

WILD BIRDS IN RELATION TO AGRICULTURE.

HIS is the title of a very interesting paper contributed by Earl Cathcart to the Journal of the Royal Agricultural Society, issued on the 30th of June last. A letter from Sir Herbert Maxwell, M.P., in relation to the Scotch

plague of mice, contained "this pathetic passage:"-

A few days ago a gamekeeper in the Stewartry went to examine a trap which he had set for hawks. He found one hawk in it, and, strange to say, its mate had been feeding it. No fewer than portions of twenty-two mice were discovered lying around it, including a number of voles, or field mice. It is alleged that the gamekeeper killed the hawk, although such proof was given of its being the farmer's friend:

and this moved Earl Cathcart to write to the Times a letter, published on May 16th, pleading for the study of "Economic Ornithology:"-

Economic Ornithology, or the study of the inter-relation of birds and agriculture, and an investigation of the foods, habits, and migration of birds in relation to both insects and plants, is an untrodden and promising field that lies open for

investigation by the English agricultural scientist.

We are in this important matter far behind our cousins in the United States of America; their Agricultural Department in 1885-6 established a 'Division of Ornithology,' which, I understand, has since obtained and published, in the direction in question, very valuable and very practical information. To cite the American official report—'By publicity it was hoped to correct the ignorance concerning injurious and beneficial effects of the common birds of the country, and to prevent the wholesale destruction of useful species.'

In the present paper, the Earl develops his scheme into "a proposed little school of Agricultural Ornithology," and gives an admirable summary of the evidence contained in the Report of the Wild Birds' Protection Committee of the House of Commons in 1873, from which the Rev. F. O. Morris made some extracts in our January number, while the sparrow controversy was raging. This Committee took the evidence of thirty-eight experts, ranging from Mr. Morris and Professor Newton, of Cambridge, down to the cockney bird-catcher who hailed from Seven Dials:-men of science, farmers, market gardeners, including, amongst others, real out-of-door naturalists, pure and simple lovers of science, a barber, a bookseller, a picture dealer, a hair-dresser, and other tradesmen.

The evidence was of somewhat unequal value; but Earl Cathcart questions whether any real advance has been made since in England in this department of science, and considers the Report. "an admirable text-book of all that was then known of economic ornithology." He gives in extenso a very interesting letter from Miss Ormerod, whose work in relation to our common insects will be familiar to Selbornians, from which we extract the following passages:—

Noting first some of the special services rendered by different kinds of birds,. in neutralising different kinds of insect attacks, or attacks on special crops, I think the following summary of observations put into my hands in 1879, by Mr. F. Norgate, of Sparham, Norfolk, gives useful suggestions for further amplification.

'Amongst various species of birds serviceable generally on forest trees, apple trees, and fruit bushes, Mr. Norgate mentions the titmice, including the blue, cole, marsh, long-tailed, and great tit (and of these the blue tit may be especially observed at work amongst Aphides on gooseberry bushes; also the warblers, wood-peckers, nuthatch, and tree-creepers. The lesser spotted wood-pecker is noted as especially frequenting the apple; the gold-crested regulus frequents the Scotch pine, spruce, and other Conifera; the bearded tit, yellow wagtail, titlark, wren, cuckoo, and water rail, are mentioned as serviceable in osier beds and reeds, and in marsh hay. Amongst gooseberry, currant, and raspberry bushes the titmice and warblers, the wren, and the cuckoo are noticed as of especial use. Amongst cabbage and turnip crops the partridge, spotted fly--catcher, swifts, swallows, and martins are serviceable. . . . On grass-besides the warblers, swallow, swifts, martins, and partridges before mentioned—the wagtails, pipits, and starlings were all of service.'

This just refers to a portion of what is included in my own special department, but our need of information runs far wider; we want trustworthily, and plainly, given details of the extent to which birds (specified) injure our common field or fruit crops under common circumstances; also the extent to which they may be reckoned on as friends or foes to other kinds of birds, or Mammalia, or Reptilia, useful or hurtful to us. And also we need an authentic account of the domestic habits (so to say) of each kind described, such as its time of nesting, how many broads in the year, description of the position and appearance of the nest and of the eggs, and of the birds both male and female.

So far as obtaining information goes, I do not think there would be much difficulty-bird lore from the rude but extremely well-informed observation of the village urchins, who harry all the nests they can get at, up to the grave sesquipedalia verba notes of the "scientific ornithologist," are easily procurable—but the

difficulty appears to me to lie in the working.

In the much-vexed question of the sparrow, it is no matter what it eats in a town, but in the country I am personally aware of the fearful loss caused. This is not only by its raids on the corn fields, but by driving away the swallows and martins, which are amongst the first class of our insect protectors. Should the matter be brought forward, I have a large amount of evidence in my hands as to the absolute curse that this bird is (in its fostered condition) to British agriculture, and whilst I would earnestly plead for preservation of every other of our birds, I would give every help in my power by encouragement with my pen, and (if my much tried finances allowed) by subscriptions to every sparrow club in the country limited to destruction of this one bird, *Passer domesticus*.

But reverting to the special matter, it seems to me that what we need most of

all is a plain, sound, reference book, a "Manual of Agricultural Ornithology" well illustrated, with information such as I have already suggested. If we could have this formed there would be a solid basis of beginning, and there are many

who would be competent to compile it.

Such a text-book of Agricultural Ornithology, well-illustrated and plainly written, exactly meets Earl Cathcart's views, and we are glad to know that the matter has already been spoken about in the right quarters.

As an illustration of the interesting manner in which the Earl summarises the Report of the Committee referred to, we cite the following passages dealing with the birds of prey:—

All the owls are much valued by naturalists; rats and mice are their principal food. When I was a young man I remember at Thornton-le-Street plenty of white owls, such beauties, but every man's hand—or rather trigger-finger—was against them. Our ancestors, wiser than we are, always made in their great barns ingress for owls—an owl hole—with often a stone perch. Passing over the effect the destruction of birds of prey has had in causing grouse disease, and on the moorlands the serious increase of vipers, we come to the kestrel, the sparrowhawk, and the merlin, which all have their special uses; unfortunately the kestrel is becoming more and more scarce. Canon Tristram told the Committee, "I

met the keeper of Lord Boyne, who had just killed a kestrel. I said it was a shame, it did no harm. 'Oh, sir,' he replied, 'it's varmin, they kill the part-ridges.' I said, 'I will give you five shillings for every partridge feather you find in the bird's crop.' We opened the cock kestrel, and I counted 178 wire worms and not a feather!" The hawks, owls, and weasels on Lord Middleton's estate, Wollaton, were so kept down with pole traps, and otherwise, that as many as 1,500 rats killed per month were paid for.

"Leaving the eagles, the spotted and the golden, as ratters only, we come to the kestrel (Falco tinnunculus), a great mouser, the goshawk, the sparrowhawk, the kite, the common buzzard (Buteo vulzaris), the rough-legged buzzard, the honey buzzard, the marsh harrier, the common harrier, the ash-coloured harrier, the eagle-owl (Bubo maximus), the scops-eared owl, the long-eared owl, the short-eared owl, the white or barn owl, the tawny owl, the snowy owl, the hawk owl, the little owl, Tengmalm's owl (Noctua Tengmalm'), an occasional visitor, ash-coloured shrike, red-backed shrike, woodchat (Lanius rufus), raven, carrion-crow, magpie, and jay. Of these two last, Mr. J. E. Harting says they destroy quantities of young field mice, systematically searching for the nests and turning them out. Great bustard, great plover, crane, common heron, common bittern, white stork, landrail, and water rail, at least one of these birds is known to have devoured a shrew-mouse (Morris). Here is a goodly list of thirty-five English mousing birds—go to the mouse-stricken districts and inquire how many of these mousing birds are known to be in existence? In all probability it will be found that man, knowing better than Nature, has improved them-or most of themoff the face of the earth.

The following passages from the concluding portion of this interesting paper are all that the exigencies of space will allow us to give:—

Sad to say, fair ladies-gentle dames-have not escaped scatheless from the searching examination before the Commons' Committee; it seems that the mines of Golconda, the pearl fisheries of Southern Seas, the Garden of Eden with its flowers and its fruits, never forgetting the foliage, would not satisfy their insatiate desire for objects to be used in personal adornment; they have ravaged the beasts of the field, and the fowls of the air are being devastated for the purpose of obtaining heads, skins, and feathers for these sumptuary purposes. One scientific ornithologist was greatly overcome at a party on seeing a lady who "had the audacity" to appear in a tippet constructed with 500 robins' skins; he was only very slightly revived on learning that the deceased robins were of Spanish extraction. Another ornithological witness observed with admirable precision and praiseworthy sentiment that he did not think the moral aspect of a lady's bonnet

was improved when a stuffed robin was perched on the top of it.

All birds have their uses to agriculturists and gardeners, but some may be too numerous: birds generally do more good than harm. Man, whenever he steps in, violates the law of natural co-ordination: there is a balance of nature, and that balance man upsets. He, with wayward fancy, breeds and plants whatever pleases him, and regards not the natural conditions of the plant or animal. Insects swarm more and more because their checks do not increase in proportion, and that is entirely owing to the intervention of man. Insects are one of the greatest difficulties with which farmers have to contend: especially so where high cultivation prevails. There is not a tree that grows which is not subject to attacks of its own particular familiar insect—the oak alone has no less than fifty different invading insect persecutors. Birds in England, as elsewhere, are the chief means of destroying insects. Generally, in regard to birds and their food habits, there is crass ignorance. Foolish unreasonable unthinking "crusades" against birds are everywhere preached; iron fences are multiplied; hedges are stubbed up; thatched roofs are no longer constructed; in consequence, nesting opportunities grow less and less, and where is the wonder the most desirable birds frequently disappear?

DUCKS' NESTS.

N the spring of the year I was walking in Kensington Gardens, and observing the number of broods of young ducks on the Round Pond was puzzled as to where the parent birds could have built their nests. It

seemed impossible for them to have done so anywhere near the water's edge as is usual in the wild state, for there was no cover and they would have been disturbed by the people frequenting the gardens, so the only place that I could think of was under the hedge surrounding the Palace Gardens, about

sixty or seventy yards from the water.

On enquiring of a keeper that came by, I learnt that a few birds built where I supposed, but great was my astonishment when he went on to say that most of them made their nests in the trees! I had never heard of such a thing as wild ducks building in trees, and said, "What trees?" To which he replied, "In the elm trees that you see around." He pointed out that many of them had been broken off short by the gales, saying that wherever there was a dwarfed tree of this kind, or where, on other trees, there was a favourable knot or tuft twenty feet or so from the ground, there a duck's nest would always be found each year.

I next asked him how the old duck got the young ones to the water, and was informed that directly they were hatched she simply kicked them out of the nest, letting them fall to the ground, she quacking all the time, and when they were all down she would descend, gather them under her wings for a little time to warm them, then off she would start and they would follow

her to the water.

I was even more surprised at this and proceeded to cross question my informant who persisted in his statement adding that it was only two mornings ago he had stood under one of the trees to watch this apparently heartless performance, when one of the little creatures being hurt by the fall, and unable to follow its mother, he took it up and carried it to the water after her. The duckling, revived by the warmth of his hand at once swam away merrily with its fellows.

On my arrival at home I took down from the shelf a well-known work on Natural History in which I found it stated that ducks did in rare instances build in trees, but that it then exercised the ingenuity of the old bird to get the young ones to the water. Evidently the author did not know how this was done.

Feeling an interest in this matter I wrote off to a friend who is a close observer of nature to tell him what I had heard about the ducks: he was incredulous, insisting that the ducks carried their young to the water in their mouths; however, as he had never seen them do this I preferred the evidence of the keeper at the gardens.

The next time that I was in the vicinity of the Round Pond I

engaged another keeper in conversation, and asked him if the ducks carried their young in their mouths, to which he naively replied, "Well, we never sees them do it that way; they always kicks them out of the nest and then leads them to the pond. I have seen them do it many a time." He told me that two naturalists who did not believe in ducks' building in trees, had come to the gardens to make enquiries. They took them to a famous old tree stump at the head of the Serpentine, on the top of which they knew they would be sure to find a nest, and one gentleman on reaching the top of the ladder was convinced in a somewhat rough manner, for the old bird in flying from her nest knocked his hat off.

After this testimony I was satisfied of the truth of what had been told me; there is after all nothing very wonderful in the ducklings falling twenty feet to the ground unhurt, for when just hatched their bones are not yet hardened and they are little else than balls of wool. Some are hurt, however, as we have seen, but it is possible that almost an equal number are hurt on

being turned out of the nests on level ground.

The theory of a duck carrying her brood one by one for a distance of sometimes a hundred yards in her mouth or on her back or in any such way becomes, on reflection, untenable; the little things being left by themselves in the water would be exposed to many dangers. So the keeper's story is true; but of the millions that wander in the London parks how many have realized the above simple facts?

GILES A. DAUBENY.

ODE TO AUTUMN.

Season of mists and mellow fruitfulness!
Close bosom-friend of the maturing sun;
Conspiring with him how to load and bless
With fruit the vines that round the thatch-eaves run;
To bend with apples the moss'd cottage-trees,
And fill all fruit with ripeness to the core;
To swell the gourd, and plump the hazel shells
With a sweet kernel; to set budding more
And still more, later flowers for the bees,
Until they think warm days will never cease;
For Summer has o'erbrimm'd their clammy cells.

Who hath not seen thee oft amid thy store? Sometimes whoever seeks abroad may find Thee sitting careless on a granary floor, Thy hair soft-lifted by the winnowing wind; Or on a half reap'd furrow sound asleep, Drowsed with the fume of poppies, while thy hook

Spares the next swath and all its twined flowers; And sometimes like a gleaner thou dost keep Steady thy laden head across a brook; Or by a cider press, with patient look, Thou watchest the last oozings, hours by hours.

Where are the songs of Spring? Ay, where are they? Think not of them—thou hast thy music too, While barrèd clouds bloom the soft dying day And touch the stubble-plains with rosy hue; Then in a wailful choir the small gnats mourn Among the river-sallows, borne aloft Or sinking as the light wind lives or dies; And full-grown lambs loud bleat from hilly bourn; Hedge-crickets sing, and now with treble soft The redbreast whistles from a garden-croft, And gathering swallows twitter in the skies.

JOHN KEATS.

THE GROWTH OF THE WHEAT.

THE not too large number of diagrams available for nature teaching in our schools has received an important addition in the series representing the life-history of the wheat plant, lately issued by the Royal Agricultural Society. The diagrams, eight in number, are careful reproductions of the original drawings by Francis Bauer, now in the Department of Botany of the British Museum, and are printed in colours. Bauer's work, although executed eighty years since, has never been surpassed, and Mr. Morgan has carried out the reproductions with great success. The cost of the set is ten shillings.

cess. The cost of the set is ten shillings.

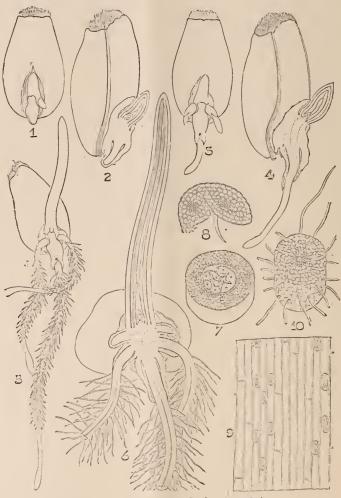
An explanatory pamphlet has been written by Mr. Carruthers, who has succeeded in combining scientific accuracy with simplicity of style in a way which is unfortunately rare. This was originally published in the Journal of the Society, and was then accompanied by reduced drawings of diagrams, one of which, by the kindness of the Society, we here reproduce. It has been re-issued separately for distribution, and in this form would have been very useful, even apart from the large diagrams, had not the Society, for some inscrutable reason, omitted the reduced illustrations from the reprint. We cannot but regret that a body of standing and wealth of the Royal Agricultural Society should have thrown away so admirable an opportunity of promoting sound teaching among the farmers and others for whose benefit it presumably exists. As both letter-press and illustrations were already in type, the Society might well have issued both together as a penny pamphlet, which would have been invaluable as a text-book in county schools and technical classes. They have, however, chosen to publish the text alone at the cost of threepence, which seems to us exorbitant for ten pages of letterpress.

We cannot better show the usefulness of the undertaking than by quoting that portion of Mr. Carruthers's pamphlet which relates to the diagram reproduced.

"DIAGRAM II. GERMINATION OF THE GRAIN.

(The figures printed in brackets [] refer to the corresponding figures on the Diagram itself.) "When wheat is stored, the little plant in the seed remains dormant. It is not, however, free from the influence of external conditions. It parts with its moisture to the dry air, and this may go on till the plantlet is completely dried up and killed. A few years are sufficient to produce this change in a grain of wheat.

Every well-ripened wheat seed may grow when sown the year after it has been harvested. But if seeds be kept for two years some will fail to germinate, and the number failing will increase year by year, till in six or eight years not a seed will grow. The stories of the germination of wheat that has been buried with mummies are only fables. The most vigorous and prolific erops are grown from fresh ripe seeds.



- Grain sown three days, × 4 times,
 Section of 1, × 6 times,
 Grain sown five days, × 4 times,
 Section of 3, × 6 times,
 Grain sown eight days, × 4 times.

- Section of 5, × 8 times.
 Section of leaf and sheath of 5, × 30 times.
 Section of piece of leaf of 7, × 120 times.
 Skin and stomates of leaf, × 120 times.

- 10. Section of root of 5, × 40 times.

[&]quot;Under the influence of warmth and moisture the plantlet in the seed begins its independent life. A seed of wheat will not grow unless the temperature is 10° above freezing, while a heat of 104° Fahr. kills it. It germinates most vigorously at a temperature of about 80° Fahr.

"Supplied with moisture and a suitable temperature, the seed begins to swell and soften. In the field the seed gets its moisture from the soil; when sown, it should not be placed too deep in the ground, but should be covered just sufficiently to keep it moist. The cells of the plantlet contain the living protoplasm, which ischemically a nitrogenous substance like the stored-up gluten; in the plantlet it is in a condition of rest, but is capable of resuming activity under favourable circumstances. Every active cell in a plant is either filled with protoplasm or its walls are lined with it. By its agency all the work of the plant is carried on: the elements of the food are taken in through root and leaf, are manufactured into organised substances, are transmitted to where they are needed, and are there built up into the tissues of the plant by protoplasm. The starch and other carbo-hydrates in the seed supply the material for the formation of new cell walls, while the nitrogenous gluten serves to make good the waste and to increase the bulk of the protoplasm. The new life manifests itself by the growth of the minute plant, which soon bursts through the skin [1], first sending down its rootlet and then pushing upwards its stem. The whole plantlet escapes from the seed except the scutellum, which remains attached to the [2] store of food. . . .

"In another three days the roots [5] have actively extended themselves, and have developed a number of fine hairs [6], which supply a large surface for taking in the needed water. There are no openings in the roots for the entrance of water; it is taken in through the walls of the root hairs [10]. Dissolved in it the wheat-plant secures some mineral and other substances necessary for its food, such as compounds of nitrogen, potash, lime, magnesia, silica, iron, phosphorus, and sulphur. In his use of different mineral and other manures, the farmer supplies the necessary substances in which the field is deficient, or replaces those that have been re-

moved by former crops.

"The leaves are still covered by the protecting sheath [6], and now ones are being formed at the growing point of the stem. A transverse section [7] shows the cell structure of the protecting sheath, and the first green leaf folded up on itself. The leaf is covered by a skin or epidermis, which encloses a mass of green cells [8], penetrated by slender fibres (vascular bundles) passing up the leaf, and forming the veins. These fibres [9] (which are the leaf skeleton) form the supporting francowork for the cell tissue and also serve to transmit fluids. The epidermis is pierced by numerous two-lipped mouths (stomates) to permit the entrance of the air to the green cells, and the escape of water-vapour and the gases set free by the plant."

A SWEDE IN ENGLAND.

Peter Kalm, a translation of whose *Visit to England* in 1748 has lately been issued by Messrs. Macmillan, was a native of Finland, where he was born in 1715 and died in 1779. He was a distinguished naturalist and a pupil of Linnæus, at whose recommendation he was commissioned by the Swedish Government to undertake a voyage to America, for the purpose of describing the natural productions of that part of the world. Both on his way out and on his return he visited England, remaining about six months on the former occasion and five weeks on the second. In 1753 he published in Swedish an account of his travels in three volumes, of which the greater portion referred to his American experiences, and this has been published in English more than once. The portion referring to our own country has not, however, been translated until now, when Mr. Joseph Lucas has brought it before us in a handsome octavo volume.

Books in which we can see ourselves as others saw us a long while ago are always interesting; more than one of the kind has been published in Cassell's National Library. Kalm's volume differs from most of the kind in the fact that it is concerned less with people and towns than with the country and its various-aspects. The writings of Arthur Young, William Ellis, and many more are readily available, and give abundant details of the agricultural life of the last century; but Kalm's simple narration of his travels adds a good deal to our knowledge of the authorities themselves. Of Ellis, for example, not much was known beyond what could be gathered from his own books. Kalm, who visited him at Little Gaddesden, tells us a great deal about him, and his account certainly detracts considerably from the impression derived from Ellis's writings.

While he was in London, Kalm visited the suburbs and made careful notes upon the market gardening there. He saw the haymakers at work "on the slopes just outside London, especially on the north side of the town;" went to Vauxhall, "that much vaunted pleasure garden, where the youth of London, almost every evening in summer, divert themselves," and to Ranelagh; to Peter Collinson's garden at Peckham, "a pretty village" three miles out of town; and to Chelsea, "a little suburb or village, situated a couple of miles towards the west," where "a multitude of people in fine weather in the summer come out to west, "where "a multitude of people in one weather in the summer come out to enjoy themselves." Londoners frequently spent what in the north is called "the week end" in Chelsea. There is also a full account of the trees of the "beautiful forest" of Epping. The London smoke impressed him greatly, and is often referred to—it discoloured "tin and silver gildings," and "statues of former kings looked just as if the image of a nigger or of a crossing sweeper had been set up, only in royal costume." "When the snow had lain a couple of days on the roofs," he continues, "it began to acquire a black colour; the houses were all either blackish or grey from the coal smoke. To a foreigner and one unused to it, this coal smoke was very annoying, for it affected the chest excessively, especially at night. I found in my own case that however free I was from cough when I now and again went into London from the country, I got one always as soon as I had been there a day, which never failed to be the case, even further on in the summer when the air was warm, and there were not large fires in the town; but as soon as I left London and had been two days out in the country, I lost my cough. All who lived far out in the country, and were not accustomed to coal smoke, even native Englishmen, had the same tale whenever they came up to London on their business. But when anyone had been for a time in London he no longer had so very manifest a sensation of it. Nevertheless, I am not altogether indisposed to believe that this great coal smoke is even one of the reasons that cause so many in England to be troubled with lung disease and consumption.

Here is a brighter picture of London life. "At the beginning of May was seen at many places in the streets a custom which milk-girls practise. They had bound together several vessels, such as cans, pint pots, drinking cups, &c., which were mostly of silver(!) but sometimes also of tin, and made with them a device, either like a pyramid or like a man, or most frequently like a woman, or also in some other fashion. Some of these images were decked with a number of flowers. They were carried either on a barrow or on the head. A spelman or fiddler, who played the viol, always accompanied them, together with several girls. They mostly stood in front of each house where they were accustomed to offer milk for sale, when the fiddler fiddled and one or more of the girls danced. The usage was that after they had done this they received pence from the persons at whose houses they danced. They began this on the 1st of May and kept it up for some days." Alas! the milkmaids and their May dances are gone, it is only

the smoke that remains.

The book abounds with quaint and interesting passages, and will well repay perusal. Perhaps some after reading it will be pleasantly reminded of the author when the spring brings it the beautiful *Kalmia*, which bears his name.

NOTICES OF BOOKS.

In Annals of a Fishing Village (William Blackwood & Son, 7s. 6d.) the "Son of the Marshes" gives us some delightful chapters of what we can hardly be wrong in believing to be autobiography, although it does not purport to be so, and is written in the third person; and with it may fitly be noticed A Son of the Fens, by P. H. Emerson (Sampson, Low, & Co., 6s.), which claims to be autobiographical, but, unless we are mistaken, is not really such. Both are interesting books, and will repay perusal; the author of the former, indeed, needs no commendation to our readers, and Mr. Emerson's previous works have been well received by the press.

"Marshton" is not the real name of the "fishing village" depicted in these charming pages, but there are sufficient indications given in the text to enable

any one acquainted with the Kentish marshes to identify it. It is the history of the past that is presented to us—not of the remote past, indeed, but of a time before the railways had penetrated the region described. The most touching chapters in the book, throughout which pathos is by no means wanting, are those which describes the visit of Denzil to "the scenes of his old wanderings," after a few years' absence.

"The fisher folk had already begun to change like their surroundings, they were losing much of their peculiar dialect, and although the older members of the community still clung to their fanatical opinions and weird superstitions, yet they had to give way outwardly to the new order of things. Four short years had worked marvels, Den thought. . . The large old-fashioned inn at Standbeck, where as a boy he had gone to gaze at the golden eagles, had been converted into a big draper's establishment, which was the centre of a busy street. be the place where the broken jetty stood, looking always ready to be washed away? A solid landing place for the steamers had taken the place of old seawalls; it was heavily timbered at the sides with huge driven piles covered with sea-weed tangle, where the great winkles hung thick as blackberries on a bramble bush; where the great eels had twisted about visible at low water, and the crabs scuttled along in search of their food. . . As the railroads gave facility for placing product in the London markets and elsewhere, cement works, wharves, and ship yards appeared along the waterside, as though by magic, it seemed to the slow thinking and acting graziers and old marsh dwellers; and in the spots where at one time the silence had been broken only hy the cry of wild fowl, rang out the clink and hum of machinery, and the cling of hammers, the fowl having flitted for good."

The volume is mainly occupied with the doings of Denzil and of his two fisherboy companions, 'Winder' and 'Scoot.' As befits their race and place, they are far more robust and daring than Bevis and his friends, whose exploits were narrated by Jefferics, and their proceedings partake more largely of adventure. There is, indeed, a freshening breeze throughout the book which distinguishes it from the other works of this writer, and brings with it "sights and sounds of the infinite sea."

Extracts fail to convey any adequate notion of this delightful volume; as Mr. Dick Swiveller said of another attractive combination, it "can't be tasted in sips." It is full of the most wholesome form of Selbornian teaching, and must take a prominent place on that shelf of books which should form part of the "plant" of every branch of the Selborne Society. Here is a passage showing the relations be-

tween Denzil and his "feathered friends."

"With his tame birds that he managed to keep in some spot or other—his feathered friends and companions- . . . all their wants were anticipated; he watched them night and day, and talked to them, the lads said, in their own language. It was certain they understood him. One large brown owl he had which followed him about like a dog, and watched for his coming, yelling at times like a feathered demon if Den remained away too long. In the dusk of evening he used to walk about with his wise-looking companion perched on his arm, free and unfettered, without one feather in his fine wings missing. The boy had his faults, like all other boys, but he was never known to mock at sacred things, or at any true professor of religion. When he grew older he used to say no true naturalist ever could fail to see and reverence God in His works."

Mr. Emerson's Son of the Fens is a very different character, and we fear can hardly be accepted as an exponent of Selbornian principles. His career is traced in an autobiography extending from his fifth to his thirty-third year, and, so far as we are able to judge, gives an accurate if not a complete record of the ordinary life of the natives of the Norfolk fens. There are no graces of composition, and none of the appreciation of nature which gives such a charm to Denzil Magnier's history; but it may be said on the other hand that the picture drawn is more vraisemblable, and that, as an accurate painter of the realities of life, the "Son of the Fens" is more to be trusted than the "Son of the Marshes." Mr. Emerson has shown by his previous works, one of which was noticed in these pages (NATURE NOTES, 1890, p. 44) that he is well acquainted with the fen country, and the dialect in which Dick Windmill relates his history may be accepted as accurate. The footnotes help to render this intelligible to the

ordinary reader, but they might well have been more numcrous. The work is worth perusal, but it can hardly claim a permanent place upon the Selbornian bookshelf.

Science Ladders, by N. D'Anvers. 5 vols., 8vo. London: Geo. Philip & Son. I - each. This is a series of simple reading-books giving lessons in physical geography, natural history and geology. They are quite elementary in their scope, and are written in sufficiently simple language for any intelligent child to understand; at the same time they show every sign of careful preparation, and are generally trustworthy. They are much superior to any science text-books of an equal standard with which we are acquainted. The first volume is on *The* Earth and its Early Explorers, giving in 146 pages a simple account of the most striking phenomena of physical geography, and a sketch of the history of early exploration; this is one of the best of the series and except for an occasional introduction of catastrophes (e.g., pt. ii., p. 10) and an antiquated theory of the causes of the ocean currents, there is little to object to. The second volume on Vegetable Life and its Lowest Forms is far less satisfactory: the author in more than one place defines and uses ovule as equivalent to seed, and defines dry seeds as those that burst their envelopes. He says that the old leaves of Sigillaria formed the trunk; that water is a "mixture" of hydrogen and oxygen. On p. 32 he states that "the stomata are most numerous on the upper side of leaves which are exposed to the air," whereas, those that grow straight up have them on both sides, and those under water only on the lower side; but the confusion of fact is perhaps a mere matter of detail, since it enables the author to draw a sound moral as to the benevolence of such a providential arrangement of things. The definitions are generally couched in simple language, so simple in fact, that it is often quite impossible to tell what is meant, as when (pt. i., p. 16) the nucleus is defined as "so-called because, like a nut, it holds the kernel or the heart of a plant," or when (pt. ii., p. 20) the author points out that "fungi are more like animals than plants in their volatile parts." It is to be regretted that in the chapter on lichens no hint of symbiosis is given. Volume III. deals with Lowly Water Animals, some of which Mr. D'Anvers makes a good deal lowlier than they are, as when he places (p. 31) the sponges in the Protozoa and much lower than the Infusoria. It would be quite easy to pick out many small mistakes in this, as in the other volumes, but perhaps the most serious is that the figure on page 20 of part ii., which is said to be a ship-worm is really a *Pholas*. The author is often happy in his choice of simple illustrations, but his name for rotifers of "tiny creatures with water-works" is not one of these, as the term would have been far more aptly applied to the water vascular vessels of the echinoderms. The fourth volume on *The Life Story of our Earth* is an improvement on the last, though the frontispiece of a labryinthodon without any tail is a bad start, especially as the author correctly states in the text (p. 71) that they had long tails; the statement on p. 14 that the earth has "a cooler outer crust of watery matter" is not a model of precision.

The last part is devoted to *The Story of Early Man*, and is a pleasantly written sketch of the elements of the subject; that most of it is a compilation and not based on personal knowledge is shown by such mistakes as that the altar stone at Stonelenge is of "blue marble" instead of red sandstone, and that at Abury there are two stone avenues leading to the circles. The statement that "during the glacial period the centre of North America was one great lake . . . [which] became broken up into the now well-known group of five great sheets of water, of which that of Niagara is one" shows that the author understands the pleistocene geology of North America as clearly as he does the difference between a waterfall and a lake.

SELBORNIANA.

Selbornian Teaching in France. — A correspondent sends us the following article from Le Jour of August 1st, which we reprint in extenso:—

"LE PLUMAGE DES OISEAUX.

"Si les mondaines savaient comment on se procure la plupart des brillants plumages dont elles ornent leurs chapeaux, certainement elles s'en montreraient moins fières! La plume, en effet, une fois arrachée à l'aile de l'oiseau mort, a perdu ses vives couleurs; elle n'est plus qu'une pâle image de ce qu'elle était lorsque l'animal, débordant de vie, s'élançait joyeux et libre dans l'air.

Aussi, pour lui conserver son éclat soyeux et sa chaude douceur, l'homme, être très ingénieux, l'arrache brutalement à l'animal encore vivant, alors que le sang chaud circule encore dans ses veines. Et, par un raffinement de cruauté, il choisit pour cette sinistre opération l'époque de l'année où l'oiseau, tout a l'ivresse

du printemps, se livre aux joies de l'amour.

"Dans certains magasins de Londres, où s'opère en grand le trafic des plumes, on les entasse à hauteur d'homme et l'on a petne à marcher au milieu de cette mer de duvet. Un marchand recevait dernièrement, en un seul envoi, 32,000 colibris, 80,000 oiseaux aquatiques et 800,000 paires d'ailes. De même, dans une récente vente aux enchères, on adjudgeait, à des prix variés, 404,389 peaux d'oiseaux du Brésil ou des Antilles, 356,389 des Indes orientales, sans compter des milliers de faisans et oiseaux de paradis. Long Island, seul, exportait l'an dernier 40,000 hirondelles de mer. Et, comme on le pense bien, pour fournir à la consommation une telle quantité de plumes, il faut se livrer parfois à une véritable guerre d'extermination.

"Plusieurs espèces admirables ont déjà disparu ou sont en train de disparaître. Dans le nord du Malabar, l'Aleyon smyrnensis, entres autres, aura bientôt cessé d'exister: il y a quelques jours, on vendait en bloc, au prix dérisoire de 50

centimes la pièce, 5,000 dépouilles de ces merveilleux oiseau.

"On a dit souvent qu'une femme doit souffrir pour être belle. Doit-elle pour cela faire souffrir les plus charmantes bestioles de la création?"

The New Forest Out of Danger.—We are glad to learn from the Entomologists' Monthly Magazine for August that the exertions of Mr. Herbert Goss have been crowned with success. Mr. Goss writes:—"Persons interested in the New Forest will be glad to hear (if they have not already heard) that the vigorous opposition made during the winter and spring months to the Government proposal to acquire sites in the Forest for rifle ranges has been successful. In the first place, the Ranges Act, 1891, under the authority of which the whole Forest was at the mercy of the War Office, has been repealed; and subsequently the objectionable clauses of the Military Lands (Consolidation) Bill, 1892—by virtue of which the Government, although giving up under pressure their greater powers, might still have retained 800 acres of the Forest—have been struck out in committee. Further, a clause has been inserted in the Bill last mentioned providing that nothing in this Act shall authorise the taking of any land in the New Forest, or shall empower the Commissioners of Woods to grant or lease, or give any license over any land in the New Forest.

"The result of the recent agitation, and the consequent repeal of the Ranges Act, 1891, and the modification of the Military Lands (Consolidation) Bill, 1892, is to leave the Forest in exactly the same position, legally, as it was in after the passing of the New Forest Act, 1877, by which Act it was secured to the public as an open space. All naturalists should feel much indebted to the verderers and commoners of the Forest, the Commons' Preservation Society, the London and local press, and to various individuals, for their continuous efforts to preserve the Forest for the public, and for a result which has been attained only after a long and uphill struggle and the expenditure of a considerable sum of money."

Should not the Selborne Society have been enumerated among the bodies to

whom naturalists should feel indebted?

A Good Example.—A case of considerable interest far beyond the locality immediately concerned has just been decided at the Bristol Assizes. The

parishioners of Walton-in-Gordano are blessed with a common, rising in the middle to a breezy hill, the whole covering some sixty-five acres. At one time the common was of wider extent, but the local lords of the manor, by means of the old game of encroachment, have brought it to its present limits. The subject of the recent trial was a determined attempt to annex the remainder, hill and all, but we are glad to say that by the aid of the Bristol and District Footpaths Preservation Society the parishioners have been able to vindicate their rights. A feature of the case was the revelation of the methods adopted by the encroachers. They set up a wire fence with a diabolical invention described as a "fish-hook barb" in the middle of the common, and planted the land with thorns. This was annexation with a vengeance, and the jury marked their sense of it by ordering the defendants to remove both fence and thorns,—Daily Chronicle, August 16.

The London Ivory Sales.—There is an interesting article in the Leisure Hour on "A London Ivory Sale," which is crammed full of facts which it must have taken a great deal of trouble to collect. In order to replenish the ivory market of England 15,000 elephants have to be killed every year. The annual slaughter of elephants amounts to 75,000. As the elephant does not begin to breed until it is thirty years old, and the average is one youngster every ten years until he is ninety, the extinction of the elephant is within measurable distance. The total cash value of the 200,000 elephants in the Congo Basin is only half a million sterling, each elephant being supposed to have 50 lb. weight of ivory in his jaws. Some tusks weigh as much as 200 lb., but that is very rare. The tusks for billiard balls fetch the highest prices, as much as £110 a cwt. being paid for them. Ivory dust and ivory shavings are used by confectioners as stiffeners for jellies. Out of every cwt. of ivory, 13 lb. remains as scrapings, which are burned into ivory black, worth from £16 to £20 per ton. Hippopotamus ivory is harder than that of the elephant. The outer coat is so hard that it resists steel and strikes fire.—Review of Reviews, July 15.

How our Ferns are Exterminated.—When visiting lately a beautiful village in the heart of the Scotch Highlands I was sorry to observe a placard posted in a prominent position, stating that the local church was in debt, and that it was proposed to lessen this by digging up and selling the choice ferns of the neighbourhood. I myself saw offered for sale on a table in front of the principal inn, tufts of holly fern (*Polystichum Lonchitis*), which is now getting extremely rare in this country, and also parsley fern, black and green spleenwort, bladder fern, and several others. One is almost provoked to say that it would be preferable not to go to church at all, than to one which is subsidised in this manner.

E. G. B.

Children's Country Holidays.—We have received 15s. in answer to our appeal on p. 123, from H. G. P., to whom we return thanks on behalf of the child thereby made happy. We trust Mr. Cyril Jackson has received many such sums through the agency of Nature Notes.

Pinner Juvenile Branch of the Selborne Society.—This Branch has been started for the sake of promoting a love of natural history among children, and of widening their knowledge and interest in all natural objects. Twelve ladies have kindly promised to lend their houses as centres for monthly meetings throughout the year, when fresh information will be given, partly by addresses on different subjects, partly by discussion and enquiry. The annual subscription of 2s. constitutes a family membership, and no other expenses will be incurred. Although all members of families will be welcomed at the meetings, it is specially hoped that children will join in large numbers. The Rev. C. E. Grenside, vicar of Pinner, is the President of the Society, the Hon. Sec. being Mr. Louis Davis, of the Cocoa Tree, Pinner.

The Hilly Fields.—It appears that only about £1,000 is now needed to preserve this open space, the importance of which was set forth at some length in these pages (NATURE NOTES, 1892, pp. 50, 97). The Lewisham District Board of Works still perseveres in its discreditable refusal to co-operate with the London County Council in purchasing the Fields. It is to be hoped that local public opinion will be brought to bear upon a body which spends public funds upon the eating and drinking of its members, but declines to contribute towards so important a plan for the public good.

NATURAL HISTORY NOTES, QUERIES, &c.

A Pyramid Snail.—Mrs. H. D. Rawnsley sends us the following interesting extract from a letter just received from Egypt:—"One hot afternoon when we were in Egypt, my sister and I picked up a number of little white snail shells, which we found among the sand and rocks near the Great Pyramid. We brought them to England in a cardboard box, and there they have been shut up for nearly eighteen months on a large tray, with all the other Egyptian 'anticas.' About three weeks ago they were all arranged on shelves with glass doors, and the lid was taken off the snail box. I was startled one morning by the housemaid asking, in an awe-struck voice, whether I thought there was 'anything alive among those queer things?' I decidedly thought so when I looked and found that one of the snail shells had walked out of the box and was sticking to the glass!

"His habits are very interesting to us. Sometimes he does not stir for days, but we occasionally find him in a new place. He always walks in the middle of the night, and we have only once seen him rapidly moving along about II. 30 p.m. A very vigorous, sand-coloured juicy-looking little fellow, with horns out and eyes that apparently see nothing, as they took no notice of a lighted candle put close to the glass. We call him Cheops, and as he apparently lives on nothing, and goes to sleep for eighteen months at a time, he may have seen the Pyramids built! We can find nothing he will eat, so we can do nothing for him. I have tried my best by surrounding a piece of the limestone casing of the Great Pyramid with sand, thinking he might like to bury himself, but he did not appreciate my efforts."

A Swallow's Nest.—I was surprised to find, on the 31st July last, the nest of a swallow, containing young birds, near Chagford, Dartmoor, in a hole in a high wall bounding one side of a road along which I was walking. Having never seen a swallow's nest in such a situation before, I should be glad to know if any of the readers of NATURE NOTES have ever met with a nest of this bird in such a place.

J. M. Voss.

A Captured Daddy-long-legs.—The other day I noticed one of the smaller species of the *Tipulidæ*, vulgarly called "daddy-long-legs," struggling violently, as though held fast, at the end of the frond of the common *Lastrea* fern (*L. Filix-mas*). Upon breaking off that portion of the frond with the insect, and examining it under a glass, I found that the withered point of the pinna tightly held the leg just above the joint of the tibia and femur. It seems very extraordinary how the insect could have got into this position, unless the leaf curled up just at the moment the insect's leg was there.

R. M. W.

Largesse (p. 150).—The custom of asking "largesse" of visitors still prevails among the workers in the Suffolk crag pits. Most of these pits are between Ipswich and Felixstowe

J. E. COOPER.

A. B. B.—Wayfaring Tree (Viburnum Lantana).

Miss H.—The plants are: Sea Purslane (Arenaria peploides), Sea Milkwort (Glaux maritima), a Scurvy-grass (Cochlearia), and a Sea Sandwort (Spergularia). For purposes of identification it is best to attach a number to cach specimen.

E. H. H.—Jacob's Ladder (Polemonium caruleum).

M. Lee.—(2) Corydalis elaviculata; (4) Hypericum pulchrum; (5) Autumn Gentian (Gentiana Amarella; (7) Sundew (Drosera rotundifolia); (10) Wood Sage (Teucrium Scorodonia); (11) Figwort (Scrophularia nodosa).

What is Foxwort?—A writer in the *National Observer* of August 13th, gives some interesting extracts from "a farmer's note-book" kept early in the last century. He says "Nearly all [his recipes] are compounded from such well-known herbs as foxwort and dandelion," &c. The name foxwort does not occur in the *Dictionary of English Plant Names*, so that it can hardly be very "well known." Can any reader of NATURE NOTES tell me what plant is intended?

An Oversight.—We omitted to mention last month that we were indebted to the kindness of Sir John Lubbock for the use of the two cuts illustrating Mrs. Brightwen's paper on "Seedling Trees." The cuts are taken from Sir John's important work on Seedlings, which will shortly be published by Messrs. Kegan Paul, Trench & Co.

OFFICIAL NOTICES.

OUR VOLUMES.—We desire to call the special attention of our readers to the volumes of NATURE NOTES for 1890 and 1891, which may be obtained at the offices of the Society, 9, Adam Street, Adelphi, W.C., at the cost of three shillings each, or by post, three shillings and fivepence. By the variety and interest of their contents these volumes are admirably adapted for the school or parish library, and we would urge upon our readers not to neglect so excellent a means for advancing the interests which they have at heart. Cases for binding the numbers for 1890 and 1891 may be obtained from the Secretary at the above address, price Is. each; or the numbers will be bound and the case supplied by Messrs. Bale & Sons, 87, Great Titchfield Street, W., at the cost of Is. 3d., or with gilt edges, Is. Iod. The name and address of the sender, with stamps to the above amount, should be forwarded with the magazines in order to prevent mistakes or delay.

THE SELBORNE SOCIETY.

THE object of the Selborne Society is to unite lovers of Nature for the following purposes :-

The Protection from unnecessary destruction of Wild Birds, Animals and

Plants;

The Protection of places and objects of Antiquarian Interest or Natural Beauty; The Promotion of the Study of Natural History.

The minimum Annual Subscription (which entitles the subscriber to a monthly copy of the Society's Magazine) is 2s. 6d.

All particulars as to membership may be obtained from the Secretary of the

Selborne Society, 9, Adam Street, Adelphi.

NOTICE TO CORRESPONDENTS.

Contributions for any number should reach the Editor, JAMES BRITTEN, F.L.S., 18, West Square, London, S.E., not later than the 15th of the month.

When it is particularly requested, MSS, not accepted will be returned, if stamps sufficient to pay the postage are sent for that purpose. Short notes on Natural History or Selbornian subjects will be especially welcome. In every case contributions must be accompanied by the name and address of the writer.

Queries on any points connected with Botany, Zoology, or other branches of Natural History, will be answered if possible, and advice will be given as to the best books for students in any department of Natural Science; but all questions must be accompanied by the names and addresses of the writers, not for publica-

tion, if this is not desired.

Specimens sent for identification will be named, if sent carefully packed and in good condition, and if sent to the Editor, but we cannot undertake to return any specimens. Not more than six specimens will be named at one time, and, in the case of common plants, it is suggested that correspondents will find it far more useful to work them out for themselves than to send them to us for naming; we shall always be willing to confirm or correct such determinations.

We shall be glad to notice any books bearing upon natural history in any of its branches, and to direct attention to magazine articles of the same kind, if these are sent to us. Publishers will confer a favour upon our readers if they will always state the *price* of any volumes they may send, in order that it may be quoted in the notice. This addition is much appreciated by our readers, and

is desirable in the interest of the volumes themselves.

It is particularly requested that subscriptions and letters connected with busi ness should not be forwarded to the Editor, but to the Secretary of the Selborne Society, 9, Adam Street, Adelphi. Editorial communications, specimens, and books for review should be addressed to Mr. BRITTEN, as above.

Mature Motes:

The Selborne Society's Magazine.

No. 34.

OCTOBER, 1892.

Vol. III.

THE MASTER OF THE BUCKHOUNDS.

O compromise with social or bodily disease is a dangerous thing. What would be thought of a physician who gravely assured his patient that in another year he would treat him for his malady, but meanwhile he must wait? It would be small wonder if by that time supposing

must wait? It would be small wonder if by that time, supposing the sufferer did not succumb, his complaint became incurable.

The love of cruel sport is a social disease still rampant among A favourable opportunity has lately presented itself of applying an immediate remedy with reasonable prospects of a cure. The recent change of Government suggested the abolition of the office of the Master of the Buckhounds, and the royal pack as well. Absurd as are many of the antiquated offices that still cling round a modern government, all reasoning people have ceased to believe that the Windsor district is a wild and tangled forest in which the mighty stag roams, as of yore, monarch of the woods, a fair match for man, horse and hound in strength and sagacity, and a terrible foe when brought to bay. There is just this to be said of the other needless appointments in the Ministry, that if they do no good they at least do no harm; but to the absurdity of keeping up the office of the Master of the Buckhounds is to be added the cruelty which the whole system entails. This seems to have impressed the Prime Minister so far that the appointment has been made for one year only. The immediate abolition of the office would have set the seal of the state on opposition to cruel sport in all its forms. As matters now stand a distinct recognition has been given it. Pigeon-shooters and rabbit-coursers will justify their action on the plea that those high in rank are permitted to indulge in similar amusements, only on a larger scale. If the stream is to be purified the cleansing must begin at the fountain-head; in other words, if the masses are to be dissuaded from their indulgence in

pigeon-shooting and rabbit-coursing, a blow must be struck at

the hunting down of tame stags by the classes.

It is needless to harrow the feelings of our readers with a lengthy and detailed description of the sufferings inflicted on the unhappy animals, but some (though not among the members of the Selborne Society) are ready to bolster up the appointment on the pretext that the State thereby recognises the inherent and ineradicable love of "sport" in the English nation. The following quotation from the *Star* shows to what extent real sport is a factor in these proceedings in the neighbourhood of the Royal borough:—

The exact date of the "catch" is always kept a profound secret. The officials like to steer clear of the "London division" on that day. The men employed are not warned until the morning of the event, when the grooms of the royal stables at Windsor take the Queen's horses out for exercise. Windsor Great Park is the common rendezvous, especially when the mushrooms are about. The grooms wait to see a few piles of hurdles set down about Cranbourne paddocks, and then they scamper off to Windsor, Eton, Datchet, Old Windsor—in fact, to every place near the Royal borough—to tell the news.

The writer goes on to say that in this way all the ne'er-dowells in and around the Royal Borough get their information and are up betimes to see the "sport." After stating that he has seen the stags caught, and the stags hunted, and can truthfully say that the one practice is as infamous as the other, he continues:—

During the month of October the red deer are in their prime. They stand erect, with their splendid antlers branching out from their proud heads. This is the time when they are cornered and caged for Her Majesty's hunt. The nets are spread, the hurdles raised, and there follows the mad howling of horsemen and dogs, driving the deer round and round till they fall exhausted in the web. The affrighted animals struggle and kick, their tongues hang from their foaming mouths, while the ladies chatter and laugh at what they call the "jolly sport." Out come the park labourers from their hiding place, and the poor stag feels the clutch of brawny arms. Then the saws begin their work. The splendid antlers are sawn away, and the stag emerges from the nets to be driven into the cage, foaming and dead-beat, with little knobs where formerly the horns were, bleeding. When enough deer have been secured, off goes the van to Swinley Paddocks, the workmen return home beer laden, and the sporting papers announce that "a very prosperous season with Her Majesty's is anticipated." All this is done in a Christian country in the name of sport, and will happen again during the coming season.

Such is the description of catching the deer; equally heart-rending is the scene that follows later on. The incidents are summed up in this forcible appeal:—

When the tame deer, hauled from the cart, fawns upon its would-be pursuers and has to be goaded even to a gentle trot, when it takes refuge in a private house by leaping through a sheet of glass at the peril of its life—when in its efforts to escape the teeth of the hounds it is disembowelled on a fence of barbed wire, and when its lacerated body has to be dragged by the huntsman from the fury of the pack—in these circumstances, and in the other horrors which every reader of The Star knows to follow in the wake of the tame deer hunt, fine ladies and gentlemen may close their eyes to the facts, or, like the cowards that some of them must be, enjoy the "sport." But if you recognise that sickening barbarities, savage and inhuman cruelties, are inflicted upon the mild, piteous, graceful animals, and recognising this, still continue the hunt "during one season more,"

you are knowingly guilty of brutality which no specious phrases, no chatter about custom and the conventionalities of royal appointments, can ever by any possibility mitigate, much less excuse.

It is too late to do more than join our protest to that which so many other journals have already made against all this cruelty. It is common knowledge that Her Majesty has expressed her strong disapproval of the practice—a disapproval that should have been immediately respected; and the very fact that the buckhounds are to be kept up only another year is an evidence of the growing abhorrence and disgust in which such an institution is now held by all right-thinking persons. All that is left is for us to make the most of this concession, such as it is. Trusting that the cure will not come too late, let us hope that after the hateful thing has been put away, it will be speedily forgotten, and that following in its train a host of other cruel amusements will become things of the past. And let every reader of Nature Notes, by word and deed discouraging false sport, do his or her part to bring about this result.

ARCHIBALD CLARKE.

THE SPARROW ABROAD.

HE great Sparrow Question—"to be or not to be"—is by no means confined to these islands, and we think it may be of interest to quote some experiences of observers in other lands. It is evidently as difficult abroad as at home to sum up and weigh accurately the evidence

for and against this ubiquitous and irrepressible bird.

Mr. F. A. Sampson, writing in the American journal, Science, for August 5th, is on the side of the sparrows. He gives a long list of birds, many with unfamiliar names and some with well-known names strangely applied, which have not been affected by the sparrow, and he evidently considers the martin more than able to hold its own, although the bluebird and the chippee have bad times of it. He writes:—

The town martin has always been in the city in great numbers, making their nests in all kinds of cavities around the houses in the business part of the city. These same places were taken possession of by the sparrows; and they being here the year round, and making nests even in the winter time, the places belonging to the martins were appropriated before their arrival, and when they came they had to fight to recover them. I was much interested in watching one of these fights. Across the roof of a one-story building, next to my office, and in the top of the adjoining building, a martin had found a hole, and had appropriated a place within for a nest. A sparrow had also afterwards done the same, and was found in possession when the martin arrived from its winter pilgrimage. The latter at once gave fight, and time and again during their fight they would fall to the roof below, and were so intently engaged that more than once I had my hand almost upon them before they would let go of each other. The martin won the fight, and the sparrow gave up the nest it had taken. As I now sit in my yard the martins are circling overhead by the hundred, they staying during the day in the

business part of the city. It is very evident that the sparrows have not run the martins out, although they are direct competitors for the same nesting places.

Vears ago the chippee always made its nests in my yard, but has not done so for six years, except in one case, and that nest was abandoned without being completed. I do not know the reason; I imagine the English sparrow domineers over the little chipping sparrow, but still the latter quit nesting in my yard before

the former commenced.

I put up boxes which were formerly occupied by blue-birds. As soon as the sparrows nested in my yard they took possession of these boxes; and when the blue-birds came they did not have the grit or strength to turn the intruders out, and they went elsewhere to nest. After nesting time they are seldom seen in the city during the summer. Very clearly the sparrows have driven the blue birds out of this part of the city and possibly the chippees; but if they have affected any other kinds, my observation has not been keen enough to detect it, though I have had my attention directed to it for years.

Mr. W. A. Oswald, in the Canadian Record of Science for July, is a pronounced antagonist. He will have none of the sparrow, who was brought to Canada about twenty years ago, and carefully protected and fed. The countryman who warmed the snake seems to have been a mild prototype of the country which welcomed the sparrow. It increases rapidly, is hardy, and "seems to be able to endure the cold winters of Canada as it does the tropical heat of Australia, and it is rapidly becoming a troublesome pest in both of these widely separated countries." Mr. Oswald sums up his indictment thus:—

It has often been stated in favour of the sparrow that they destroy caterpillars, worms and the smaller insects that are injurious to trees and vegetables; but from frequent observations and dissections by experts, it has been proved that while they are young they are fed partly on insects, but as they reach maturity their food consists almost wholly of grain—while it is a known fact that the food of blue-birds, white-bellied swallows, and the cliff swallows, consists entirely of caterpillars, worms, butterflies, moths, and small insects. Yet these are the first birds to be attacked and driven away from their nesting places by the English

sparrow. . .

At one time dozens, and sometimes scores, of cliff swallows' nests might be seen attached under the eaves of farm buildings, almost all joined together as it were; yet these birds lived in perfect harmony with each other, sallying back and forth from their nests, gliding over the fields in search of food, catching butterflies, moths, and other insects; but since the English sparrow has made its appearance, they have taken complete possession of their nests. Not content with one, they enter into severe conflicts with adjoining swallows, breaking down their nests, and finally driving away a whole colony of swallows; and the farmer sees to his sorrow, instead of a colony of swallows living happily together with their agreeable and melodious notes, the noisy, quarrelsome sparrows with their ceaseless, discordant, unmusical notes, making thieving excursions to his fields or barn to feast on his grain; but he never observes it attempt to make a repast on insects. There are many others of our native birds which are valuable insecteaters that are being driven away by the English sparrow.

We shoot all we see around the premises, but it is expensive, as there are always new arrivals, especially in the spring and summer time, during the nesting

season.

As long as they are allowed to breed unmolested in villages, towns and cities, they will stock and pest the surrounding country, no matter how diligently the

farmer may shoot them.

Their extermination ought to be encouraged by premiums being paid for their destruction: and in places where multitudes are congregated together, large numbers of them might be destroyed by shooting, poisoning, or trapping. Laws affording protection to the English sparrow should be repealed, and instead,

parties appointed to pay a bounty on all sparrows killed, as well as on all nests and eggs destroyed, thereby helping to free the land from an evil as quickly as possible, before we lose too many of our most beautiful and useful insect-eating native birds, which are a blessing to the farmer, gardener and fruit-grower, and all who depend on them for a subsistence.

In New Zealand also the sparrow has his friends and his enemies. Here is a note from the New Zealand Herald of July 5th:—

I observe in yours of the 17th June, that some Wanganui gentleman laid poison on one day, and the following morning he picked up one sack and a-half of dead sparrows. They were ordinary corn sacks. I also observe in the Auckland Weekly News that your Auckland farmers are in favour of protecting these delicious birds, as they are doing more good than harm. I may say that if any of them would come down and try their hand at grain growing in this district they would alter their tone, as I can speak by experience for many years. I should be glad if the Wanganui gentleman would give his recipe for poisoning through your columns (unless he values it as an article of sale) as he would be a benefactor to a large number of colonial settlers.

Oaonui, Opunake. G. W. GANE.

Are we to suppose that the harmless sparrow of Auckland becomes mischievous when he gets to Wanganui, or that the miscreant of Oaonui reforms his evil habits on arriving at Auckland?

Leaving this side of the sparrow's character, we may call attention to a note by Mr. G. D. Haviland in *Nature* of August 25th. Referring to his destruction—too familiar to all of us—of the "flowers that bloom in the spring," especially crocuses and primroses, Mr. Haviland tells of a tame sparrow which had a great antipathy for purple. "It was brought up in a room, but not, or seldom, caged. It lived four or five months. A piece of blue paper placed over its food would cause it to hesitate, though if hungry it would eventually draw the paper aside; a person coming into the room wearing a blue dress would make it quite wild, and a habit of mischievously pecking at a certain part of the wall of the room was successfully stopped by hanging a piece of blue paper there."

The attacking of spring flowers by sparrows is no doubt the result of their fondness for the succulent bases of crocus blossoms and the sweet stamens of primroses, and is not caused by any fondness for colour; but a letter from Kensington, signed E. J. Hipkins, published in the *Daily Chronicle* for Sept. 5th, supports Mr. Haviland's statement. The writer says:—

This antipathy as well as attraction for certain colours I have noticed with sparrows I have kept. The first sparrow, a hen, would on seeing scarlet show painful signs of distress and faint away, and, although a courageous and fearless bird in every other respect, she would always show the same symptoms during the ten years she lived with me. The other two sparrows were cock birds, and the first of these had a fondness for blue, selecting that colour from a heap of coloured wools for his rough weaving, and preferring to sleep on anything blue, whether it was a duster or his mistress's petticoat. One of his especial delights was to play with a pack of cards by candle-light, and there again he invariably selected the black cards, carefully avoiding the red and court cards; but of these he showed no fear, merely avoidance. I have also noticed when feeding the out-door sparrows from an upper window, they fly away if I wear a red jacket, while my blue one inspires them with confidence.

We have evidently a good deal to learn before we know all there is to be known about the manners and customs of our common sparrow, either at home or abroad: just as we send this to press, we see that the old controversy has broken out afresh in the columns of the Standard!

THE EARLIER OPENING OF KEW GARDENS.

EADERS of NATURE Notes and Selbornians generally will, I think, be pleased to learn that there now seems to be a prospect that a much-desired privilege will be

Directly I learnt that Mr. Shaw-Lefevre had been definitely appointed to the Office of Works I wrote him the following

letter:--

Underwood, Kew Gardens,

Dear Mr. Shaw-Lefevre,

A consideration of your well-known desire to give facilities for the public enjoyment of open spaces, of your admirable services to the Commons Preservation Society and kindred institutions, and of your labours for the rescue of Epping Forest and Burnham Beeches from the hands of the spoilers—labours which I have myself had the honour and pleasure of joining in tempts me to take advantage of your appointment to the Cabinet post of First Commissioner of Her Majesty's Works and Public Buildings, by calling your attention to the great desirability of a somewhat earlier opening of the splendid Botanic Garden which, amongst many other important open spaces, now comes under your supreme control. I am fully aware of the important and weighty reasons which can be urged against a too wide relaxation of the present rules as to the opening of Kew Gardens, and I do not desire to ask for any urgent consideration of the matter. But knowing how strong is the feeling on the part of the public on the subject, that at least some little compromise should be made in the direction of an earlier opening of these beautiful and well-managed grounds—a feeling not only shared by the people of Kew and Richmond, but by a much larger outside public -it has occurred to me that you would probably be wiiling to allow the subject to be discussed with you by a deputation. Possibly some time during the autumn, when it would be quite convenient to yourself, you would kindly permit such an interview as I venture to suggest.

Believe me to be, dear Mr. Shaw-Lefevre, Yours most faithfully, FRANCIS GEORGE HEATH.

I had just previously written to tell him that I was quite sure all the friends of open spaces would rejoice that he had been appointed to this particular department; and when I addressed him as above, on the subject of Kew Gardens, I felt sure that with his unvarying courtesy, he would promptly respond. I was not disappointed, for by return of post I received the following reply:—

Dear Mr. Heath,

One line to thank you for your kind letter. I shall be very glad to see you here later in the autumn on the subject of the opening of Kew Gardens. In November next I shall be continuously at work here, and any day will then suit me.

Yours very truly, G. SHAW-LEFEVRE.

I think I am justified in assuming that this kind reply of the genial First Commissioner of Works is of favourable augury —for I am confident that, if some concession can be made, Mr. Shaw-Lefevre is the man to make it. I have always received so much personal courtesy and kindness from the permanent officials of Kew Gardens that I should be extremely reluctant to take any action that might seem to traverse their discretion. They must of course be consulted; but I do not for one moment imagine that they will raise any objection to what would be an extremely popular proceeding. I remember that Mr. Dyer, immediately on his appointment as Director, had the good sense to abolish the old non-smoking regulation, and he may be trusted to raise no unreasonable opposition to an earlier opening of the beautiful domain he manages. Perhaps it is only a question of expense, and, if so, it is fortunate for our object that the present Chancellor of the Exchequer is also an old friend of open spaces, on which topic I have in the past heard him discourse very eloquently. As Sir William Harcourt, when he is lives down in the New Forest, he is sure to sym-"at home," pathise with the desire of Londoners to see a little more of Kew Gardens.

It has, unquestionably, been for a long time considered a grievance on the part of the public that they should be daily excluded from these great national grounds up to 12 o'clock on week days and up to I o'clock on Sundays. I do not, of course, forget that Kew Gardens are not in the ordinary sense a public park. They constitute a great scientific institution, and there should be daily a certain "close time," to permit of the quiet and undisturbed performance of necessary work; but to most people it does seem unreasonable that as much as a half of each day should be required for undisturbed operations, and even if in a part of the grounds such a restriction is required. the "closure" need not apply to the whole. I am certain that the late opening of the Gardens has caused bitter disappointment to many thousands of persons - especially to visitors from the country—who have come out in the forenoon to Kew or Richmond for the express purpose of seeing this lion of the neighbourhood, and, their time being limited, have had to return disappointed. An earlier opening will vastly increase the public appreciation of this delightful place, and will far more than repay for the expense — whatever it may be incurred. Let me add, in conclusion, that as it will be important to organise a large and representative deputation for November next, I shall be glad to learn as soon as possible the names of those who may wish to attend.

Francis George Heath.

The renewal of the agitation for the earlier opening of Kew Gardens will, it is to be hoped, be persevered in until this most reasonable concession is secured. Fourteen years ago there seemed every reason to think that the boon would be conceded.

The inhabitants of Kew and Richmond, supported by the local papers, showed much enthusiasm; public meetings were held; the public press took the matter up, and it was finally brought before Parliament, backed by a petition with 25,000 signatures. That the proposal met was negatived in the Commons can surprise no one who was aware of the extraordinary exertions which were made by the Kew authorities to influence the opinion of Parliament. A memorial signed by a number of scientific men was widely circulated, and in this the case against the opening was stated in so plausible a manner that the result could hardly be doubtful. At the same time public feeling was equally strong in favour of the opening, and as a result the Gardens were, and have ever since been, opened at

10 a.m. on Bank Holidays.

Those who wish to study the history of the proceedings at that time will find them fully recorded in the columns of the Garden for 1878, where the various objections advanced are ably answered. Nor must it be supposed that scientific botanists, notwithstanding the great influence of Sir Joseph Hooker, the then Director of the Gardens, were unanimous in opposing the public desire. In the Journal of Botany for the same year, then edited by Dr. Trimen, the present Director of the Ceylon Botanic Gardens. will be found a temperately expressed, but decided, opinion in favour of opening. The chief reason given against it, says Dr. Trimen, is "that it would seriously interfere with the strictly scientific work of the Gardens which is carried on during the morning. If such a result were likely to follow the public opening of the Gardens it would be, in our opinion, a sufficient reason for refusing to make the change, but we are convinced that the danger is wholly in apprehension. Besides the officials themselves, we believe we are not wrong in saying that the number of persons engaged in any definite scientific work in the Gardens at Kew is exceedingly small. It is obviously undesirable that everybody else should suffer in order that half a dozen artists and experimenters in fertilisation may be undisturbed. What more easy than to rail off any spot (it is not asked to have the houses open) where special work is going on? Besides, there is the Jodrell Laboratory in the Gardens, built expressly for the use of the very persons in whose interests it is sought to continue to keep the whole of the Gardens closed till the afternoon. Wishing, as every botanist must do, to see the utility of the magnificent Gardens at Kew increased, we cannot but think that their early opening is much to be desired on behalf of a large class of deserving persons not likely to abuse the privilege."

We have never understood why the Kew Gardens Public Rights Defence Association, which was established to bring the matter to a successful issue, suddenly ceased its efforts and came to an untimely end. The long name may have had something to do with it; any way, the movement came to a standstill, and beyond an occasional grumble and a question in Parliament last

May, which received a very unsatisfactory answer, nothing further has been done. In the interests of Londoners and of the public at large, and especially in those of all nature-lovers, we trust that the present movement will not be allowed to cease until it has been carried to a successful issue.

It is important that the hollowness of the scare that the scientific work of the Gardens would be in the least interfered with should be clearly demonstrated; and nothing is more easy. To those parts of the Gardens where experiments in culture are carried on, the public are (very properly) at no time admitted, nor do they ever visit the forcing-pits or other places of the The Herbarium, where the systematic botanist pursues his work, is a building entirely apart from the Gardens; the Jodrell Laboratory, for scientific work of an experimental kind, is equally inaccessible to the public. If the Gardens were open every day from sunrise to sunset, the scientific work would go on, as it does now, unhindered and unchecked.

With regard to the houses in the Gardens, the case is different; they, of course, must be closed at times, in order that the necessary watering, cleaning, and like operations may be carried on. But, so far as we are aware, it is not proposed that these should be open earlier than they are at present, so that this

objection also falls to the ground.

There remains only the Gardens proper to be considered. cannot be seriously contended that the work in them would be interfered with by the admission of the public, any more than is the case in the various parks. The Kew "bedding" is not so extensive as that, for example, in Battersea Park, which is open all day and every day without let or hindrance; and we have never heard that there, or elsewhere, the people cause any inconvenience to the numerous gardeners engaged. It might, perhaps, be opportune at this juncture to reprint the little pamphlet issued in 1879 by the Defence Association, in which the question is dealt with at greater length than is possible here. But should this be done, we trust that one needlessly offensive passage—that in which it is stated that "the real reason of the exclusion of the public is that the scientific staff find it agreeable to have for themselves and their friends the exclusive command of these noble Gardens during the best part of the day," will be expunged, and that no insinuation of this kind will be countenanced by those who have the matter in hand.

While we are on the subject of Kew, there is another matter which may be mentioned—the absence of an authorised guide to the beautiful Gardens. There was an excellent one at one time, but this has been out of print, we believe, for five or six years. The subject has more than once been brought before Parliament, and Mr. Plunket last May announced that the book was almost ready, and would probably appear during the summer. The satisfactoriness of this assurance was somewhat marred by the reminder that "a precisely similar answer" was given "fourteen months ago." Perhaps Mr. Shaw-Lefevre may be able to

expedite its appearance.

On a recent visit to the Gardens we were informed that Mr. Hemsley's excellent Guide to the North Gallery was out of print, and we understand that the Handbook to No. 2 Museum has never been issued. We hope the Director of the Gardens

will supply these important omissions at an early date.

Judging from the past, we fear that Mr. Heath is a little oversanguine in supposing that the Kew authorities will raise no opposition to the renewed proposal. But we are confident that a reconsideration of the position will modify their objections, and we trust that Dr. Dyer will be as ready to extend the hours of opening as he was to increase the facilities for smoking—a somewhat doubtful boon, by the way, to those who do not smoke and dislike the smell!

THE EDITOR.

THE STARLING.

O LITTLE mocking-bird, thou dusk-winged stare, Singing thy song with innocent conceit, Dost thou not deem it wonderfully sweet? Thy light weight softly stirs the thin branch where Thou swayest 'gainst the faint-flush evening air; And to thy song a measure thou dost beat With the small, ugly wings that are as fleet As the blue swallow's, shapely-made and fair. In the full happiness God giveth thee, With many flutterings of thy little throat, Thou singest, singest, singest, and art fain To imitate the rippling melody, The trill delicious of the thrush's note, Or robin redbreast singing through the rain. MARY FURLONG.

NATURE NOTES IN THE MAGAZINES.

HE numerous contributions on subjects of interest to Selbornians which are to be found every month in the magazines show that the love of Nature is becoming increasingly diffused among us. From time to time we think it will be well to call attention to the more noticeable of these, in order that Selbornians may be made acquainted with them.

Taking last month's issues, we find in Scribner an article on "The Last of the Buffalo," by Mr. George Bird Grinnell, beautifully illustrated and full of interest. The Buffalo, which "once ranged over a large part of the American continent" is now practically extinct. "In the Yellowstone National Park, protected from destruction by United States troops, are the only wild Buffalo which exist within the borders of the United States. These are mountain Buffalo, and from their habit of living in the thick timber and on the rough mountain sides, they are only now and then seen by visitors to the Park." The actual number existing is estimated at from three to four hundred. "In the far North-west, in the Rance River district, there may still be found a few wood Buffalo"—the estimate of their number varies from five hundred to fifteen hundred. "Apart from man, the Buffalo had but few natural enemies," and Mr. Grinnell gives full and painfully interesting details of the way in which the war of extermination has been carried on.

In the Contemporary Review Mr. A. E. P. R. Dowling has a very interesting paper entitled "Flora Sacra," in which he treats of the numerous flowers dedicated to the saints, or associated with religious feasts, customs, and observances. Mr. Dowling's article differs from almost every other contribution written on this subject in the carefulness with which the wheat is separated from the chaff. He gives a long list of books which have copied, one from the other, statements based on no trustworthy authority, and traces to their source the various "spurious antiques" of Thomas Forster, and the supposed dedications of Hone. We think the English Dialect Society's Dictionary of English Plant Names might well have received a somewhat fuller recognition, and we regret that Mr. Dowling's paper is by no means free from misprints in the Latin names cited; we can assure him, for example, that we do not "say now, or try to remember, Briza medium" (sic). The attack on scientific names is not supported by common sense; and it is not just to imply that there is no "lesson worth the learning" in Latin commemorative titles. The paper on the whole, although exception may be taken to certain details, is interesting and accurate.

In the Nineteenth Century the Rev. B. G. Johns discusses what is known as 'mimicry' or 'protective resemblance' in a very readable paper on "The Protective Colour in Animals." Beginning with examples selected from Mr. Bates's Naturalist on the Amazons, he proceeds to show that "like and kindred marvels may be found here at home among the fields and woods of England." His instances, chosen from animals, birds, reptiles, fishes and insects, all observed "in a lonely nook among the Hampshire woods" are both interesting and instructive; but they "leave [him] in the midst of a crowd of mysteries, contradictions and anomalies, out of which [he] cannot see [his] way." "If some certain birds, insects, and caterpillars, and fish have or assume a protective colour, how is it that others, equally abundant, and equally thriving, set all this régime at defiance? If the peacock and tortoiseshell butterfly pick out the nettle for their dingy

brood of caterpillars, why does the comma select for her brood of brownish-red caterpillars the hop, the nettle, and the honey-suckle, where their colour at once betrays them? Along the coping and in the crevices of an old grey brick wall I often find the grey and brown chrysalides of certain small moths and butterflies, exactly matching the colour of their hiding place, and therefore safe; but not twenty yards away, hung on torn withered stalk or twig, I also find the chrysalis of some other similar flies, yellow, black, or brown, and certain, therefore, to be detected by the first hungry sparrow or tit that comes by. Why so much clever foresight in the one case, and none in the other? Again, our English grasshoppers are all of a green or brown hue, eminently safe among brown and green grass; at Cannes they are red, green, and blue among grass like our own." Similar questions to these must, we think, have occurred to every observer in connection with the subject of 'protective resemblance.'

Under the title "A Famous Family," Mr. Benjamin Kidd discourses in *Longman's Magazine* about aphides. Beginning with an account of the hop-aphis as we see it in the hop-fields of Kent, he proceeds to summarise Bonnet's early observations on the group, and goes on to deal with the extraordinary methods

of reproduction which they exhibit.

NOTICES OF BOOKS.

WE ought sooner to have called the attention of our readers to the latest contribution of our President to literature, but *The Foresters* (Macmillan & Co.) has been so fully noticed in the press at large that an extended review in these pages was unnecessary. While we may be allowed to doubt whether Lord Tennyson's plays merit the position which his poems have attained, we know that anything he writes is sure to contain lines well worth remembering—such, for example, as those with which Maid Marian brings *The Foresters* to a close:—

"And yet I think these oaks at dawn and even, Or in the balany breathings of the night, Will whisper evermore of Robin Hood, You, good friar, You Much, you Scarlet, you dear little John, Your names will cling like ivy to the wood. And here perhaps a hundred years away Some hunter in day-dreams or half asleep Will hear our arrows whizzing overhead, And catch the winding of a phantom horn."

Messrs. Dent and Co. have brought their series of reprints of T. L. Peacock's works almost to a close with his Maid Marian, which deals in prose with the same subject which Lord Tennyson commemorates in rhyme. These little books—the most charming half-crown's worth with which we are acquainted—need no commendation to those who admire Peacock, but they merit the notice of Selbornians on account of their beautiful "get up," as well as for the songs and lyrics which the author delighted to scatter through his works. There is a delightful little rhyme:—

"The slender beech and the sapling oak
That grow by the shadowy rill,
You may cut down both at a single stroke,
You may cut down which you will,

"But this you must know, that as long as they grow,
Whatever change may be,
You never can teach either oak or beech
To be aught but a greenwood tree."

"The tale," says Mr. Richard Garnett, in his introduction to the work, "isthe concentration of the love of sylvan nature fostered by years of an open-air life and perpetual rambles in Windsor Forest and by the banks of the Thames."

The recent death of John Greenleaf Whittier, the "Quaker poet," in his eighty-fifth year, has deprived us of another of the band of American singers who have become almost as popular in England as in their own country. Like Longfellow, he had a keen appreciation of nature, and his presentment of certain aspects of North American vegetation was graphic and accurate. Such poems as "April," "Hazel Blossoms," and many more, breathe the true spirit of the nature lover; while to this is joined his characteristic style of reflection in such verses as "The May Flower," or "The Last Walk in Autumn," from which we take the following descriptive verse:—

"Along the river's summer walk,

The withered tufts and asters nod,
And trembles on its arid stalk
The hoar plume of the golden rod.
And on a ground of sombre fir,
And azure-studded juniper,
The silver birch its buds of purple shows,
And scarlet berries tell where bloomed the sweet wild rose.

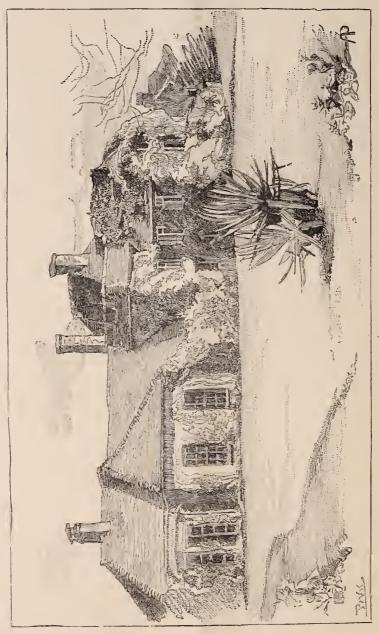
Messrs. F. Warne and Co. send us the "Albion" edition of Whittier's Poetical Works (3s. 6d.), a handsome volume of 576 pages; Messrs. Macmillan and Co. have published an edition de luxe of his complete works in seven volumes (6s. each), the "Poems of Nature" being collected in the second of these.

We are sorry that we cannot swell the chorus of favourable notices which Mr. H. G. Groser's Allantis, and other Poems (Hutchipson, 2s. 6d.) has called forth. The verses are smooth, but we cannot agree with the Daily Telegraph that they are a "happy exception to the rule of mediocrity." The odium theologicum is not wanting, and that which has been styled "the sincerest flattery" is conspicuous—not only in "The Fight of the Little 'Content,'" which recalls throughout another fight, that of "The Revenge"—a comparison which is not to Mr. Groser's advantage—but in other instances. Selbornians are always glad to hear the praises of St. Francis—"St. Francis D'Assisi," as Mr. Groser styles him—but what is the authority for the statement embodied in the following verse?

"And when around his dying bed
In the hushed cell his brethren drew,
About the moon-lit bars o'erhead
A feathered throng complaining flew.
And at his passing, gyre on gyre,
Through the frost silence rose and rang
The music of a skylark choir:
And till the grey sad dawn they sang."

We cannot say much in favour of *The Young Naturalists: A Book for Boys and Girls*, by Minnie M'Kean (Paisley, Gardner, no date). The book is well-intentioned, and the author has steered clear of "howlers," but the information given is meagre, the illustrations are very poor, and misspellings are sadly too frequent: e.g., "Foramenifera" (more than once), "Aveus" for "Avens" (four times). There is also far too much of what by courtesy is styled "poetry." Miss M'Kean falls into the common error of being childsh when she wishes to be childlike; and so she talks of "Lady Mollusca" and "Little Lady Arachnida"—"isn't she a funny little thing?"—and tells us what the midge "thinks to itself in midgey language;" she calls the sun-dews "clever little mites," and speaks of "a botanist named Fucho," after whom the "Fuschia" was named. A member of "our club" concludes a paper on the Daisy with—"I wonder if Spenser know what the moonbeam said to the daisy? If he didn't I could have told him. 'You shut up!'" We will take the hint.





Mr. Robinson's volume on Garden Design and Architects' Gardens (Murray, 5s.) is so beautifully printed and illustrated that our objection to the presentment of two reviews in the form of a book is qualified, although not altogether set aside. It is a counterblast to the book on The Formal Garden which we noticed on p. 73; and as we were on that occasion enabled to reproduce a specimen of the illustrations, so now, by the courtesy of the author, we are permitted to bring before our readers one of peculiar interest to Selbornians-a picture of Gilbert White's house at Selborne. Mr. Robinson has done as much as any man living to improve the taste in gardens, and his utterances are entitled to all consideration. We cannot help feeling, however, that in these reviews he has been unnecessarily bitter in his criticisms of *The Formal Garden* and Mr. Sedding's *Garden Craft*. Each arrangement has its charms-a fact which the illustrations of each book make abundantly manifest -and there is room for both. Nothing is gained by the use of violent language, and we think that Mr. Robinson has overstepped the bounds of moderation and courtesy in his animadversions; his English, too, seems to have suffered in the heat of the discussion. We are all the more ready to enter this protest from the fact that our sympathies are mainly with Mr. Robinson in the points at issue, and we are sure that his is not one of the "weak cases" in which it is necessary to "abuse the plaintiff's attorney." Mr. Robinson has, as we have already said, done so much to raise the garden to a higher level that we cannot but regret the asperity which, in our opinion, disfigures a beautiful book.

Several other volumes stand over for notice.

SELBORNIANA.

Sea-birds at Bridlington.—"A Disappointed Visitor" writes the following letter in the *Leeds Mercury* of August 31st:—"On revisiting Bridlington Quay after a lapse of some years, I have been painfully struck by the entire absence of sea-birds, which once were such a charm to Bridlington, and instead of seeing hundreds of gulls and other seabirds wheeling about close to the shore, in happy freedom, I only now see one or two scared-looking specimens flying timidly

across the bay.

"Every evening you may see groups of men, presumably visitors, coming in from the boats, with large quantities of shot birds, often far too mutilated to be of any use as specimens, and if you go off in a boat you are pretty sure to come across headless birds, or worse still, winged and mained living birds, left floating on the water, slowly and miserably to perish. I can only imagine that those who pursue this wanton cruelty are too ignorant to know how absolutely beneath contempt this vile butchery is, besides being utterly unsportsmanlike. The other day I spoke to a man who was going out to shoot sea-birds for the sake of their plumage, although he admitted that the fashion for wearing wings had disappeared, partly owing to the fact, no doubt, that our beloved Princess of Wales has forbidden any hats or bonnets trimmed in this manner to be submitted for her approval. The man I spoke to said, quite of his own accord, 'Well, it is cruel; it would be a good thing if the close time could be extended until September, for a great many young birds who are unable to fend for themselves, must perish if the old ones are shot now.'

"Does it not occur to people that this wholesale slaughter of sea-birds, besides disgusting naturalists, and many who do not care for this so-called sport, is depriving this part of the coast of one of its most famous attractions. I would most strongly urge that petitions be drawn up and signed, to extend the close season until September, when the young birds would have more chance to provide for themselves. There must be many of your readers, who are dwelling in the large towns, and come to this fine coast for their holiday, who would give their willing help in obtaining signatures to such petitions. This would strengthen enormously the local efforts, and before another season surely Bridlington will no

longer be obliged to witness such disgraceful and vulgar cruelty."

Footpath Preservation .- The following important letter from Miss

Octavia Hill appeared in the Times of September 14th :-

"An important point of law bearing on the preservation of footpaths has recently come to my notice, which it would be well to bring to the knowledge of the public, with a view to its undergoing alteration in the next session of Parliament.

"In a country parish with which I am well acquainted the largest landowner desired to close one footpath and divert another. They were of small moment to many of the resident gentry, who, as a rule, drive to their houses, and have parks, large gardens, or wood-paths in their own possession. But they formed pleasant walks for the poorer people, and as they lay between the village and the station they were much frequented. The feeling, therefore, among the poor was strongly in favour of keeping the paths. A vestry meeting was called to consider the matter, and on a show of hands the proposition to close and divert the paths was lost. A poll was thereupon demanded on behalf of the landowner, and a day appointed on which it was to be taken. Residents in the neighbourhood consulted authorities in London, as they could hardly believe it possible that the votes on such a subject would be reckoned according to the property of the voter. That is to say, that every ratepayer assessed under £50 would have one vote only, and that every £25 additional assessment gave an additional vote up to six votes. It seemed hardly possible that in a matter involving no expenditure of rates a preponderance of weight should he given to the richer voters, who are precisely those who are least interested. But this proved to be the case, and the statute, which was doubtless intended to preserve ratepayers from unreasonable burdens, is available to enable them to vote away the birthright of their poorer neighbours. Surely it is important that the law should be altered.

"In the case above referred to, an enthusiastic open-air meeting was held by the villagers as a protest against the scheme, and at the poll 75 of them recorded their votes against it; but 39 richer people, whose votes counted as 103, over-weighted them, and the highway board has decided that its function is purely ministerial, and that it is bound to consider that the 'wish of the inhabitants' is in favour of the proposed alteration. What the justices and the Court of Quarter Sessions will do remains to be seen. But the method of measuring local opinion

seems to need alteration.

"These field-paths are, so to speak, the inheritance of the landless people, and it would seem an anomaly to give to the larger owners a preponderance of weight in deciding about these thin lines of path, which afford pleasant ways, and open a sight of wood, and field, and stream. highways of the Queen, and therefore of the least of her subjects, growing every year of greater value to them, yet the number of which is yearly being diminished. Surely the care of them should commend itself to the attention of our legislators, for they are among England's best possessions, and should be kept for her people now and in the years to come."

The Rural World devotes a portion of its space every week to reports of matters connected with the preservation of footpaths, open spaces, &c., and is evidently doing excellent Selbornian work in this direction. Unfortunately the paper is so strongly, not to say violently, political that we can hardly recommend it to our readers generally, among whom we are glad to say we number many in

all the political camps.

An English Garden.—"From under the mulberry tree where we are sitting to write this—a dear old tree, that has borne its luscious fruit in another century than ours—we look around us. Pompon chrysanthemuns, with hardy russet faces, range themselves along the border where pink and purple columbines—the 'grannie's mutches' of our younger days—have given them place; behind, a small passion-flower, black-purple in his rage of climbing, reaches a tendril here and there to catch them by the neck. He is so old that his name is lost to us, only year after year he races over the old pink brick-work in company with a clematis as abandoned as himself. The dahlias are flaunting above the graves of the yellow day-lilies, and the tremendous hollyhocks drop their port-wine petals to where the carnation watches over her family of 'slips;' a spicy wind gets up in her neighbourhood and shakes the scales from the shields of the honesty till she shows to all the garden the silver of her face. With a little winter tending and tenderness, the heliotrope and lemon verbena live as bushes in our beds, and in June we sow the night-stock and watch for the white nicotiana to rise like a

green star and help to make a dish of perfume. What are the dwarf geraniums, the 'stocky' calceolarias, the begonias, the hardy bedding lobelias, to us, when we may bend over the purple earth, and in imagination hear the bursting of the seed-pods she has stored for us? when we know that in February the assembly of the bright army will begin with the first yellow aconite mocking a pale sun, that onward with squillas, grape hyacinth, 'sweet Nancies,' hepaticas, and 'peacockeyes,' all our old friends will glow and blossom for us in the places we first learned to look for them, and that the last private in the last company will be a belated bud upon the *Gloire de Dijon* when November is darkening to its last day? No, the wide earth holds nothing that we would exchange for the English flowers of our English home."—Daily Chronicle, August 24th.

NATURAL HISTORY NOTES AND QUERIES.

The Queen Cow's Crown.—The following is from a letter of the late James Macdonell, written at Dietenheim in the Austrian Tyrol in 1878, and published in the account of his life by W. R. Nicoll (p. 346):—"The first thing we saw was the crown which is placed on the queen cow when she and the rest of the herd come down from the autumn pastures among the hills. The cattle are kept far up among the mountains during the summer. One of them is called the queen, and, unlike our own sovereign, she gets the place by a vigorous system of competitive examination. After much fighting, one of the cows takes the head of all the others, going first into every new place, and first out of it. That vigorous creature is the queen. When she comes down she has the honour of wearing the wondrous crown which we saw last night. It is made of a multitude of pieces of coloured glass, some of it spun into long fibres like hair, some of it cast into pearl-like beads, some of it into red beads and green, until it is a blaze of colour. In the centre is a wax figure of St. Anthony. The queen cow is said to be as proud of her crown as other queens are of theirs."

A Death's Head Moth at Hampstead.—It may interest some readers to know that a perfect and beautiful specimen of Acherontia Atropos, the Death'shead Hawk Moth, was found in the Ellerdale Road, Hampstead, on August 24th, by my workman: this is the first specimen that I remember having seen taken in the town of Hampstead. When living at Ashford, Kent, many years ago, I remember finding several of the caterpillar, the season being very warm throughout August and September of that year.

J. E. Whiting.

A Strawberry Festival.—We clip the following from a paper on "The Cliff Dwellers in the Cañon," published in the September number of the Atlantic Monthly:—"As I lingered to admire the picturesque rapids in the brook, a slight movement drew my attention to a little projection on a stone not six feet from me, where a small chipmuck sat pertly up, holding in his two hands and eagerly nibbling—was it, could it be, a strawberry, in this rocky place? Of course I stopped instantly to look at this pretty sight. I judged him to be a youngster, partly because of his evident fearlessness of his hereditary enemy a human being; more on account of the saucy way in which he returned my stare; and most, perhaps, from the appearance of absorbing delight, in which there was a suggestion of the unexpected, with which he discussed that sweet morsel. Closely I watched him as he turned the treasure round and round in his deft little paws, and at last dropped the rifled hull. Would he go for another, and where? In an instant, with a parting glance at me to make sure that I had not moved, he scrambled down his rocky throne, and bounded in great leaps over the path to a crumpled paper, which I saw at once was one of the bags with which tourists sow the earth. But its presence there did not arouse in my furry friend the indignation it excited in me. To him it was a treasure-trove, for into it he disappeared without a moment's hesitation; and almost before I had jumped to the conclusion that it contained the remains of somebody's luncheon he reappeared, holding in his mouth another strawberry, bounded over the ground to his former seat, and proceeded to dispose of that one also. The scene was so charming and his pleasure so genuine, that

I forgave the careless traveller on the spot, and only wished I had a kodak to secure a permanent picture of this unique strawberry festival."

Field Names.—In Canon Ellacombe's paper on "Old Field Names" (p. 164) I see he confesses to being puzzled by the name "Pill Leaze." Is not "pill" or "pyll" a Somerset word for a brook? The brook at Kilve is called "The Pill." If this is so, and there is a stream in or near the meadow called "Pill Leaze," some light might be thrown on the subject.

Midhurst, Guy Landon.

Wild Ducks' Nests (p. 169).—Some years ago I found a wild duck's nest about thirty feet from the ground in the fork of an elm on the bank of a river; though I carefully watched I was not fortunate enough to see how the parent bird managed to fetch the young ones to the water from such an elevation. The following year, however, there was a nest in the same place, and having calculated the date at which the young were hatched, I had the satisfaction of seeing the parent bird flying from the nest and dropping the young into the water, a process repeated till the young ones were all brought down in safety. I was unable to see exactly how they were carried, whether, as woodcocks carry their young to the feeding-places, under the wings which were not fully expanded, as the bird dropped into the water in a slanting direction, or between the feet; but certainly not in the beak, as the bird in descending uttered a peculiar sharp note or call. On mentioning what I had seen to an old lady of eighty in whose grounds the incident took place, she said, "I have had a grievance and a feeling of injustice all my life; I once when a girl saw an incident exactly such as you describe, and on relating it to my elders was severely punished and for a long time in disgrace for telling a story."

Clyst St. Mary. J. A. KERR, LL.D.

Ducks' Nests (p. 169).—I was rather amused on reading Mr. G. A. Daubeny's article, to find how ignorant he has been, till recently, of the fact of wild ducks building in trees. Every schoolfellow of mine in and around my native place (Alresford, Hants) was aware of the fact of ducks building in trees twenty years back; and long before I was twelve years old I had taken eggs from ducks' nests in trees at least half a mile from any pond or river, and from thirty to forty feet from the ground. I think in that case the theory of the bird carrying its brood (in some manner) to the water is more feasible than that of her kicking them out of the nest, and leading them to the water. In the case I mention such a proceeding would have proved fatal to the whole brood.

JOHN W. REDFERN.

A Daddy-long-legs Note. — I was recently feeding a newly emerged dragon-fly (*Æschna cyanea*), and amongst other luxuries gave him a large daddy-long-legs (*Tipula gigantea*), which he seized just below the thorax. The daddy-long-legs struggled, and, as a result, the head and thorax, to which are attached the two wings and the six legs, flew off, leaving the dragon-fly to enjoy the abdomen in peace. Thinking to end a painful existence, I searched the room for the missing head and thorax, but in vain. Three hours after, whilst sitting reading, the missing portion came buzzing round me, and then made for the window, where it continued its gambols until dusk. To prevent its flying into the gas when lighted, as these insects are always attracted by a light, I placed it under a ventilated shade containing some ferns, where it lived for upwards of thirty-six hours after losing its abdomen, frequently flying round the glass as though uninjured.

Wheat.—The interesting paper on "The Growth of Wheat" in this month's number of NATURE NOTES has suggested to me the idea that some of our members may be interested by an extract from an old book called 'The Weekly Entertainer, or agreeable and interesting repository,' from January to June, 1809. This contains an account of what the Rev. Dr. Drake, of Amersham, did in his own garden:—"On the 1st of August I sowed a single grain of wheat, and in the latter end of September, when the plant had tillered, I took it up and divided it into four sets of slips. Those four slips I planted and they grew and tillered as well as the most. In the end of November I took them up a second time, and made thirty-six plants or sets. These I again planted, which grew

till March, in which month I a third time took up the plants and divided them into 256 plants or sets. For the remaining part of the summer, till the month of August, they had nothing done to them, except having the ground cleared from the roots, till the corn was ripe. When it was gathered I had the ears counted and they were three, five, eleven, a great part of which proved as good grain as ever grew out of the earth. Many of the ears measured six inches in length; some were midling grains, some were light and thin. There was rather better than a-half bushel of corn as the produce of one grain of wheat."

The Ascent of Climbing Plants.—May I draw the attention of the readers of NATURE NOTES to the different ways in which climbing plants ascend? I have noticed that nearly all such plants have a characteristic direction in which they grow, either twining from the right to the left, or from the left to the right. The honeysuckle (Louicera Periclymenum) always encircles a tree from right to left, and if its course be interrupted, will reach the nearest branch, and continue to grow upwards in the same direction. We have a large quantity of this beautiful creeper in a wood here, growing up the stems of the hazels, and I have noticed that this direction never varies. The scarlet-runner (Phaseolus multiflorus) ascends in a spiral manner from left to right; the large wild convolvulus (Calystegia sepium) also twines in the same direction. There are, however, some climbing plants which seem to have no particular mode of ascent, such as the ivy (Hedera helix), and the tendrils of the cucumber (Cucumis sativus).

Hasely Hall, Warwick.

MAUD SAWYER.

[We publish this note because it shows that personal observation of common natural objects which it is one of the aims of NATURE NOTES to encourage. The subject, as most of our readers know, was treated at length by Mr. Darwin in his Movements and Habits of Climbing Plants. Ed. N. N.]

The Clouded Yellow.—A few days since I and a cousin of mine caught in one marl-pit seven splendid specimens of the Clouded Yellow butterfly (four males and three females), while we saw several others which we could not secure; at the same time and place we also caught a very fine large Tortoiseshell.

Down, Kent. Percy Lubbock.

[We saw several Clouded Yellows near Freshwater, Isle of Wight, last August. We are particularly glad that you "could not secure" the other specimens you mention; why should you wish to take all you saw? ED. N. N. [1]

- M. A. J. H.—It is Tropicoris rusipes, one of the Hemiptera (bugs), and is common.
 - F. M.-Willow Wren.
- Miss E.—The request for "observations and information relative to the alleged injurious habits of hedgehogs, mice, squirrels, and other mammalia" is too comprehensive for us to answer. You will find much useful information in a paper called "The Vermin of the Farm," published in the Journal of the Royal Agricultural Society for June 30th, 1892 (vol iii. part 2). We must once more direct attention to the last paragraph of our "Notice to Correspondents."
- J. A. K.—The lichenologist to whom we have submitted your question states his inability to determine the specimen from your description.

OFFICIAL NOTICES.

THE LOWER THAMES VAILEY BRANCH.—The Daily News of September 5th contains an interesting account of "A Field Club Ramble" to Fulwell and the river Crane—one of the Saturday afternoon excursions so successfully organised by this Branch. From the reports published in the Richmond and Twickenham Times—which, by the way, sadly need revision so far as the scientific names are concerned—we learn that these excursions (one of which we noticed at page 140) have been well attended and very satisfactory. A Field Club has been formed in connection with the Branch, which will be open to all members of the Society upon payment annually of one shilling, which, it is thought, will cover the additional expenses of printing and postage. Members are requested to intimate their consent

by writing, or otherwise, to the Hon. Secretary, Mr. John Allen, 8, Clarence Road, Field meetings will be held during the spring and summer months for the study of botany, zoology, geology and any cognate subject. It is proposed also to hold periodical winter evening meetings, when by the reading of papers, conferences, conversational meetings, the use of the microscope, and other means, all branches of Natural History may be taken up. These will be held, by the kind consent of Miss Wallis, at the High School, Matson House, Richmond, on the second Wednesdays of the months, and are to be inaugurated by a conversazione in the Gymnasium, on Wednesday, the 12th October. Promises of several microscopes, objects of interest, pictures by local artists of good standing, and help of singers and instrumentalists have already been secured. The Branch has also in contemplation the erection of a suitable monument to the poet Thompson, and the preservation of the Kew Ait, about which we spoke at length in our last year's volume (pp. 130-134).

THE SELBORNE SOCIETY.

THE object of the Selborne Society is to unite lovers of Nature for the following purposes :-

The Protection from unnecessary destruction of Wild Birds, Animals and Plants:

The Protection of places and objects of Antiquarian Interest or Natural Beauty;

The Promotion of the Study of Natural History.

The minimum Annual Subscription (which entitles the subscriber to a monthly copy of the Society's Magazine) is 2s. 6d.

All particulars as to membership may be obtained from the Secretary of the Selborne Society, 9, Adam Street, Adelphi.

NOTICE TO CORRESPONDENTS.

Contributions for any number should reach the Editor, JAMES BRITTEN, F.L.S., 18, West Square, London, S.E., not later than the 15th of the month.

When it is particularly requested, MSS, not accepted will be returned, if stainps sufficient to pay the postage are sent for that purpose. Short notes on Natural History or Selbornian subjects will be especially welcome. In every case contributions must be accompanied by the name and address of the writer.

Queries on any points connected with Botany, Zoology, or other branches of Natural History, will be answered if possible, and advice will be given as to the best books for students in any department of Natural Science; but all questions must be accompanied by the names and addresses of the writers, not for publica-

tion, if this is not desired.

Specimens sent for identification will be named, if sent carefully packed and in good condition, and if sent to the Editor, but we cannot undertake to return any specimens. Not more than six specimens will be named at one time, and, in the case of common plants, it is suggested that correspondents will find it far more useful to work them out for themselves than to send them to us for naming; we shall always be willing to confirm or correct such determinations.

We shall be glad to notice any books bearing upon natural history in any of its branches, and to direct attention to magazine articles of the same kind, if these are sent to us. Publishers will confer a favour upon our readers if they will always state the *price* of any volumes they may send, in order that it may be quoted in the notice. This addition is much appreciated by our readers, and is desirable in the interest of the volumes themselves.

It is particularly requested that subscriptions and letters connected with business should not be forwarded to the Editor, but to the SECRETARY OF THE SELBORNE SOCIETY, 9, Adam Street, Adelphi. Editorial communications, specimens, and books for review should be addressed to Mr. BRITTEN, as above.

Mature Motes: The Selborne Society's Magazine.

No. 35.

NOVEMBER, 1892.

Vol. III.

At a special meeting of the Council of the Selborne Society held October 10th, 1892, it was resolved—

"That the Council of the Selborne Society desire to place on record their deep sense of the great loss they have sustained by the death of their President, Lord Tennyson, and respectfully offer their condolences to Lady Tennyson and family."

The above resolution was forwarded to the present Lord Tennyson, who acknowledged its receipt in the following letter:

" Aldworth,
" Oct. 15th, 1892.

"Sir,

"My mother and myself are deeply grateful to the Council of the Selborne Society for their resolution and sympathy.

"I am,

"Your obedient servant,

"HALLAM TENNYSON.

"A. J. Western, Esq."

THOMSON.

MONG the elegies sung by poets upon their brother poets, only the few immortal poems of Milton, Shelley, Tennyson, Arnold, and some others, are more perfect than the verses of Collins upon Thomson, and upon his grave by the Thames at Richmond.

"Remembrance of shall haunt the sh

"Remembrance oft shall haunt the shore,
When Thames in summer wreaths is drest,
And oft suspend the dashing oar,
To bid his gentle spirit rest!"

Among "breezy lawn or forest deep," the poet's lover shall "view you whitening spire," with tears; gliding down the stream, he will "mourn beneath the gliding sail." May he, who "shall scorn thy pale shrine glimmering near," lose all joy in nature.

"But thou, lone stream, whose sullen tide
No sedge-crowned sisters now attend,
Now wast me from the green hill's side,
Whose cold turf hides the buried friend.

"And see! the faery valleys fade;
Dun night has veiled the solemn view;
Yet once again, dear parted shade,
Meets nature's child, again adieu!"

But long may the poet's tomb be adorned by the "hinds and shepherd girls" of his loved meads; long may it move the English wayfarer.

"O! vales and wild woods, shall he say, In yonder grave your Druid lies!"

Time has not fulfilled the pious prophecy of Collins; the resting place of Thomson has met with merely an irreverent and a forgetful neglect. But the Richmond Branch of the Selborne Society has determined to remove this reproach, and with public assistance to raise a worthy memorial to the poet, who did so much to make poetry out of nature, and to make others

feel the poetry in nature.

The fame of Thomson was once prodigious: we all know how Coleridge, taking up a well-worn copy of the Seasons in a village inn, exclaimed, "This is fame!" But now, thanks to that contempt, bred less of familiarity than of ignorance, into which the poets of the last century have fallen, Thomson is out of favour, and thought "artificial." In these days we are all "artistic," and we do not dream that to future generations our art will seem but artifice. "Thomson's Seasons read six times," said that singular artist, Smetham, "will drive out the overplus of Tennyson-ity." Now Smetham was an ardent enthusiast for Tennyson, but he remembered how infinitely various are the forms and fashions of good art. Let us take a few lines from the Seasons, and see if there be no "natural magic" in them, fresh and beautiful even now:—

"As yet the trembling year is unconfirmed,
And winter oft at eve resumes the breeze,
Chills the pale morn, and bids his driving sleets
Deform the day delightless; so that scarce
The bittern knows his time, with bill engulpht
To shake the sounding marsh; or from the shore,
The plovers when to scatter o'er the heath,
And sing their wild notes to the listening waste."

That is early spring; presently the spring advances, "the hawthorn whitens," and the whole forest at last is full in leaf:—

"Where the deer rustle through the twining brake, And the birds sing concealed."

From the hills we see the landscape, "one boundless blush, one white-empurpled shower" of blossom. After wild storms, the wind sinks

"Into a perfect calm: that not a breath
Is heard to quiver through the closing woods,
Or rustling turn the many-twinkling leaves
Of aspen tall."

He tells how rain begins: the clouds "softly shaking on the dimpled pool, prelusive drops." At first

"The stealing shower is scarce to patter heard, By such as wander through the forest walks Beneath the umbrageous multitude of leaves."

He describes the sunset after the storm; the sun breaking brightly out, "from amid the flush of broken clouds, gay-shifting to his beam;" the "rapid radiance" upon mountain and through forest; the "yellow mist far smoking" over the great plain. He advises the angler about times and seasons:—

"Now, when the first foul torrent of the brooks, Swelled with the vernal rains, is ebbed away, And, whitening, down their mossy-tinctured stream Descends the billowy foam; now is the time, While yet the dark-brown water aids the guile, To tempt the trout."

When enough trout have yielded to temptation, and the sun is high, the angler should lie upon "the bank where flowering elders crowd," or under "the spreading ash,"

"Hung o'er the steep, whence borne on liquid wing The sounding culver shoots, or where the hawk High in the beetling crag his aery builds."

Then there are the gardens of spring, where among other flowers is the famous "yellow wall-flower, stained with iron-brown," praised by all critics save Mr. Ruskin, with

"hyacinths, of purest virgin white, Low bent, and blushing inwards."

He describes the whole choir of spring, "from the first note the hollow cuckoo sings," up to "the full concert,"

"While the stock dove breathes A melancholy murmur through the whole."

Among others he notes how

"The blackbird whistles from the thorny brake, The mellow bullfinch answers from the grove; Nor are the linnets, o'er the flowering furze Poured out profusely, silent."

Here are the young birds, learning to fly.

"O'er the boughs
Dancing about, still at the giddy verge
Their resolution fails; their pinions still
In loose libration stretched, to trust the void
Trembling refuse."

But at last,

"The surging air receives
Its plumy burden; and their self-taught wings
Winnow the waving element."

Birds seem to have fascinated Thomson:

"High from the summit of a craggy cliff
Hung o'er the deep, such as amazing frowns
On utmost Kilda's shore, whose lonely race
Resign the setting sun to Indian worlds,
The royal eagle draws his vigorous young,
Strong-pounced, and ardent with paternal fire.
Now fit to raise a kingdom of their own,
He drives them from his fort, the towering seat,
For ages, of his empire; which in peace
Unstained he holds, while many a league to sea
He wings his course, and preys in distant isles."

This is a no less royal bird:

"The stately-sailing swan Gives out his snowy plumage to the gale; And, arching proud his neck, with oary feet Bears forward fierce, and guards his osier-isle, Protective of his young."

These lines are from *Spring*; here are a few from *Summer*. Now, "short is the doubtful empire of the night;" and very soon

"The meek-eyed morn appears, mother of dews, At first faint-gleaming in the dappled east:"

soon the light brightens, and before it "white break the clouds away," and finally,

"The dripping rock, the mountain's misty top,
Swell on the sight, and brighten with the dawn.
Blue, through the dusk, the smoking currents shine;
And from the bladed field the fearful hare
Limps, awkward; while along the forest glade
The wild deer trip, and often turning gaze
At early passenger."

He did not disdain to describe in homely style very homely scenes: as the heat of the day, when,

"in a corner of the buzzing shade, The house-dog, with the vacant grey-hound, lies, Out-stretched and sleepy. In his slumber one Attacks the nightly thief, and one exults O'er hill and dale; till wakened by the wasp They starting snap." All know Lucretius' and Tennyson's descriptions of a dog's dreams; Thomson's has escaped notice.

He dwells upon the murmurous life of summer:—

"Resounds the living surface of the ground;
Nor undelightful in the ceaseless hum
To him, who muses through the woods at noon;
Or drowsy shepherd, as he lies reclined
With half-shut eyes, under the floating shade
Of willows gray, close crowding o'er the brook."

He dwells upon "the downy orchard," and upon the hay-field, where all the rustic populace

"Rake the green appearing ground,
And drive the dusky wave along the mead."

He describes the sheep-shearing, and the poor sheep: "what softness in its melancholy face!" It is true, as Cowper and as Hazlitt said, that he describes best what he has seen, yet some of his foreign descriptions are admirable. "The rage intense of brazen-vaulted skies, of iron fields," and the volcano, "the infuriate hill that shoots the pillared flame." But his love was all for England: "Thy valleys float with golden waves;" and he is happiest in such scenes as the summer evening, when,

"A fresher gale
Begins to wave the wood, and stir the stream,
Sweeping with shadowy gust the fields of corn;
While the quail clamours for his running mate."

In autumn, under "attempered suns"-

"broad and brown, below Extensive harvests hang the heavy head: "Rich, silent, deep, they stand, for not a gale Rolls its light billows o'er the bending plain. A calm of plenty! till the ruffled air Falls from its poise and gives the breeze to blow."

The chase occupies much of *Autumn*; thus he pictures the piteous hare, hidden in "rushy fen," or "ragged furze," on the "stony heath," or in "thick-entangled broom," or "withered fern," of "the same friendly hue" with herself.

"Vain is her best precaution, though she sits,
Concealed, with folded ears, unsleeping eyes,
By nature raised to take the horizon in;
And head couched close betwixt her hairy feet,
In act to spring away. The scented dew
Betrays her early labyrinth, and deep
In scattered sullen openings far behind,
With every breeze she hears the coming storm;

and as it comes nearer,

"she springs amazed, and all The savage soul of game is up at once."

There is the picture of the gathering swallows, how, circling in the air, a "feathered eddy floats," and the migration of seabirds:—

"Where the Northern ocean, in vast whirls Boils round the naked melancholy isles Of farthest Thule; and the Atlantic surge Pours in among the stormy Hebrides; Who can recount what transmigrations there Are annual made? what nations come and go? And how the living clouds on clouds arise? Infinite wings! till all the plume-dark air, And wide resounding shore, are one wild cry."

He draws the various autumn aspects of the moon in the time of "shooting stars,"

"Near extinct her deadened orb appears, And scarce appear, of sickly beamless white."

And there are the various "will-o'-the-wisps," as the strange light which "sent by the better genius of the night," sits harmless "gleaming on the horse's mane." Winter has many fine passages, too long for quotation: as the signs and presages of storm, no mean echo of Virgil, or the familiar description of the robin. Perhaps Thomson's greatest strength is in his description of light and heat, clouds and mists; which he renders with all the accuracy, and no little of the poetry, so abundant in the poems of Wordsworth or Shelley, and in the

pictures of Turner.

The seasons are hard to treat well in poetry; a fine picture from nature is excellent as part of a poem not directly concerned with nature; in simile or in metaphor: but a deliberate poem upon the aspects of nature may be tiresome in many ways. Thomson indulges too much in philosophic meditations of no great value, in tedious and irrelevant love stories, in high-flown rhetoric and bombast. But succeeding poets have agreed to praise his fine qualities. Cowper, whose judgment upon descriptive poetry is that of an expert, says that "Thomson in description is admirable." Wordsworth, who again is of the highest authority, gives him a somewhat patronising applause. He was Tennyson's master in verse, at a very early age, and the model of his first verses; and Mr. Saintsbury classes Thomson's blank verse with that of Milton and of Tennyson, as "one of the chief original models of the metre." The plain-spoken Cobbett, indeed, speaks of "the pensioned poet, Jammy Thomson, and that sickly stuff of his, which no man of sense ever can endure after he gets to the age of twenty." But the weight of critical authority and of popular sympathy is against him.

Dr. Johnson, in his Life of Thomson, and throughout Boswell, praises him highly. "Thomson had, I think, as much of the peet about him as most writers. Everything appeared to him through the medium of his favourite pursuit. He could not have viewed those two candles burning but with a poetical eye." Thomson has described "two" candles burning, but it was when his jovial huntsmen, well fed and well drunk, were

"seeing double."

"Before their maudlin eyes Seen dim and blue, the double tapers dance, Like the sun wading through the misty sky." To illustrate Thomson's occasional verbosity and diffusiveness, Johnson once read aloud to Shiels a large part of him, and then asked," Is not this fine?" Shiels expressed the highest admiration. "Well, Sir, I have omitted every other line." For pure beauty, like in its degree the beauty of Spenser, or of Keats, or of the Lotus Eaters, or of Kubla Khan, Thomson's Castle of Indolence is his best work. There occur the wonderful lines:

"As when a shepherd in the Hebrid isles, Placed far amid the melancholy main:"

the "sable, silent, solemn forest," all those enchanting images of dreamy, luxurious, murmuring, restful places. But Hazlitt, by far the best critic of Thomson, explains the greatness of Thomson; his power of expressing the whole soul of the season and of the landscape. Read him for single fine lines, wonderful Tennysonian phrases, and you will be disappointed, but read him through, and his charm will be felt: "that is exactly the feeling of a summer day," you will exclaim, or "the very image of the moon in winter." In an age not given to the minute study or to the general appreciation of Nature, without any model save the classics, Thomson wrote his great poem: let us not forget to honour his memory. A pleasant figure! "More fat than bard beseems," as he sang of himself. A pleasant figure he makes in our memories, sunning himself along the old garden wall, eating peaches with his hands in the pockets of his dressing gown, and murmuring his sonorous lines; a poet of laborious indolence, but of excellent poetry.

LIONEL JOHNSON.

A WINTER PURSUIT.

NCE again is depressing November upon us, causing us to shudder apprehensively at the near approach of winter. Heavy rains and high winds are already playing sad havoc with the foliage, the rich autumnal tints of which afforded but now such a grand show. A few more frosts, another gale, and the woods will be riding out the winter storms under bare poles. Nature will make all snug. Hibernating animals will batten down their hatches, retire below, and turn in for their annual sleep, not without a pardonable glance of approval at their own plump persons and well-filled garners, and a feeling of satisfaction at the profitable use they have made of the warm weather. Most Selbornians, of course, have had the forethought to provide some means of keeping in touch with nature during the slack season. Some have made collections of plants, insects, minerals, &c., from the naming, labelling and arranging of which they will extract much intellectual enjoyment. Others have started aquaria. Others will digest

the valuable memoranda which they have made in the past season, and embody them in the form of a paper for publication in NATURE NOTES, contributing thereby towards the solution of some abstruse problem of natural science. Such as these may be likened to the industrious ant of the fable. Some, like the grasshopper, may have wasted the golden opportunities of summer. They have, let us suppose, limited their observation to the natural phenomena of a lawn tennis court, and now, perhaps, find themselves without prospect of any rational

occupation for months to come.

Are these improvident people really past salvation? Not at all, for however limited the range of subjects in the animal kingdom may happen to be, in the vegetable kingdom the case is otherwise. It is true that the flowering plants and ferns present but few attractions to the collector, but the cellular cryptogams are a playground wherein he may indulge himself to his heart's content. Most of us are aware that this group of plants includes the mosses, lichens, sea-weeds and fungi, all of which may be studied with tolerable facility in the winter. Certain disadvantages attach to the pursuit of the three latter natural orders. The sea-weeds are available only for those to whom the coast is accessible: the lichens are most abundant in mountainous regions, and are liable to be buried deep in snow: the fungi are extremely difficult to preserve, and do not prosper during frost or prolonged drought. But the mosses are peculiarly suited for winter collection, and to them the present remarks shall be confined.

These unobtrusive but beautiful little plants, so universally distributed by nature, so much neglected by man, are within the reach of all, and thoroughly deserve the closest attention that may be bestowed upon them. A large number of them ripen their fruits between autumn and spring, a most convenient arrangement, for on structural differences of the fruit the classification is largely based. They are easily collected and dried, and take up little room when stowed away. They resist decay, and are not liable to destruction by insects. Upon being soaked in water they speedily resume a life-like appearance. They can thus be hunted for and gathered during the daily constitutional, and put aside for investigation till the evening or the first rainy day. Their delicate tissues and minute organs are exquisitely beautiful objects for microscopic examination.

A word or two as to the literature. Until lately there was felt to be a want of some good but cheap and elementary work on simple lines which should be in keeping with the present state of our bryological knowledge. Happily this want no longer exists. Bagnall's *Handbook of Mosses* is just such a work as was required, and is obtainable at a low price. A better introduction could not well be conceived, the subject is most clearly and adequately treated. Mr. Bagnall shows the young

collector how few appliances are required, how to classify his specimens and prepare them for the herbarium, where to search for material, and what species he may expect to find under given conditions; and provides a deal of other information.

For a most readable and attractive essay on *British Mosses* we are indebted to Sir Edward Fry—a leading light of the Selborne Society, recently retired from the dignified position of the judicial bench. This essay, which should find a place on the book-shelves of all Selbornians, is elaborated out of a lecture which the author delivered at the Royal Institution

last year.

A book of another type, dealing purely with classification, is Hobkirk's Synopsis of British Mosses, the only English work which contains all the British species (some 570 in number) and their scientific descriptions. One of its greatest drawbacks is that it has no simplified, analytical key by which you can rapidly refer your specimen to its proper genus and species, But this deficiency has been supplied by the Rev. H. G. Jameson in his Key to the Genera and Species of British Mosses, which appeared in the Journal of Botany last year, and is now to be had as a separate publication. Its leading feature is that, being based as far as possible upon characters other than the fruit, it enables us to identify even barren specimens. If Messrs. Hobkirk and Jameson could find it possible to unite in authorship for the production of a revised Synopsis, they would immensely add to its present acknowledged value.

A great obstacle to the progress of the beginner is the want of adequate illustrations whereby he may check the determinations to which his deductive faculty shall lead him. Such illustrations are to be found in advanced works of higher price or less recent date, e.g., Braithwaite's British Moss Flora, Wilson's Bryologia Britannica, &c., for the various merits and demerits of which we may refer the reader to p. 6 of Bagnall's Handbook. Those who read French will benefit by the purchase of M. Douin's cheap but clever Nouvelle Flore des Monsses, in which are provided a series of analytical tables, simple to use, unencumbered by technical terms, and with every character illustrated by an explanatory figure introduced into the text. Students in or near London should not neglect to avail themselves of the collection of specimens, with descriptions attached, which is on view in the botanical gallery of the Natural History

Museum in Cromwell Road.

In conclusion, the student should be warned that the subject is not all plain sailing. He cannot expect to develop suddenly into a full-fledged bryologist. He will constantly find himself beset with difficulties, and will gain his experience with much tribulation. Well for him should he have served his apprenticeship among the flowering plants, and so proceed from the obvious to the minute. Let him, however, not be discouraged. The study of mosses is one which will grow upon him and become

more and more fascinating. It will introduce into the dull routine of country life an object which is capable of arousing and sustaining the interest and of engaging the mind.

The full titles of the works quoted above are:—

Handbook of Mosses, by James E. Bagnall, A.L.S. London:

Swan Sonnenschein & Co. Third edition, 1889. 1s.

British Mosses, by the Right Hon. Sir Edward Fry, LL.D., F.R.S., F.S.A., F.L.S. London: Witherby & Co. 1892. Is. Key to the Genera and Species of British Mosses, by the Rev. H. G. Jameson. West, Newman & Co., 54, Hatton Garden, E.C. 1891. Is. 6d.

Synopsis of the British Mosses, by Chas. P. Hobkirk, F.L.S. London: L. Reeve & Co. Second Edition, 1884. 7s. 6d.

Nouvelle Flore des Mousses et des Hépatiques, par Prof. I. Douin.

Paris: Paul Dupont. 1892. 5fr. 50.

ANTONY GEPP.

WHAT SHALL WE DO WITH OUR SCHOLARS?

A CALL TO THE SELBORNE SOCIETY.



E are all agreed that England, with its bird-life undiminished, and its flowers un-uprooted, may be Merry England still, but we have not recognised that it will be thoughtful England also.

It is not till we read the poets that we learn how much of the freshness of their song to quicken and inspire, and to make patriots and thinkers, has been the result of a land whose flowers change with all the changing year, and where birds are heard with varied note as nowhere else in the world.

How are we to keep this precious heritage of bird's song and

flower's beauty for the generations yet unborn?

It is a hard task. Thirty-two varieties of birds are, we are told, in a fair way to become extinct in the British Isles, and I met a man on the Coniston Fells a short time since, who had been employed by a market gardener somewhere in the midlands to cart off the third truck-load in the season of ferns, club moss, etc., for sale. The King Fern, or royal fern, has ceased to exist in a valley that thirty years ago was full of it, and pan passu the flowers that dare to show their heads when the tourists flood the Lake district are disappearing.

We are all of one mind as to the need of making and keeping England a land of gentlemen in the truest sense of the word.

The gentle heart is what we desire to find the common possession of the people here in England, as much as we find it to be the characteristic of the Swiss peasantry, or, I was going

to add, of the Sinaitic Arabs, and Beduin of the Tîh. And yet from time to time we are horribly shocked to find such ghastly doings at rabbit courses, as Col. Coulson exposed by the banks of coaly Tyne among the men of Northumberland, last year. We are troubled by the barbarity that sometimes attends the royal stag hunt, and we are perplexed by the want of humanity which, it is to be feared, allows hecatombs of victims to be tortured in the name of humanity and scientific desire to

alleviate pain.

Let us just ask ourselves where we are to begin if we are to cope with such power of cruelty as seems compatible with a high civilization. The pulpit seems to have failed; organizations such as the Selborne Society, the Society for Prevention of Cruelty to Animals, and others, seem to avail chiefly with those who are already on the right side. And yet if we may judge by the horrors of cruelty to children that have in this past year come to light, steps need to be taken vigorously and effectually to rouse feelings of kindness and humanity to the innocent and helpless, and to disseminate from earliest years the lesson of the tender heart and gentle life broadcast in the souls of Englishmen and Englishwomen. Where shall we begin? with English girls and boys; nay, with English infants, say I. Let us do what we can in our schools—National, Board, and Voluntary—to teach and preach the elementary duty of kindness.

"To all Who need our kindness, for this simple cause That we have all of us one feeling heart."

Let prizes be given for essays from year to year on this subject to the scholars. Let the old May festivals be revived throughout the land, and the May Queen publish her edict against cruelty to animals each year upon her coronation day. Let the reading-books used in our schools be chosen, because some of the chapters deal with this subject. But most of all let us call out the powers of "the eye that cannot choose but see," and stimulate the habits of observation of the children in the direction of Natural History.

Why not encourage the scholars to know the flowers of the neighbourhood, their habitat, their time of coming and going, their nature, their mode of propagation? Why not give some little prize to the scholar who first notes the arrival of this or that migrant, and bit by bit so rouse the dormant love of observation of the things of nature as to add to the lives of the

lowliest a great and life-long interest.

Is it asking too much of County Councils to help us to have little patches for experimental gardening near our schools, and a drawing class wherein children may be encouraged to draw accurately the plant and animal life of their districts. The Technical Education Act, with its continuation class in every school, seems to be likely to supply a want here.

In this way the gentle life of our scholars may be educated,

for the observer of natural things will love as he or she learns to observe. In this way the rabbit-courses will cease to be; for the boy who has come to know something of the life of the dumb animal will think twice before he takes it by torture for

a bet over a glass of beer.

Our Dicks, our Edwards, will thus become the village naturalists of their own country sides throughout the land; and last, but not least, instead of crowding up at the first chance into the mighty Babylon of brick and mortar, the village boy who has grown up with a love of observation for the birds and beasts and flowers around him, will think twice ere he leaves the land of blossom and song for the songless barrenness of a city slum.

Will the Selborne Society take up this work? It is not enough that it cries down righteously the wearing of egret plumes in ladies' bonnets—we want it to cry up the white tlower of a blameless gentle life for the growing village boy

and girl throughout the land.

H. D. RAWNSLEY.

NOTICES OF BOOKS.

PROBABLY no one who has tried popular science lecturing to school children will be too particular as to methods, if these help to secure the interest and stimulate the sluggish imaginations of the average elementary student. When this is done by making simple domestic contrivances illustrate natural phenomena, and by means of explanations couched in language of charming simplicity, criticism is to a large extent disarmed. Miss Johnson's work on Sunshine (Macmillan & Co.) is written on these lines, and is distinctly a book for which to be grateful. It consists of a series of forty lessons on the elements of optics, and is based on a series given in connection with the Manchester School Board. Following the example of Professor Tyndall, she begins by demonstrating that sunshine is due to the overlapping of images of the sun, which a picture of the sun shining through some trees (here reproduced) helps to illustrate. The propagation of light, the formation of shadows and images, reflection and refraction, and the use and properties of lenses are considered in succession. Three lessons are devoted to the sun, and two to "how the sunbeams feed the flowers." After this follow a couple of lessons on the eye, which here seem rather out of its proper order, as we immediately return to coal and coal forests and other "traps for sunbeams." A good many of the ordinary, and some extraordinary, experiments with soap bubbles are then described, after which we turn suddenly to the moon. Two of the last lectures are devoted to the phenomena of diffraction and iridescence, but, no real effort is made to explain the experiments by which these are illustrated; the name of the former is not even mentioned. The style adopted is conversational, the language is simple, and the illustrations selected are generally very happy; 163 well executed figures adorn the volume, but some of these are not referred to in the text, and the majority of the "hand shadows" might have been omitted without any serious deduction from the educational value of the volume.

The main points in the work which may be regarded as faults, are that whereas sometimes terms are used and not defined (as e.g., dichroic on p. 312), at others phenomena are described but not named, as in the case of diffraction referred to above. A few mistakes have crept in, such as the remarks on the oyster's eyes on p. 316, and the statement that the floating spots in the eyes

occur in the lens instead of in the vitreous humour. The statement on p. 43, "that water never looks as deep as it really is: a pond that looks only three feet deep is really four feet deep" is far too general: the pond only appears shallower if it be looked at obliquely; if, as in the figure given, the line of sight be perpendicular to the surface of the water, there will be no refraction, and the bottom will not appear to rise. We do not know whether Miss Johnson really believes the story about the 30,000 luminous worms in every cubic foot of thirty miles of ocean, but we will hope the children did not. A more serious objection is the suspicion that many of the experiments described were never really performed; the Manchester people must have very powerful circulations if the crude pulsometer figured on p. 48 gave any approach to the indication shown; the vibration of the beams of light, if it occurred, was probably due to the shaking of the operator's hand.



When, however, we come to consider how far the method of teaching was successful, we find that the results were most satisfactory; even as early as p. 220 the author tells us that both Edmund and Ernest have been converted into "little philosophers already:" we hoped to follow the development of these prodigies of sagacity to the end of the volume, but unfortunately their names do not appear in the last chapters, so we fear they must have been promoted to a higher sphere, or perhaps did not return from the excursion to the moon to which the class were treated. No doubt the excellence of the results was due to the interest Miss Johnson took in each member of her flock; she knows them and calls them all by name—with irritating frequency. Judging by the numerous names scattered

through the book, the class must have been a very large one, but it was at the same time distinctly good; the conversation is naturally one-sided, as Miss Johnson takes much more than her share, but when one of the children does get a remark in, it is always intensely to the point. With such material to work on, we cannot but regret that Miss Johnson did not more often try to make the scholars ponder over reasons instead of simply observing facts, and that she devotes so much space to "Tommy's dream," "what Gwyneth saw" about Ernest Leigh's approaching departure for Australia, and an account of an almost miraculous coincidence (p. 199), which we commend to the investigation of the Society for Psychical Research. There is, in fact, so much of this sort of thing in the book that if it be retained in future editions, we would suggest that "and Moonshine" should be added to the title.

J. W. G.

The title of Mr. F. W. Hackwood's book, Kindness to Animals (Dawson, 2, Warwick Lane), is sufficient to recommended it to Selbornians. It is "a handbook for teachers," containing "complete notes of lessons on the humane treatment of animals, with special reference to their structure, habits, and uses." The author might have placed on his title page the refrain of Mr. Ashby-Sterry's amusing poem:—

"Be always kind to animals, wherever you may be."

To teachers the little volume cannot fail to be useful and suggestive; to the more ordinary reader it seems sometimes a little strained in its sentiment. It may be only because we have more than once been unable to sleep in consequence of night being made hidcous with caterwaulings, that we demur to the statement that "the cat will never abuse its freedom if properly cared for at home." It is, however, cortain, that many besides ourselves are inclined to abuse the cat under such circumstances. We would suggest that in the next edition (for the work will certainly soon reach one) the modern American rhyme—we refer to the much-parodied "Mary had a little lamb," whose author died only lately—should not be attributed to "Tudor times," or considered an evidence of the "importance of the great wool-trade:" the three other rhymes given are all missound harshly to Selbornians. Mr. Hackwood judiciously advises teachers to "admit 'occasional' depredations" on the part of the sparrow: the anecdote of "Frederick the Great of Prussia" will delight Jack's enthusiastic admirers, but certain details in the narrative will, we fear, arouse the suspicions of sceptics. There is an admirable lesson on the iniquities of the "ladies" who bedeck their persons at the cost of the lives of thousands of birds, and the teacher is told to "describe the Selborne Society of England and the Audubon Society of America, established to counteract these pernicious practices." Our Society is also commended elsewhere in the book, and we almost hoped to find an allusion to NATURE NOTES—say, as a suitable book for school prizes or libraries. There is an excellent index, and the book deserves every encouragement.

Mr. F. W. L. Sladen, a youthful naturalist, sends us an interesting curiosity in the shape of a little lithographed book on "The Humble Bee—its life history and how to domesticate it." It embodies a great deal of observation, and the facts, although not of any particular novelty, are evidently recorded at first-hand. It is just the sort of thing which we want our young Selbornians to undertake. The patience and keen observation of minute detail manifested throughout is extremely creditable, and the care and trouble spent in the production of the little book is equally deserving of praise. Copies can be obtained of the author, at Ripple Court, near Dover, for 6d each.

Beneath Helvellyn's Shade, by the Rev. Samuel Barber (Elliot Stock), is a little volume of "notes and sketches in the valley of Wythburn," as its full title tells us. Its interest is chiefly local, but the general reader will find much in the way of custom, tradition, and folklore in its nicely-printed pages; and we regret that the exigencies of space will not allow us to notice it at greater length.

SELBORNIANA.

Proposed Memorial to the Poet Thomson.—As we mentioned in our last issue, the Richmond Branch of the Selborne Society is anxious to erect a suitable monument to James Thomson, whose name is intimately associated with Richmond. At present his only record, besides the tablet in Richmond Church, is a crumbling worn-out board in the plantation of Pembroke Lodge, at the end of the gravel walk leading from Richmond Gate, on which are the lines given on the accompanying figure, for the use of which we are indebted to the editor of the Rural World. These have been attributed to Jesse the naturalist, but according to Mr. T. F. Wakefield, who has brought this matter



forward, they are not his, nor is their author known. Mr. Wakefield has discovered other Richmond poets unknown to fame—one who begins some verses with the following stanza:—

"On the brow of Richmond Hill,
Which Europe scarce can parallel,
Ev'ry eye such wonders fill
To view the prospect round."

Mr. Wakefield considers these "lovely lines," wherein we cannot agree with him. Thomson's verses, however, are another matter, and we think our readers, especially at Richmond, will read with interest the appreciative essay by Mr. Lionel Johnson, which appears at the beginning of the present number of NATURE NOTES. The Richmond and Twickenham Times, always actively Selbornian, warmly supports Mr. Wakefield's proposition.

The Earlier Opening of Kew Gardens.—A letter from "A Country Botanist," complaining of the annoyance experienced by visitors to London who go down to Kew in the morning and find the Gardens closed, was published in the Daily Graphic, and a representative of that paper subsequently consulted the assistant-director, Mr. D. Morris, on the subject. Mr. Morris's views are published in the Daily Graphic for October 4; and we find in them nothing that has not been answered by anticipation in the last issue of NATURE NOTES. Mr. Morris says that people could not be admitted to the houses before noon, but, so far as we are aware, no one has suggested that they should be so admitted. They might, however, quite easily be allowed in the Museums, just as they are at Bloomsbury or South Kensington. Whether the beds are "kept up to the highest pitch of excellence" is a matter of opinion; they certainly are in no way superior

to those in our public parks. We believe that Mr. Morris's colleagues were as much surprised as we were to learn that "during the summer months—nay, practically all the year round" there are "nearly a thousand people at work in the Gardens," and we looked for some correction of a statement which, if accurate, would suggest that the admission of a few hundreds more or less could make little difference to those employed. The explanation is, however, to be found in the Gardeners' Chronicle of October 22, which states that nearly a thousand people possess tickets allowing them to visit the Gardens early—a statement very different from that of Mr. Morris. We regret to learn that our observations last month have given offence to Dr. Dyer, the Director, but we have nothing to withdraw from what we then said. We trust that every effort will be used to obtain for the public a boon to which they are justly entitled, and which can in no way interfere with the scientific aspect of Kew Gardens.

Gilbert White's Grave.—A correspondent of the Daily News writes in that paper for September 30th:—"On a recent visit to Selborne, I was surprised at the difficulty I experienced in finding Gilbert White's grave, and, when pointed out to me, was still more surprised to see only about eighteen inches of mildewed stone above the ground. The only recognisable trace of its being his were two letters, "G. W.," and a date, which could only be deciphered by scraping the stone. Might I suggest, that, as a Selborne Society exists, it would seem to be one of the most natural things to do, to restore the sunken stone and make it easy for visitors to find, as in its present condition no stranger could determine which was the grave, however diligently they might search for it. Not knowing the address of the Selborne Society, I am making use of your columns, hoping by so doing to bring the matter under the notice of one of its members." Next year is the centenary of White's death. The Society could not commemorate it in a more fitting way than by undertaking the work of restoration which appears to be so greatly needed.

Protection of the Edelweiss.—The Daily Graphic of August 30th says:—" Many an admirer of the Alpine flower known as the 'Edelweiss,' writes our Vienna correspondent, will be glad to hear that the Emperor Francis Joseph has given his sanction to a Bill passed in the Provincial Diet protecting the flower against the destructive proclivities of the alpine climber. To so great an extent has the ruthless uprooting of the floral queen of the snow region been perpetrated in almost all accessible altitudes of the Austrian Alps that it was in imminent danger of becoming extinct. The local authorities, aided by the Alpine and Tourist Clubs severally, will now take steps to protect the Edelweiss against the vandalism of the tripper and of the professional flower vendor, and it is widely hoped that legislative prohibition may yet preserve to the desert solitudes above the snow line the velvety blossom so dear to the heart of the mountaineer."

Prizes for Rare Plants.—A correspondent writes:—"I observe the following report in *The Irish Naturalist* for October:—'July 30th. Excursion to Benevenagh... There was keen competition for two prizes, one for the largest collection of flowering plants, the other for the rarest twelve flowering plants collected.' Is not this method of botanizing one of the chief causes why several of our rarer plants are on the verge of extermination? On this very mountain some species have their only locality for the eastern part of Ulster. One (Saxifraga oppositifolia) is almost, if not quite, extinct. Others recorded from there have not been recently observed. Such competitions are much to be deplored. If they are necessary for the encouragement of botanical study, let them be carried out in some district where a few lingering alpines are not crying out for mercy. But, whether there is such a necessity or not, there is a far stronger one that all right-minded botanists should observe that of protecting our rarer plants, and to them I appeal."

We have reason to know that every care was exercised on the occasion referred to to prevent any mischief being done. But we are strongly of opinion that, on general principles, the stimulus of a prize for the rarest plants collected on a botanical excursion is unnecessary and unwise. It is unnecessary for the botanist, to whom the discovery of a rare plant is in itself a sufficient reward, and it is unwise to encourage the mere collector to do more mischief than he would do without the prospect of a recompense. The sale of specimens of rare British plants, if carried on to

any extent, is another matter which, as it seems to us, should be discouraged by botanists. A few days since we saw in the possession of one collector, who advertises such plants for sale, some twenty or thirty fine specimens of *Orchis purpurea*, obtained this year in Kent. With introducers on one side, and exterminators on the other, our indigenous flora seems likely to fare badly.

Was he a Gentleman ?—A writer in the Globe of September 14th, writing from Worthing, says:—"A lovely parrot has been flying about for weeks to the delight of scores of us, supporting himself by moderate attacks on various gardens. Unfortunately he alighted in one owned by a man who may be considered a gentleman, because he is a member of our club; he captures and kills the wanderer."

Ostrich Feathers.—A writer in the Daily News complains of the cruelty exercised in plucking ostrich feathers, and is satisfactorily answered by another contributor, who writes as follows:—" The letter signed 'Philo' is contrary to my experience of seventeen years amongst ostriches and ostrich farmers. That such a practice as 'pulling' feathers was in vogue twenty-five years ago, in the early days of ostrich farming, by ignorant Dutchmen, cannot be denied; and it may be to those times your correspondent refers. Now feathers are not 'pulled by the handful with vigorous jerks that taxed the strength of strong men,' as your correspondent states. They are, when ripe, carefully cut from the birds, the quills being allowed to remain in the sockets for eight weeks, during which time the new feather has partially grown, allowing the dead quill to be removed painlessly. Apart from humanitarian principles, and judged from a purely commercial point of view, the farmers (now almost exclusively of the intelligent English and colonial class) would not adopt such a suicidal method as 'pulling,' which would destroy the delicate cell in which the ostrich feather is formed, and render the bird valueless. I shall feel, Sir, obliged by your kindly inserting this in your next issue, so as to correct the false impressions 'Philo,' in excess of zeal, may have spread abroad with respect to an important industry, and to allay any tender pangs of conscience women may feel as to the propriety of wearing the most beautiful of all natural ornaments." The matter, as our readers will remember, was fully discussed in NATURE NOTES for March, 1890.

The Warehouseman for October 22nd censures the Selborne Society for denouncing the plucking of ostrich feathers, but, as far as we are aware, the

censure is undeserved.

To the Ladies.—Fashionable women may be interested in knowing that last summer 15,500 nightingales, red-throats, fly-catchers, &c., were caught for fashion purposes alone in two forests in France. In two or three provinces a like extermination goes on, so that, at least, over a million little birds must be annually destroyed. Electricity is now being employed in catching and killing these harmless creatures. Wires are stretched across fields on which tired birds perch only to drop down dead with an electric shock. Nearly all the birds destroyed are insect-eaters, so a day of terrible retribution is in store for the farmers and fruit-growers who now profit by their slaughter.—*Million*.

Barbed Wire.—The following appeared in the Manchester Guardian of August 2nd:—"During the holiday season there will not be lacking some vigorous maledictions on the barbed wire fences by which certain owners and occupiers endeavour to protect their fields and woods from the unwelcome attentions of wandering tourists. It is, no doubt, true that a minority of holiday-makers are not always careful to remember that private rights are guaranteed by existing laws, and that a farmer or landowner may justly complain if his acres are treated simply as part of the public domain. This is, of course, more especially the case when the thoughtless pleasure-seeker damages the crop of growing cereals or fruit. On the other hand, there is too much in this country of a churlish spirit which appears to find its greatest satisfaction in hindering the enjoyment of others. To persons of such a disposition the barbed wire, except where it contributes to their own discomfort, must be a thing of joy. Some members of the Selborne Society have been inquiring whether the use of this particular kind of fence does not come under the prohibition of the Offences against the Person Act of 1871. That Act, it will be remembered, makes it an offence punishable with five years' penal ser-

vitude to place or set any spring gun, man trap, or other engine calculated to destroy human life or inflict grievous bodily harm, with intent that the same may destroy or inflict grievous harm upon a trespasser or other person coming in contact therewith. The same section which prescribes this penalty provides, however, that it is lawful to set a trap for the purpose of destroying vermin. If a pedestrian were injured by a vermin trap it is conceivable that a nice point of law might arise. But is 'barbed wire' one of the 'other engines' declared to be illegal? Mr. F. W. Ashley, writing in NATURE NOTES, thinks not, but Mr. R. F. Mac-Millan points out that it has been held in several County Court cases that a landowner who fences his land adjoining a highway or public footpath with barbed wire placed in such a position as to inconvenience the public creates a nuisance, and renders himself liable to damages for injuries caused by it. A little more generosity on the part of the landowner and a little consideration on the part of wayfarers would solve a problem which at present causes friction and ill-feeling.'

NATURAL HISTORY NOTES AND QUERIES.

Mountain Ash Berries.—There are some mountain ash trees in a garden in this village, which always have a plentiful crop of rich-coloured berries, which some time in the latter part of August mysteriously vanish in a single night, leaving no trace whatever of depredators. This occurs annually—it is thought that the robbers must be some large flight of birds, especially as having made a closer inspection this year, we find that only the berries are gone, leaving the cluster of little stalks still on the trees. What birds do you think they would be?

Seend, Melksham.

Wild Rabbit tamed.—While living at Carrick Castle, Loch Goil, this summer, I observed the very interesting, and, as far as I know, singular case of a wild rabbit living in an almost tame condition. Mrs. Paul, a fisherman's wife, living in a hut between Ardnahein Farm and the mouth of the Loch, deserves the credit of the kindness which brought this to pass. The rabbit had been brought in when very young by the cat, and reared by Mrs. Paul, from whose hand it still feeds. It now spends part of its time in the woods—where the ribbon round its neck must astonish its friends-and part on the low sloping roof of the hut among the pigeons, or at the door among the fowls. It seemed shy in the presence of strangers, but quite friendly and confident in the fisherman's wife, who, though she has never heard of the Selborne Society, is by nature fitted to adorn it.

HELEN J. MURRAY.

A Pyramid Snail (p. 179.)—Some few months ago I had three or four living specimens of this mollusc given to me, and as I had been successful in rearing and breeding some British land shells, I thought I would try these under artificial conditions. I therefore procured a gardener's propagating glass, and a flower pot filled with fine sand and some small pieces of chalk. I put the molluses on the sand and covered over with the bell-glass and placed them in the kitchen window, and, like Caleb Plummer when he painted his toy horses, I made my pot of sand and its surrounding condition as like Egypt as I could for sixpence. When this was done I thought about the food, and here came the difficulty. I tried them with cabbage, lettuce, bean-leaves, onions, banana, cocoanut and other things, but nothing would they eat except a little nibble at the cocoa-nut and the banana. I ultimately had to give up the experiment of breeding them. I noticed one morning that during the night one of the snails had made a hole in the sand, about an inch in depth and about a inch in diameter. It may have been trying to lay eggs, or searching for some food that might be found under the sand in the desert (perhaps the larva of the Scarab beetle). It would be interesting if any of your readers could tell us something more about this desert snail (Helix desertorum) and what are the plants which grow in its habitat about the rocks and sands of the Pyramid.

T. Rogers.

Martins. - A few weeks ago I was taking a holiday rest on the sea-coast in Sussex. Among other places of interest I visited the village of Felpham, once the residence of the now almost forgotten poet Hayley; he lies buried in the church, and there is a tablet on the chancel wall to his memory. That church is about half-a-mile from the sea. The morning was one of the finest in the recent splendid month of September, and about the middle of the month— 17th. On approaching the church I was gratified by witnessing a sight such as I had never seen before. The church is a fine large structure for a village, and has one of those broad sloping roofs so very characteristic of many Sussex churches; the roof of the south side of the nave and the south aisle is high-pitched and very broad, as it covers both nave and aisle in one. This broad roof was covered thickly with martins, as was also the roof of the chancel on the south side, and there were many on the north. There must have been hundreds of these little birds, preparing for their flight across the Channel. I was unable to remain to watch their further movements, and my one companion was also unable, and we, therefore, reluctantly left the birds without further observation. It would, however, be interesting to know whether any similar gathering was witnessed about the same time.

ROBERT SIMPSON.

"Pother-wind."—The whole of last autumn I spent in the beautiful vale of Harting, where the wild clematis grows in profusion, and had the opportunity of conversing with a number of old people. On one occasion I expressed my admiration of the trailing habit of the "Traveller's Joy" to an old native, when he remarked, "I don't know what it be," but after I had described the plant he exclaimed, "Oh, we calls it pother-wind." As I have never met with this name before, others may not have heard it.

JOHN FULLWOOD. [We take this opportunity of reminding our readers that we shall be very glad to receive any local plant names for incorporation in the supplement to the *Dictionary of English Plant Names*, which is now in active preparation. Ed. N. N.]

Ducks in Trees, etc. (pp. 169, 198).—The following is taken from "Some Notes of a Naturalist in London," printed in the Preston Chronicle about thirty-eight years ago, when the naturalist was eight years old, and written down

for him by his mother-

"The ducks in Kensington Gardens build up in the trees. Last summer we observed one waddling along the grass, and after stopping some time, and looking about her very cautiously, she flew up into a horse chestnut tree, which has one large branch, about twelve feet from the ground, projecting horizontally a short distance before shooting upwards. On this platform Mrs. Dilldill had built her nest, and we spied her bright eyes peeping out at us, from a mass of leaves, grass, and down. The keepers said there were several nests about the Gardens, and that the eggs were often stolen. How the ducklings are got to the ground is a mystery yet to us.'

I may add that the branch was blown down one stormy October years ago, and that the rest of the tree, almost dead, has been rooted up this summer. It was near the north-east side of middle broad walk. Another duck built in a branch of an elm near the present fountains, long before that end of the Serpen-

tine was Italianised at the expense of all the elms near it.

The branch fell before the eggs were hatched, and it was very pitiful to watch the mother duck hunting about and looking everywhere for her eggs. She did not seem to understand that the smash of eggs, shells, and leaves at the foot of the tree could be her snug nest.

The Muscovy Duck at Crowder House Farm, near Sheffield (see NATURE Notes, 1891, p. 79), has continued to make her nest in the ventilating niche of the barn, over the cart shed, about fifteen feet from the ground. August this year for the first time, we discovered how she brought the little ducklings to the ground; as soon as they were hatched she flew down and called them. They immediately started on their perilous journey. On reaching the lowest part of the roof of the shed they dropped on to the hard ground, and directly followed their mother to the nearest pond. This wonderful performance was accomplished in a very short time.

HELEN WAKE.

The Avenues at Abury.—Will you forgive my calling your attention to a curious error of your reviewer on p. 176? He criticises the Story of Early Man, and says that its author is wrong in speaking of there being two stone avenues leading to the circles at Abury. The fact is, there are the remains of two very distinctly to be seen. I was there and examined them myself last month. In the "restorations" of Stukeley (see Abury and its Literature, by Rev. T. Bazeley, and Mitchell's History of Abury) two serpentine avenues, one ending in a distant circle and the other at a mentier, are almost the most conspicuous objects in the drawing. It is your reviewer who is wrong, and must himself have been writing "without personal knowledge" of Abury.

FRED. TESSIONS.

[We were aware when publishing the notice in question that our reviewer was personally acquainted with the locality, but have submitted Mr. Tessions's criticism to him. In reply, he writes:—"In regard to the existence of two avenues at Abury, I thought it was now generally known that all archæologists agree that Stukeley's second stone avenue was based simply on Longstone Cove at Beckhampton, and a few scattered stones. There never has been any evidence for the Beckhampton Avenue figured on Stukeley's 'restoration,' and the whole structure of the country renders its existence highly improbable. If your correspondent has found any evidence of the avenue I would recommend that he should make an accurate survey, marking the precise spot of the stones, and publish it. I have twice worked over the ground with care, and should be interested to see the evidence that would re-establish faith in Stukeley. Lukis' 'Report on Stonehenge and Abury,' Proc. Soc. Antig. (2) ix, 1882, 7, p. 154-3, discusses the matter; it would be easy to give a long list of other references."—ED. N. N.]

NOTICE TO CORRESPONDENTS.

Contributions for any number should reach the Editor, JAMES BRITTEN, F.L.S., 18, West Square, London, S.E., not later than the 15th of the month.

When it is particularly requested, MSS. not accepted will be returned, if stamps sufficient to pay the postage are sent for that purpose. Short notes on Natural History or Selbornian subjects will be especially welcome. In every case contributions must be accompanied by the name and address of the writer.

Queries on any points connected with Botany, Zoology, or other branches of Natural History, will be answered if possible, and advice will be given as to the best books for students in any department of Natural Science; but all questions must be accompanied by the names and addresses of the writers, not for publica-

tion, if this is not desired.

Specimens sent for identification will be named, if sent carefully packed and in good condition, and if sent to the Editor, but we cannot undertake to return any specimens. Not more than six specimens will be named at one time, and, in the case of common plants, it is suggested that correspondents will find it far more useful to work them out for themselves than to send them to us for naming; we shall always be willing to confirm or correct such determinations.

We shall be glad to notice any books bearing upon natural history in any of its branches, and to direct attention to magazine articles of the same kind, if these are sent to us. Publishers will confer a favour upon our readers if they will always state the *price* of any volumes they may send, in order that it may be quoted in the notice. This addition is much appreciated by our readers, and

is desirable in the interest of the volumes themselves.

It is particularly requested that subscriptions and letters connected with business should not be forwarded to the Editor, but to the Secretary of the Selborne Society, 9, Adam Street, Adelphi. Editorial communications, specimens, and books for review should be addressed to Mr. Britten, as above.

Mature Motes:

The Selborne Society's Magazine.

No. 36.

DECEMBER, 1892.

Vol. III.

THE LATE LORD TENNYSON.

By THE EDITOR.



HE portrait of the late President of the Selborne Society, which, by the courtesy of Messrs. Barraud, I am enabled to reproduce, forms a fitting frontispiece for our volume.

So full—I had almost added so fulsome—have been the notices of the poet which have crowded our newspapers and magazines, that there is little need for me to swell the meed of praise which followed him to his grave, or add a flower to the wreaths which covered his coffin. Much, indeed, of what might have been said was admirably expressed by Mr. Kegan Paul in our July number: "To ask ourselves how Tennyson looks on the outward world, and what he can teach us of the birds, the sky, the sea, the flowers, will be when we can answer the question, no bad fragment of a liberal education." With these words Mr. Kegan Paul concluded his paper; and we shall all agree with him that the poet "has taught us much when we have looked through his eyes and heard with his ears."

On the few occasions when I have been privileged to share Lord Tennyson's walks, or to hold converse with him, what has struck me most has been his intense delight in and knowledge of flowers, and especially wild ones. When I first called at Farringford, I noticed on the table a deep plate filled with rock roses, and in the hall and elsewhere were simple bunches of wild flowers. Although not what would be styled a botanist, he knew the plants of Freshwater well. I remember how, on our first walk, he suddenly stopped and asked me to gather some bogbean for Lady (then Mrs.) Tennyson, directing me from the road to the exact spot in the marshy meadow where it grew. He was always glad to be questioned about the meaning

of passages in his poems; and it was on one of these walks that I obtained from him the information about "the sea-blue bird

of March," which has been already given in these pages.

Through all his poems, down to the last volume, by which "he being dead, yet speaketh," the same love and knowledge of nature is manifest. In this, *The Death of Œnone*, the beautiful dedication to his wife is a picture of the down above Aldworth—not "the ridge of a noble down" at Freshwater, which boasts comparatively little heath and fern.

"There on the top of the down,
The wild heather round me and over me June's high blue,
When I looked at the bracken so bright and the heather so brown,
I thought to myself I would offer this book to you,
This, and my love together,
To you that are seventy-seven,
With a faith as clear as the heights of the June-blue heaven,
And a fancy as summer-new
As the green of the bracken amid the gloom of the heather."

A NOVEL CHRISTMAS TREE.

NYONE who has had long and intimate dealings with our furred and feathered brothers and sisters, must, if he speak the plain unvarnished truth, confess that, in one respect at least, they are our superiors. The proverb that, "Virtue is its own reward" is in nine cases out

of ten bitterly true, in the sense that, from man at any rate, virtue gets no other. And although Wordsworth speaks with incredulity of the

"hearts unkind, kind deeds With coldness still returning;"

the majority of us are forced, unwillingly, to allow that the poet's experience was exceptional, and that the excess of man's grati-

tude has not often "left us mourning."

But with the furred and feathered creation the case is quite different. Not even a kind word is allowed to pass unacknowledged, and by a very small expenditure of time or money it is quite possible to win the gratitude and confidence of a whole tribe.

Last winter we added to the small and select company of feathered friends who each winter haunt our grounds, many who are "worth knowing," according to Punch's definition (i.e., those who, hitherto, have not wished to know us), by the present of a Christmas-tree; and their delight and gratitude knew no bounds.

The big French windows of our dining-room look south, and open into a wide verandah. Not more than four feet from the

window stands a pot, in which is a small spruce fir between four and five feet high. This fir is ornamented with all kinds of dainties calculated to win the hearts of the feathered tribe—a coco-nut sawn in two and pierced with holes to enable us to wire the halves firmly on to the tree, brazil nuts cracked and half peeled, lumps of suet and dried figs: and twice a day a miscellaneous meal of scraps is strewn on the ground beneath the tree. To this feast of good things come various guests. The great tits—of which we have at least two pairs—are hardly ever absent from the tree for more than a couple of minutes together. A pair of marsh-tits are constant visitors, and are second in beauty to none, with their black satin caps, pulled down well over their eyes, and their rusty-grey waistcoats. The nuthatches come two and three at a time. The tom-tits and cole-tits are numerous, and there is always a crowd of betterknown birds pecking at the scraps on the ground. Here come the greedy blackbirds, and in the presence of so much in which their souls delight, the "rollicking tenors of the shrubberies" become mere pugnacious gluttons, chasing one another round and away from the much-prized morsels-which are meanwhile snatched up wholesale by the harmful, unnecessary, and always vulgar sparrows, who arrive in flocks, like ghouls, at the mere hint of a meal. The thrushes—both the common kind and their somewhat overbearing relations, the storm-cocks—hop in suddenly amongst the crowd, pounce on a morsel, and are off with it at once. One thrush—with a curious crest of white feathers—has been a pensioner of ours for nearly five years now.

Occasionally a small troop of dull, heavy greenfinches, on their way along the edge of the terrace upon which the ash from the field below casts its seeds, will turn aside for a moment to see what is exciting the other birds. And sometimes one, more adventurous than his fellows, will so far come out of his groove as to make the experiment of this new kind of food. But, like the true rustic he is, new tastes displease him, and he plods back to join the troop who are bumping heavily along on their short legs at the edge of the terrace, pecking up the ash seeds and cutting off the husky brown wings with a dexterous twist of their strong beaks, which gives them for the moment a faint resemblance to cross-bills, so completely do the mandibles overlap. Surely the greenfinch is the Hodge of the feathered creation—heavy in his movements, clumsy and dull, absolutely contented with his narrow groove, and looking upon anything novel with alarm. For the six years this rectory has been my home have the greenfinches come in troops in January and February, and generally in the afternoons, to the west corner of the terrace, just above the big ash-tree in the field below, and lumped heavily along the edge of it, eating as they go in a business-like, unjoyful manner, to the east corner, when they take flight silently, or with one unmusical note, like the creak of a rusty wheel, to some more ash-trees in a far-off

shrubbery. And they never seem to diverge from this plan of procedure in the smallest degree. The so-called song of the greenfinch in the spring is dreary beyond the power of words to describe, and resembles nothing so much as that monotonous tuneless whistle of the ploughboy, which has been so well said

to proceed from "want of thought."

Chaffinches, robins, hedge-sparrows, &c., are numerous at this feast; it is interesting to observe their different modes of behaviour. The nuthatches seem to favour the scraps of suet quite as much as the nuts. These latter they always attack head downwards; in this position they arrive on the long slender top-shoot of the Christmas-tree, let themselves slide down into the coco-nut, and then hammer away, chipping out large wedges of it. If they chip off a bigger bit than they can conveniently swallow, they fly off with the morsel to a neighbouring tree, into the bark of which they poke it firmly, and then hammer at it, head downwards still, till it has disappeared. I have never seen a nuthatch attempt to fight another bird, but for some reason all the tit family—prize-fighters by profession though they be—give place to them on the tree at once, and without a murmur or remonstrance.

The cole-tit prefers brazil-nuts to anything, but failing his favourite food nothing comes amiss to him. He has a curious, and apparently useless habit of carrying off scraps of food and sticking them all over the boughs of a cedar near by, where they naturally fall to the share of the rapacious and lazy sparrow. I have seen the cole-tit play this game for half-an-hour at a time, much to the delight of Jack Sparrow. The tit never seems to revisit any one place again to look for his hoard, if it is intended for such. The cole-tit is quite devoid of the sleek and natty appearance of the rest of his family, and is a most insignificant and untidy pinch of fluff; but tiny as he is, he possesses the family courage and pugnacity in a degree quite disproportionate to his size. Apparently he is quite aware of the fact that he is too small to have a chance of victory in a stand-up fight with any other bird, unless it be with his first cousin—the longtailed-tit, or the golden-crested wren, so he has acquired a knack of flinging himself up from the ground, anyhow, into the face of any bird threatening a particularly coveted morsel, and in the instant of bewilderment which follows this ruse, making off with the prize! The whole tit family possess the power of rising equal to any emergency, however unprecedented.

A friend of mine suspends brazil-nuts by a long string to a branch, and I have seen the marsh-tit hauling up the string with his bill, and collecting "the slack" under one tiny black foot as if he had been at the work all his life. The tits will also hold food in their claws to peck at like hawks and owls, and birds of prey generally, but quite unlike all other birds of their

size.

Coming home the other night, about dusk, a large bird flew

swiftly up from the tree at my approach, and over the roof of the house. Next morning I noticed a lump of suet weighing nearly a quarter of a pound was gone from the tree. A day or two later as I was getting up I heard a great commotion among the small birds in the verandah below, and on going to my window to see, if I could, the cause of the excitement, a kestrel slowly floated up from under the verandah roof carrying another piece of suet in his claws, and sailed past the window of my bedroom. A few hours later a kestrel—presumably the same bird—was knocked over by a farm lad with a stone, in the garden of the bird-loving friend already mentioned, in the very act of killing a tame peewit. The kestrel was a young bird and in very poor condition, which perhaps accounted for its condescending to eat suet.

The whole tribe are now so tame that we can stand at the window to watch them without disturbing them at all. Occasionally, if we come to the window suddenly or make an unexpected noise, a feeding tit will screw his head backward over his shoulder to look at us as he hangs upside down to a brazil nut. Sometimes too, under similar circumstances, a nuthatch will pause in the act of letting himself slip down into his coconut, to look reproachfully at us as if to say, "Don't do that again; I'm easily frightened." But no one moves away for us, and the re-decorating of the Christmas-tree is always watched from the cedar and an old apple-tree in the field below by an excited crowd, who swarm back almost before the window is shut, chirping and chattering, raising their crests, and looking at the window with bobs and jerks, as if in gratitude for the replenished feast.

To those who are tired of racking their brains and emptying their purses in the vain attempt to give pleasure to satiated human senses and stomachs, I would say—if you live in the country, try the experiment of entertaining guests from the waysides and hedges. You will not meet with sneering depreciation of your hospitality from the feathered bipeds, and the Toms will not be offended at being asked to meet the Coles! Indeed, their gratitude to you will be out of all proportion to your expenditure of thought and money. Half-a-crown will buy a spruce fir; spend another half-a-crown on suet, brazil and coco-nuts, and then enjoy the unfeigned delight and gratitude of Nature's great operatic company over their Christmas-tree.

ELLA F. CONYBEARE.



YOUNG SELBORNIANS.



OW that the year is drawing to a close it behoves the local committees to consider what fresh steps to take to advance the objects of the Selborne Society in the new.

As 1893 will be the centenary of Gilbert White's death, no effort should be spared to bring the Selborne Society more before



the public. We have spent a lot of time over the ladies and the slaughter of birds for their adornment, unfortunately without the large result which our energy warranted us in expecting. Let us now, without relaxing our crusade against the wanton destruction of bird life, give a little more attention to the boys, who, in their love of hunting for something, waste a great deal of animal life, and to the girls, who do their share towards the destruction of our native flora.

This inborn love of collecting could be turned to good account by getting the children together and instructing them how to observe nature's wonders without destroying the beauties of our fields and

hedgerows.

Only two or three branches appear to have given the youngsters serious attention, yet there is as much to be gained in this direction as any other. Many of our senior members do little more than give us their subscription: they believe in the

objects of the Society, but take little interest in making any regulated observations of Nature. The Society is very glad to have their subscriptions, even the minimum half-a-crown, but we want more workers; and as there are apparently so few prepared for this, why not train up the boys and girls to a love of observing animals and plants, and protecting them from wanton destruction? Thus in another decade there will be a band of

ready-made Selbornians, who will take more interest in the work of the Selborne Society than members who only subscribe because of the importunities of honorary secretaries.

The first junior section was formed by Miss Wallis, in connection with the Lower Thames Valley Branch at Richmond: the subscription was one penny per annum, which was certainly

very small for so important a town.

In connection with the Clapton (Lower Lea Valley) Branch a junior section was formed early in 1891, chiefly through the energy of Miss M. C. Barlow, but here the subscription is sixpence per annum. The section is managed by a sub-committee. The children receive a ticket of membership upon payment of their subscription, which entitles them to a monthly lecture, made interesting by lantern, drawings or specimens, and an excursion in the summer, to which they all pay their expenses. A prize is offered on this occasion for the best named and arranged collection of plants, and the children are shown how and what to pluck without destroying the plant. Other prizes are offered by the president of the branch, and a small library has been formed for their use.

The last junior branch formed is at Pinner, where, as yet, there is no senior organisation. Here Mr. Louis Davis, with the aid of a number of ladies and gentlemen, is endeavouring to make all boys and girls in the district true followers of Gilbert White. They have issued a most enticing prospectus,* which I would recommend all country branches to ask permission to reprint. In a few short sentences it explains who Gilbert White was, the objects of the Society, and what members will be expected to do. The organisation here is different from the above, as the meetings are held once a month at twelve different "centres," which are the houses of twelve ladies who each give their rooms once in the year. The subscription is by family ticket costing two shillings; a small pocket-book is given each member in which to make notes, and a library for their use has also been started.

There should be a "junior section" in connection with each branch: in many cases it will bring members to the senior section, for often the children will interest parents and friends in the Society's work as no outsider can.

The amount of subscription should be arranged by the local committee according to the means of the children in the district.

I feel assured that the energy displayed by boys in collecting birds' eggs, moths and butterflies, &c., might be transferred to a more useful channel by instructing and encouraging them in making observations of animal and plant life instead of wantonly

destroying it.

R. MARSHMAN WATTSON.

^{* [}The illustrations of this article are from the prospectus referred to.—Ed. N.N.]

FURTHER NOTES ON LONDON BIRDS.

HE following notes are supplementary to my paper on "Some London Birds," which appeared last year in this magazine, and embody observations made during the year ending on the 31st July last.

Referring to my remarks on the bullfinches in the Flower Walk in Kensington Gardens (Nature Notes, 1891, p. 174), it should be mentioned that in the April number of the Zoolegist of this year there is a note by Mr. W. H. Tuck, in which he states that the original pair of bullfinches were brought in the summer of 1890 from Siberia. This being so, the birds would no doubt belong to the northern race of bullfinch, a larger and brighter bird than ours, known as Pyrrhula major. Early in February one of the keepers told me he had recently observed the birds, but I have not seen them now for some months, and do not know whether they nested in the Gardens this spring.

Early in January the thrushes were beginning to sing, and by the 18th the hedge sparrow was in full song. On the 31st a pair of tree creepers paid us a visit—the first I had seen in Kensing-

ton Gardens for some years.

Blackheaded gulls (Larus ridibundus) were unusually numerous on the Thames between Blackfriars and Westminster Bridges throughout the earlier portion of the year. They began to assume the black heads of their spring dress during the bitterly cold weather in February. The first day on which I saw one with an entire black head was the 16th February, but by the 20th a large proportion of them had acquired it. During this cold weather larks were frequently to be seen making their way up the Thames, usually flying only a few inches above the surface of the water.

The rooks which built in Connaught Square last year returned to breed this spring; there were four or five nests. In years gone by there used to be a rookery there, but I am told that, prior to the spring of 1891, it remained uninhabited for about twenty years.

The crow's nest in the avenue of trees which leads from the Round Pond to the Serpentine was again occupied, and the old bird was sitting hard in April; but it is doubtful whether any young were reared this season—at any rate I saw nothing of

them.

There seems to be no end to the increase in London woodpigeons. They were comparatively rare only a few years ago, yet no less than eighty-three were feeding in St. James' Park at the same time on the 20th July. Sometimes, like the Orleton swifts, I "don't go home till morning," and on one of these rare occasions (2nd June) I noticed quite a large flock of woodpigeons feeding at 3 a.m. in the middle of the Bayswater Road. I have also seen them perching on the chimney pots of Hyde Park Gardens.

Turning to the migratory birds, the most striking point in connection with the spring passage through London was the exceptionally large influx of willow wrens. The first was heard on the 22nd April, and a few more came on the 23rd; but when I went into Kensington Gardens before breakfast on the 24th, a beautiful Sunday morning, the whole place was alive with them. There was a willow wren singing on almost every tree. But they left as suddenly as they had appeared, and on the following morning I did not hear one. Curiously enough there was a young willow wren in New Square, Lincoln's Inn, on the 19th July. How it came there is a mystery: I do not think any birds of this species nested in Lincoln's Inn Fields, the most likely place in the neighbourhood.

Apart from the willow wrens, the summer migrants seemed to be hardly as numerous as usual. A few redstarts passed through in the middle of April; the blackcap was seen on the 24th April; the whinchat on the 2nd May; whitethroats and sand martins on the 4th May; house martins on the 10th; while, punctual as ever, the spotted flycatcher appeared on the

15th.

Several pairs of flycatchers stayed and nested in Hyde Park and Kensington Gardens, but I noticed very few young birds. In fact, the first young flycatcher I saw was a fully fledged nestling sitting on the back of a chair being fed by its mother on the 23rd July. A few swifts were hawking flies over Lord's Cricket Ground on the 10th July: on the 27th I observed a cuckoo flying over the Serpentine, and saw another on the 31st in St. James' Park.

On the whole, the migratory birds were rather disappointing; and even allowing for many being overlooked, it is curious that they should not have been more numerous, for throughout the whole of the South of England warblers seemed to take possession of the country in almost unprecedented numbers. Perhaps the fine weather which enabled so many of them to arrive safely on our shores after their long journey rendered the usual rest in the metropolis unnecessary.

A. HOLTE MACPHERSON.

TWO OF OUR ROBINS.

"IRDS in their little nests agree" we are told; but out of their "little nests" they very often "fall out and chide and fight." We once had a dear little robin, very tame and gentle; it would hop into our room through the French window, and trill out its little song so cheerfully from the top of some vase or picture frame. It would pick up the crumbs from our afternoon tea, and make itself

generally charming. But alas! in an evil moment an unwary gardener killed our pet by accident; we mourned for it, and had it stuffed and set up on the bracket from which it had so often sung to us. Then we began to tame another robin, a bright perky little chap who came hopping about, and seemed most anxious to be friendly. He hardly waited to be invited to enter, and soon made himself quite at home.

"Oh! the poor late lamented Dicky has tumbled over," cried some one, one day entering the drawing-room and finding the stuffed robin prostrate. The next time the room was empty the same thing happened, and at last it was found that our new tame robin came in and deliberately knocked his predecessor over. With ruffled feathers and indignant pecks he flew at it

till down it went, then he hopped off contentedly.

Then we began to make experiments as to how much our fiery-tempered friend would dare, in his rage and fury. We put the stuffed robin out on the step of the window, and sitting inside watched him. He dropped down from the yew tree at once with a little trill and "went for" the late lamented; he pecked and danced round it, he knocked it over, and jumping on its body gave some more infuriated pecks; then flying into the old tree he sang a song of triumph, trilling away most

cheerfully.

Then we sent out cards "At Home," and put down in the corner "A Robin Fight," and when the party arrived and a whole ring of merry chattering young people had had their tea, we put the stuffed robin in the middle of the drawing-room floor, and, the window having been wide open all the time, we sat round and waited. There were ten of us, or more. It had not been there five minutes before, with a warning trill, in swooped the little warrior, and began a tremendous onslaught on its unconscious victim. Every now and then it would fly off nervously, but only to return in a few seconds, when he would find the dummy set up again, and setting up his feathers he would fly at it till its feathers flew about, and its glass eyes were broken with the fury of the warrior's pecks. He never gave up his feud that autumn, till, fearing damage to our ornaments, we took the stuffed bird away to a safer place, very much the worse for wear.

D. H.

THE SELBORNE SOCIETY.

THE object of the Selborne Society is to unite lovers of Nature for the following purposes:--

The Protection from unnecessary destruction of Wild Birds, Animals and

The Protection of places and objects of Antiquarian Interest or Natural Beauty;

The Promotion of the Study of Natural History.

The minimum Annual Subscription (which entitles the subscriber to a

monthly copy of the Society's Magazine) is 2s. 6d.

All particulars as to membership may be obtained from the Secretary of the Selborne Society, 9, Adam Street, Adelphi.

TWO NEW BIRD BOOKS.

London Birds and other Sketches, by T. Digby Pigott, C.B. (R. H. Porter: 7s. 6d.) It was quite worth while to re-publish these pleasant papers. There are, indeed, but seven of them, and two of these are, in the actual result to be gained from them, a little disappointing. We fancy as we begin the chapter on "The Last Home of the Bearded Tit," that we are going to be shown a nest of that fairy of the fens, which to most of us is a name and little more; but we are not even to get so much as a glimpse of the bird. And when we open at "St. Kilda from without," we are excited rather by the "St. Kilda" than the "without," and when we find that we never reach St. Kilda at all, we can hardly avoid a momentary feeling that we have been taken in. Yet even in these very chapters, Mr. Pigott's skill as an author soon reconciles us to our disappointment. He has much grace of expression, a flavouring of gentle humour, and that true sympathy with all living things which will make his book welcome to all right-minded Englishmen, and especially to members of the Selborne Society. He takes us to the Shetlands, to the Farne Islands, and to the flat meadows of Holland, not to tell us of his prowess with the gun, but of his enjoyable studies of animal life. He does not waste his space, indeed, in vituperating those who shoot and collect, but he does what is far more valuable—he sets us an excellent example of good Brief holidays snatched from work in London may be used to some real purpose, if we can afford to follow Mr. Pigott's lead; even London itself may be made to yield plenty of out-door pleasure, as the paper on London birds, and still more that on London insects, will prove to anyone who doubts it. I am grateful for some very pleasant half hours spent with this book, which is the work of a scholar and an antiquarian, as well as of an observer of animal life; and the only fault I can find with it is that its long and narrow pages, though they may be of a shape which is becoming fashionable, are not quite suited, in my opinion, to give that repose to the eye which we seem to expect in a volume whose contents are so enjoyable.

The Migration of Birds, by Charles Dixon (Chapman & Hall). I hardly know what to say of this book to readers of NATURE NOTES. It is an attempt, and by no means a very successful one, to deal scientifically with a huge mass of facts relating to the migration of birds, not only in these islands and in Europe, but in all parts of the globe. At the same time, Mr. Dixon scems to have intended his book to be a popular one, i.e., to be readable and intelligible for those who have no special knowledge of scientific ornithology. The result unfortunately is that we have neither a good popular book nor yet a good scientific book; it will often be most puzzling to the ordinary reader, while to the man of science it will

be wanting in completeness and solidity.

As a popular book it is spoilt by the want of that power to explain difficult problems lucidly, which the great masters of science almost always possess. It may, indeed, be doubted whether the subject of migration is as yet ripe for such a treatment; but Mr. Dixon has rushed in to undertake it, and he must bear the responsibility. His want of clear thinking is very obvious in his frequent failure to master the construction even of his own sentences. He can usually narrate his own experience well, and his books have hitherto been at least readable; but in this volume we are continually irritated, in spite of an honest desire to make the best of a work which is unique of its kind, by such sentences as never should have been allowed, either by author or publisher, to run the risk of exposure. I forbear to quote, but examples of what I mean will be found on pages 14, 72 and And I must add that Mr. Dixon often makes use of expressions which show that he is quite ready to degrade our language to the level of modern scientific German-in other words, to the lowest level to which human printed speech can well descend. What else can we say of such a sentence as this: "As for myself, I neither accept nor deny it [i.e., the theory of hibernation], having personally seen nothing to refute or confirm it, although fully believing it possible, considering that such an attitude is the most scientific position to assume until the subject has been more fully investigated, even at the risk of being 'handled without gloves' by some mud and torpor despising bruiser critic for my heresy."

Even such expressions as "hibernation capabilities," or "high earth eccentricity," are by no means agreeable to an English ear, and might easily have been dispensed with. It has, no doubt, been necessary for Mr. Dixon in the course of his researches to read a great deal of German, but there was surely no need for him to adopt the habit of using the unnatural idioms of that ill-used language.

Again, the scientific ornithologist will find fault with Mr. Dixon for not quoting the authorities for the immense number of facts which he has brought together. Surely he might at least have given us a list of the books he has used; one or two are quoted in the preface, and here and there in the text an authority is referred to, but this is all the means we have of verifying many of his statements. The plain fact is that Mr. Dixon has attempted too much, and has given himself insufficient time. This is indeed a pity, for the book contains much that is interesting, and in the last three chapters, and also in that on "the perils of migrations," where the subject matter is easier to handle, the reader will find the facts, so far as they are at present known, gathered together in a way that can hardly fail to be useful. Yet even now, as I read again the last chapter on inigration in the British Islands, I cannot but feel that it is altogether incomplete and unsatisfactory, and that quite as much may be learnt from those excellent maps, intended to illustrate the routes of migration, which the authors of the Birds of Devon have appended to their valuable work. Mr. Dixon seems indeed to have been pressed for space, and tells us that he could have easily filled a whole volume with the matter of this last chapter alone. I cannot help sincerely wishing that he had limited himself to this part of the subject, and had given us his own experience and views in a simple and unambitious form. In this way he might have aroused a more general interest in the phenomena which are within our own reach, and so have gradually led up to the more profound problems which yet await solution, and which cannot be even understood as unsolved problems without some knowledge of geological theories and of astronomical facts. I wish, in fact, that he had made up his mind to write either a popular book or a book of science, and that, which ever choice he made, he had taken more time over his work. I speak as an unscientific ornithologist who wishes to learn, but also, if I may say so, as one who knows well enough what scientific and scholarly work means.

W. WARDE FOWLER.

NOTICES OF BOOKS.

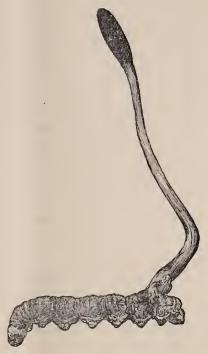
WE regret extremely that it is impossible to notice in the present number the numerous books which we have received for review. We regret it all the more because we believe that one of the most useful functions of NATURE NOTES is the recommendation of good books. Some day we hope to draw up a list of books suitable to form the nucleus of a Selborne Library, which we should like to see adopted as part of the machinery of every branch, and we shall be glad to receive suggestions on the subject. At the end of these notices is a list of the principal works which demand our attention, most of which we hope to review in January.

Vegetable Wasps and Plant Worms, by M. C. Cooke (Society for Promoting Christian Knowledge, 1892). Pp. 354. 51 woodcuts and 4 plates. Price 5s.

If the principle that regulates the choice of the titles of scientific books has any validity, wonders are portended by this title. However, it is only the author's playful way of describing his popular history of entomogenous fungi, i.e., fungi that are parasitic on insects—though where the "plant worms" come in is not so plain. Such fungi have attracted the notice of most naturalists, and their remarkable character induced Mr. G. R. Gray some thirty five years ago to print (privately) a memoir of them which Mr. Cooke has made the foundation of his book. Mr. Gray left in manuscript a preparation for a new edition of his memoir (now in the Botanical Department of the British Museum), and it is a pity that Mr. Cooke, who has done justice to the memoir as he knew it did not learn of the existence of this. However, he has made a very complete and interesting

popular account of the subject, which, it may be hoped, will draw further attention to this interesting department of inquiry. For example, there is a group of such fungi—the Laboulbeniaceæ—of the highest interest, some member of which may be expected to turn up any day in this country, and would constitute a find worth hunting for, and investigating rigorously when found. They are commonly regarded as very low types of Ascomycetes, but there is a deal of uncertainty about that in the minds of most students of fungi. The most noticeable of the fungi that attack insects are other Ascomycetes, e.g., Cordyceps (with its conidial form Isaria), forming generally club-shaped growths arising from the body of the victim. By the kindness of the publishers we are able to give an illustration of this genus—Cordyceps Gunnii, a Tasmanian species. Then there are the Entomophthoreac, to which group belongs the fungus that attacks our common house-fly, and may be found on window panes often enough—and lastly the inevitable bacteria that cause the disastrous "foul brood" of bees.

Mr. Cooke has arranged his matter according to the hosts of the fungi, i.e., he takes together all the fungi that attack Hymenoptera, similarly those that prey upon Coleoptera, Lepidoptera, &c., which of course is useful to the entomologist. The student of fungi has an index to guide him to the places where he will find the items of his research. It is a pity that the author should have given currency to a very doubtful statement regarding a possible connection of Empusa musca (the house-fly fungus) with Saprolegnia ferax (the salmon disease fungus), which grows on dead flies in water, as well as many other things, such as freshwater fishes, fish ova, earth worms, noses of frogs, pieces of bladder, and even manatees and whales, when kept in fresh water aquaria! He says, "it has long been known that when the house-fly, infested with Empusa musca, falls, or is thrown into water, a more complex mould is developed, which really is identical with the salmon disease. This would seem to indicate that the *Empusa* is a conidial form of the Saprolegnia, which view has been asserted even by mycologists, whilst we venture to doubt whether



there is really any genetic relationship between them." Mr. Cooke might well venture to doubt. It is, of course, not possible to prove a negative to this statement, but this idle assertion would be as tough a matter to establish. There is no ground for supposing anything of the sort, and it has never been established by any specimen that any Sapriolegnia has even grown on any fly attacked by Empusa. Notice of this has been taken at length, because it is a common error, and one likely to give trouble at the outset to a beginner in the study.

G. M

From Punch to Padan Aram, by Alfred T. Story (Elliot Stock, 8vo, pp. 233), is, as its name somewhat implies, a collection of essays on various subjects, many of them informed by a true Selbornian spirit, and therefore likely to be welcomed by our readers. Here is a new way of looking at the bird-wearing question, which we select in preference to adding any remarks of our own. The

writer describes a congregation, mostly of women, coming out of Church, and "nearly every one of the fair worshippers carried a bird impaled on her hat." "Now it happened to be one of these days when the sons of God came to present themselves before the Lord, and with them came Satan also. And as those sweet bird-like voices ascended, and the Lord inclined His ear to listen, and was pleased, then Satan whispered to Him and said: 'Behold, now, how three hundred of Thy handmaidens, the fairest and the best beloved of the land, come unto Thee, each with a platter upon her head, and upon it the sacrifice of a bird.' And when the Lord looked, and then turned away His head, Satan smiled, and again went to and fro in the earth and up and down in it. One is apt to wonder why ladies indulge in this habit, seeing that it is giving encouragement to a cruel trade (for the receiver, says the adage, is as bad as the thief, and the wearer, we imagine, must be equally guilty). But the answer is not far to seek. They have been called angels so long that they naturally feel that it is about time they began to develop wing; and doubtless it is—if they are ever to be angels. But, dear ladies, it should not be on the head. You can't get a strong upward flight in that way. Wings so placed are more likely to topple you head over heels—down, down! I am loth to finish with this suggestion of poor ladies descending headlong, like Icarus, in ruffled plumes, and borrowed ones too. But what is one to do? This slaughter of the innocents lies at their door."

Messrs. Chatto and Windus have re-issued at popular prices (paper Is., cloth Is. 6d.), Mr. H. J. Jennings "biographical sketch" of *Lord Tempson*, with a chapter bringing the contents up to date. Its publication in this form is very opportune, and we are not surprised to learn that it has already met with the large sale which it deserves.

Probably Mr. Robinson's Hardy Flowers (37, Southampton Street, W.C., 8vo, pp. x., 341) is the cheapest shillingsworth of its kind ever published. It consists of three parts: first, a general introduction to the subject: next, an alphabetical arrangement of the most ornamental hardy flowers; and then a number of selections for various purposes: the whole concluding with a glossary and an index of English names. It may be warmly recommended as a profitable investment; but why should a book issued in November, 1892, bear a false date—1893—on its cover and title page?

The following volumes, of which notices will appear as soon as the pressure on our space will permit, can be recommended to those who, at this season of the year, are accustomed to spend money upon books as Christmas or New-year's presents:—

British New Guinea, by J. P. Thompson. With over 50 full-page and other illustrations, and a coloured map. Medium 8vo., cloth, 21s. (George Philip & Son.) A notice of this, with illustrations, will appear in our January number.

The Great World's Farm, by Selina Gaye: some account of Nature's crops, and how they are grown. With a preface by G. S. Boulger. Post Svo., pp. 366, 5s. (Seeley.)

The Beauties of Nature; and the Wonders of the World we Live in. By the Right Hon. Sir. John Lubbock, Bart. With illustrations. Crown 8vo., 6s. (Macmillan.)

The Toilers of the Field, by R. Jefferies. Post Svo., pp. 330, 6s. (Longmans.)

The Study of Animal Life, by J. A. Thomson. Svo., pp. 375, 71 illustrations,
5s. (Murray.)

Beast and Man in India, by J. Lockwood Kipling. 8vo., pp. 360, with illustrations, 7s. 6d. (Macmillan.)

Science Stories, by Andrew Wilson. Svo., pp. 269, 5s. (Osgood, Macilwaine & Co.)

A Mendip Valley, by Theodore Compton. Demy 8vo., pp. 288, with illustrations. (Stanford.) We regret extremely to have left this very pleasant book so long unnoticed, but we hope to review it in our next issue.

More About Wild Nature, by Mrs. Brightwen. Portrait of the Author and twenty full-page illustrations. Small crown 8vo., pp. xvi., 261, 3s. 6d. (T. Fisher Unwin.) This volume certainly needs no commendation to the readers of NATURE NOTES. It is a worthy companion to its predecessor, and we cannot recommend it more strongly than by saying this, although we hope to notice it at length in an early issue.

Several other books also remain unnoticed.

SELBORNIANA.

The Master of the Buckhounds.—We trust that the Editor of Truth has good authority for his statement that the office of Master of the Buckhounds

is not to be kept up after the present year.

We have learnt, with some surprise, that a valued correspondent has taken exception to the observations which we have felt it our duty to make upon the subject, apparently mainly because by so doing we are trenching upon the domain of the Royal Society for the Prevention of Cruelty to Animals. We believe, however, that we are acting in the best interests of the Society by joining hands whenever possible with those whose objects are similar to our own; and moreover we do not see how this is to be avoided, even were it desirable. Our Natural History notes, for example, cover ground already occupied by many magazines; the advocacy of Open Spaces is taken up by more than one body; the Preservation of Footpaths engages the attention of a special society; reviews of books are published by almost every newspaper; and so we might continue. If, indeed, we are to restrict ourselves solely to matters which are not taken up in any other quarter we shall be relieved of the growing difficulty of finding space for the interesting matter that is sent to us, but we shall at the same time lose the greater part of our subscribers, whose varied interests are, we believe, best considered by our present course of action.

A Protest.—I write to enlist your aid in protesting against the nuisance and, to me, the sacrilege, of defacing our English landscape with huge and unsightly advertisement boardings. On my recent holiday journey to and from Devonshire, whenever I looked out of the window to enjoy, as I am in the habit of doing, occasional peeps of what characteristic rural scenery is still left us, my eye was continually offended by ghastly announcements on staring canvases of some quack's pills and somebody else's cosmetics. For many miles out of London these eyesores recur in almost every alternate field, and the traveller cannot look out to delight in the windings of the silver river or the picture of the distant village church nestling among its trees without seeing these hideous developments of modern trade competition everywhere in the foreground. This at last became so painful that I ceased to look out, and turned from nature, defaced and defiled, to my book.

The pleasures of railway travel are few enough, and it seems monstrous that this one alleviation of the tedium of a long journey should be vitiated and nullified by commercial greed. I suppose nothing can be done. This is a free country, and we must accept the penalties along with the privileges of our freedom. My only hope is that a growing sentiment of pride in our national scenery, and jealousy for its preservation, such as your Society and its Magazine strive to foster, diffused among our farmers and landowners, may tend to check this unspeakable

nuisance.

All Selbornians will, I feel sure, use their influence to create a public opinion which shall denounce this wholesale and brutal defacement of our fair English landscape as a blasphemy and a crime, and give practical expression to their indignation by refraining themselves and dissuading their friends from using articles thus advertised. The cvil is increasing. In some of the loveliest parts of Devonshire I found every five-barred gate and every stile to a field-path bepasted with tailoring and other advertisements. The yokels who do this kind of thing

ought to be severely boycotted, and our country gentry would do good service by refusing to deal with any country tradesman guilty of such nefarious proceeding.

Anerley. JOSEPH HALSEY.

[We entirely sympathise with our correspondent, as we are sure do all true Selbornians. One Selbornian of our acquaintance carries his principles so far as to refuse to wash with the soap advertised by a notorious offender in this way. So many soap-makers advertise, however, that this mode of protest has its inconveniences.—Ed. N.N.]

Nature Pictures.—The following important letter from the Marchioness of Lothian appeared in the Norfolk Chronicle for September 17th: - "Much has been written of late on the comparative merits of nature pictures and painted pictures. There need be no question of such rivalry, but it must be a matter of rejoicing that our rapidly vanishing rural beauty should be valued and preserved as far as possible. There is one way in which some lovely nature pictures, or rather vignettes, might be saved to us without going the length of buying estates, and which would save from destruction much of our native flora, our wild birds and Much has been said of the depredations of holiday-makers as destroying the botany of our hedgerows; but the lover of the fern and foxglove must blame still more the present mutilation by the road-makers of the banks and braes of our pretty country roads. The pleasant grass margins—pleasant to the rider or foot passenger, especially agreeable to the eye, in this county of plough—are now being cut away, leaving a border of morass in winter, and mud heaps; in summer a crop of unsightly coarse weeds. How lovely it was to see the white road like a stream winding through the green of rich old turf, a subject for Crome or Constable. Now, the banks are cut half-way up, leaving a crumbling mass whence the wet trickles over the mud on to the road, and the scrapings, instead of being left in the road and quickly carted away, are piled and plastered on the banks to the destruction of everything that grows there. Moreover, in summer the scythe mows ruthlessly every blade of lovely grasses, of fern, and harebell.

"Can nothing be done to arrest this wholesale destruction of natural beauty? We are told to train our children in natural history, but where can the wild flowers, wild berries, wild birds exist, accessible to all, now that our hedgerow life is thus annihilated? Is it necessary on roads where there is little traffic, and in others where there is room for three carriages abreast? The beautiful roads in the Black Forest, where mud does not exist, have a well-kept border of grass where road sweepings are not allowed to encroach. The richness of our land-scape, which has few bold features, depends much on old hedgerows, and it seems a serious matter to destroy the beauty and attractiveness which belong to country-life unless absolutely necessary. Many visitors to the coast have lamented the devastation of the last year or so, as destroying the beauty and in-

terest of the drives."

Oban.—Visitors to Scotland will be sorry to hear that the hill behind Oban (on which the unfinished hydropathic establishment stands), which commands one of the finest views in the neighbourhood, has this year been entirely closed against the public, in consequence of the conduct of various persons in gathering flowers, staring in at the windows of the adjacent house, and giving general annoyance in other ways. While fully admitting the right of the owners of property to defend themselves against intrusion and annoyance, and greatly regretting that the misconduct of visitors should render it necessary, we might be permitted to ask whether this could not be prevented by some less sweeping method than by excluding all comers. It appears to me that any of the following schemes would be found sufficiently effectual. (1) Where several paths (as in the case mentioned) lead to the same point, one might be left open, away from the house and garden. (2) Visitors might be admitted (if not daily, at least at stated times) on signing their names and addresses in a book at the lodge gate. (3) A small charge might be made for admission, for the benefit of some local charity.

W. F. Kirby.

"What shall we do with Our Scholars?" (p. 210)—It may interest Mr. Rawnsley to hear that "Sunday School Wild Flower Classes" have been formed in various parishes in Dorsetshire since 1889, initiated by the Bishop of

the diocese, who in that year issued a letter to the teachers, in which he sketched a plan similar to Mr. Rawnsley's. He pointed out the help it might be to the children if they were encouraged to gather wild flowers during their rambles, and bring them each week to their teacher to be named, when a few elementary botanical explanations should be given. In various parishes these suggestions have been acted on, and it is surprising how ardent some of the children have become, and how quick in discovering new plants. Last year the Bishop's prize was given to a child twelve years of age, from St. John's School, Weymouth, for the large number of specimens she had gathered. The same girl has this year evinced the same amount of interest, and the list of plants and names has just again been sent to Salisbury.

S. M. PAYNE.

How to Feed the Birds.—During the next two months there will doubtless be occasions when many of your readers will be charitable enough to feed the birds. I will suggest, by your leave, the best way to do this. In snow and frost a place may be cleared at a suitable distance from the window—say twenty yards—in the open so the birds are free from cats. Odd scraps from the house can be put down, supplemented with a few potatoes boiled with meal, and any refuse apples and pears. The blackbirds and thrushes will soon find this out, and now and then a missel thrush, red-wing, or starling will come, with of course the robins and hedge-warblers. A small quantity of fine gravel or grit should be thrown down as a digestive, and a pan of water is a great boon, especially when there is no snow. A handful of turnip seed will attract the finch tribe, the first to come being the chaffinches and greenfinches, with here and there a linnet, redpole, mountain finch and goldfinch. Then in most places some of the tits-great, blue, cole, or marsh—will turn up with a nuthatch or two. The last are my especial favourites, and prefer nuts varied by a bit of bread or chopped bacon for a change. The great tit delights in a coco-nut sawn in half and hung up, and this never freezes. The blue tit will pick a mutton-chop bone which we often rescue from the dogs; the cole and marsh tits are fond of a piece of cheese rind cut a third of an inch thick, and nailed to a board a foot square suspended outside the window by the four corners. In very severe weather I have known a wren come, and it will take turnip seeds and very small currants. The majority of these birds are, I believe, permanent residents if they can obtain the necessary food and quiet. In the long frost of 1890-1 I noticed at feed all the birds I mention. The sparrows are troublesome, but they retire early and leave the small birds to finish their last meal in peace, and they never venture upon the hanging board. The digestion of a bird is very rapid, and in a long frost they feed all day long. It is not cold that kills them, but hunger.

Tostock, Bury St. Edmunds.

W. H. TUCK.

Another Open Space Saved .- Once more Londoners are to be congratulated upon the dedication to their use and enjoyment for ever of another open space in the shape of West Wickham Common. Small, and sadly diminished in extent from what it was formerly, its picturesque beauty goes far to compensate the regret that such a comparative fragment should alone remain unenclosed. The highest praise is due to the inhabitants of the neighbourhood who started a subscription for the purchase of the manorial rights, and to the City Corporation in completing the purchase and undertaking to maintain the Common in order. The Lord Mayor, in his admirable speech at the dedication ceremony, said it seemed to him "that it wanted but that Common to connect the links of the chain of open spaces round London." But, alas! the chain of open spaces encompassing London is anything but complete, and attention may be called to at least one important missing link. A year or more since I pointed out in these pages what a loss Londoners were sustaining in the slow but sure effacement of Wimbledon Park,* and urged that the Park would be needed as a recreation ground for the large population of the Wandsworth suburbs already rapidly on the increase. The whole of the land lying between Wimbledon Park on its eastern borders and Earlsfield, one of the suburbs of Wandsworth, is now on sale for building purposes. A short while since part of the land was flooded by the overflow of the river Wandle, and from the submerged meadow arose two posts bearing aloft the

^{*} See NATURE NOTES, Oct., 1891, p. 185.

usual board announcing the land for sale. With the near prospect of a crowded population surrounding and trenching upon the Park, the time has surely come to save it. Great and good as is the work that the City Corporation and London County Council have already done in this direction, their energies will here find full scope. It is the plain duty of the inhabitants of Wandsworth, Putney and Wimbledon to follow in the steps of those of Beckenham and Bromley, in the endeavour to arouse local interest and in the attempt to save at least some portion of this beautiful landscape lying in their midst. Having done this they surely will not seek in vain the aid of the two great governing bodies of the metropolis—the one full of youthful energy, the other boasting a dignified antiquity, but both united in a common desire to promote the cause of open spaces.

The Preservation of Birds in Australia.—A movement has been started in Melbourne for the passing of a law which may tend to prevent the wanton destruction of birds in Victoria. A deputation, organised by the Victoria Field Naturalists' Club, and representing numerous influential Societies, lately brought the subject under the notice of the Minister of Customs. In introducing the deputation, Messrs. G. D. Carter and J. Bosisto dwelt upon the necessity of protecting insectivorous birds from the reckless and indiscriminate shooting which is now so prevalent, as well as human lives, which are frequently sacrificed to the inexperience of sportsmen. The imposition of a gun tax as a legitimate source of revenue was also suggested. Mr. F. Wisewould referred to the draft which had been drawn up by the sub-committee of the Field Naturalists' Club—a draft based upon similar Acts in England and some of the Australian colonies. A few new features had, however, been added, notably that which made it illegal for persons under the influence of liquor to carry firearms. It was also provided that under no circumstances should a licence be given for the use of swivel guns. In answer to the deputation the Minister said that he would take the draft bill which had been prepared into favourable consideration. He would have an amended draft drawn up and submitted to those interested before its introduction into Parliament. He was of opinion that a 5s. tax, as proposed, was not heavy enough, since it would be worth the while of those who let out guns to pay the tax themselves.

Earlier Opening of Kew Gardens.—The First Commissioner of Works, Mr. G. Shaw Lefevre, has just given his promised interview to Mr. F. G. Heath, and has undertaken to consider carefully the earlier opening of Kew Gardens.

NATURAL HISTORY NOTES AND QUERIES.

A Spider's Bath.—When walking one day in September along the picturesque road bordering Lake Como, between Cadenabbia and Menaggio, I observed as I thought a dark bird over the water at some distance; but seeing that it did not move my attention was at once arrested, and the object proved to be a large round spider quite near, hanging by an invisible thread from a bough of a tree which extended considerably out over the lake. A good binocular glass which I fortunately had with me at once revealed a most interesting sight. The spider, whose body appeared to be about the size of a cherry, was gradually descending by means of a very fine thread with the apparent intention of reaching the water—some ten or twelve feet from the shore—his long hairy legs manipulating the fine thread, while he descended gradually, back downwards. As he approached the surface I could not but feel anxious for his safety—he looked such a tempting bit of lunch for a trout. At last he touched the water and allowed himself to be swayed about by the ripple, which tossed him quite roughly, then rose a few inches and descended again, this time seeming to give himself quite a dip, wetting his legs, and seemingly regardless of all risks. The water was about three feet deep at the spot and so clear that I could easily see the bottom, and soon perceived several very small fishes approaching to have a look. At first they darted about, playing round him, and then took courage to make an attack, and came and nibbled at his round fat body, and in their eagerness to try and get a bite, pushed him along the surface, while he, with his legs well up out of the way,

seemed to treat them with utter contempt, and after a few minutes more rose, sparkling with diamonds, and at about three feet from the water commenced his toilet, in which his long hairy legs took an active part; but as he took so long about it I was obliged to wish him farewell. Never having heard of a spider taking a bath before, I felt that the record of it might interest some of your readers.

Dublin. H. M. BARTON.

Poisoning by Bearsfoot. — I wonder if you or your readers are aware what a very strong irritant poison is the juice of the Bearsfoot (Helleborus fatidus). Of course everyone knows it is poisonous in all its parts to eat, but I was not before aware that it affects even the skin. One Sunday this last summer I came in to find my little girl lying on her face crying. She told me that she had been shelling the little seeds of the plant which, as she expressed it, "provides your garden from mine." This I knew to be the Bearsfoot, a common weed in the shrubbery. The child added that her hands were burning and pricking, and even after the thorough washing, which I at once ordered, this continued. I noticed throughout that day and the next that she shrank from using her thumbs and first fingers, and at the end of about a week the skin peeled off as if the little fingers had been burnt. I do not find any notice of this peculiarity in any of my botany books, so I thought it might be interesting to your readers.

C. M. B.

Swallows in late October.—It may interest some readers to hear that in this village I remarked a number of swallows (*Hirundo domestica*) on the 29th of October. They did not appear to be weak or young birds, neither did they seem to be stragglers left behind. I counted quite a score skimming about on the surface of the brook and in the air, as in the height of summer. Is not this an unusually late date for them to be still with us? I have generally noticed that all

the family have left us before the 20th of the month.

South Stoke, Bath. N. S. H. SAMLER.

A Scented Spider.—A friend of mine found in her garden in London the other day, a spider, and in handling it to give to a favourite bird, she perceived a strong odour of perfume in her hand, which remained there for some time, and on going into the house she was asked where the scent came from. Can anyone kindly tell me if this is unusual in spiders of this country?

F. M. M. P.

Martins (p. 219).—I have seen, year after year towards the end of September, thousands of martins in the neighbourhood of Selsey. A single telegraph wire ran from Chichester to Selsey, and it formed a favourite perch for these birds. I have seen them sitting close together, forming a continuous line nearly one hundred yards long. It was a curious sight to see hundreds of these birds packed as close together as they could squeeze, with their heads all turned one way. The natives say they always sit with their heads to the wind, but my observations did not thoroughly confirm this, for though I never saw them sitting with their tails direct to the wind it frequently blew on their quarters, if I may use a nautical expression. I never saw them start on their journey south, nor did I ever hear of anyone in the neighbourhood who did. They left suddenly—thousands of birds at night, but in the morning every one gone. I made enquiries of the fishermen who are out at all hours, but they have never noticed them leave, and when in the Channel myself with the fishermen I have kept special watch for migratory hirds, but have never seen any flying south. It would seem as if they left in a body, but in the spring they come back in small flocks, and even singly. At that time of the year it is not a rare occurrence for the birds to alight on the fishing boats for a rest, and as an example of the complete exhaustion of some of these tiny travellers a fisherman told me that one day when about seven miles from land a chiff-chafffor such I judged it to be from his description—came fluttering towards his boat and just managed to reach the side, but not having strength to cling, it fell back into the waves. The fisherman caught it almost as it touched the water, but it FRED. W. ASHLEY. was too late, the little thing was dead.

M. S. J.—We would advise you on no account to take for granted the pseudo-scientific explanations of natural phenomena which are to be found in popular works on natural history.

A Correction.—Miss Johnson writes that the statement on p. 214 that her work on Sunshine is "based on a series of lessons given in connection with the

Manchester School Board" is "absolutely without foundation." Our reviewer is on his way to Africa, and the copy of the book is no longer in our hands, but we willingly insert Miss Johnson's disclaimer, although we do not think that the statement in question was intended or is likely to disparage the work.

OFFICIAL NOTICES.

THE Secretary will be glad to receive any spare copies of NATURE NOTES for February last. They should be sent to him at 9, Adam Street, Adelphi, W.C.

At the October Council meeting the formation of a new Branch at Croydon was authorised, of which the Hon. Sec. is E. A. Martin, Esq., Carew Road, Thornton Heath.

The office of Secretary of the Birmingham Branch has been transferred to Mrs. Windle, 33, Clarendon Road, Edgbaston, Mrs. C. Dixon, the former Secretary, being appointed Treasurer. At the November meeting of the Council a vote of thanks was proposed to the out-going Secretary for her services.

The Editor begs to thank Mr. A. Holte Macpherson for his kindness in draw-

ing up the Index to the present volume.

We are extremely anxious to give, if possible in our January issue, a list of the Branches, with the addresses of the Secretaries, and a short summary of the work that has been undertaken during 1892. This can, of course, only be done by the co-operation of the local Secretaries. We are sure that in this way many useful hints will be given, while it will be possible from such reports to form some notion of the actual progress which the Society is making. We regret that the ever-increasing demands upon our space prevent us from giving in this number any account of the annual meeting of the Birmingham Branch, an interesting account of which has been sent us.

We beg once more to call the attention of publishers, contributors, and readers generally to the last paragraph of our *Notices to Correspondents*. The omission to comply with the simple directions there given often causes delay and serious inconvenience.

NOTICE TO CORRESPONDENTS.

Contributions for any number should reach the Editor, JAMES BRITTEN, F.L.S., 18, West Square, London, S.E., not later than the 15th of the month.

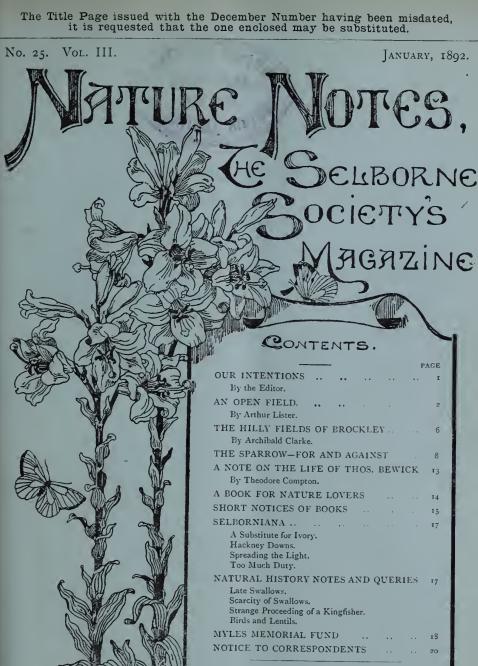
When it is particularly requested, MSS. not accepted will be returned, if stamps sufficient to pay the postage are sent for that purpose. Short notes on Natural History or Selbornian subjects will be especially welcome. In every case contributions must be accompanied by the name and address of the writer.

Queries on any points connected with Botany, Zoology, or other branches of Natural History, will be answered if possible, and advice will be given as to the best books for students in any department of Natural Science; but all questions must be accompanied by the names and addresses of the writers, not for publication, if this is not desired.

Specimens sent for identification will be named, if sent carefully packed and in good condition, and if sent to the Editor, but we cannot undertake to return any specimens. Not more than six specimens will be named at one time, and, in the case of common plants, it is suggested that correspondents will find it far more useful to work them out for themselves than to send them to us for naming; we shall always be willing to confirm or correct such determinations.

We shall be glad to notice any books bearing upon natural history in any of its branches, and to direct attention to magazine articles of the same kind, if these are sent to us. Publishers will confer a favour upon our readers if they will always state the *price* of any volumes they may send, in order that it may be quoted in the notice. This addition is much appreciated by our readers, and is desirable in the interest of the volumes themselves.

It is particularly requested that subscriptions and letters connected with business should not be forwarded to the Editor, but to the SECRETARY OF THE SELBORNE SOCIETY, 9, Adam Street, Adelphi, W.C. Editorial communications, specimens, and books for review should be addressed to Mr. BRITTEN, as above.



London:

H. SOTHERAN & Co.,

136, STRAND, W.C. & 37, PICCADILLY, W.

Manchester: 49, CROSS STREET,

Edited by

JAMES BRITTEN, F.L.S.

From WARD & DOWNEY'S LIST.

ENGLAND AND THE ENGLISH IN THE EIGHTEENTH CENTURY.

By W. C. SYDNEY. 2 vols., 24s.

"His book is about the most useful modern book on the life of the last century."-National Observer.

SOCIAL ENGLAND UNDER THE REGENCY. By John Ashton.

Illustrated with Reproductions of Contemporary Sketches. 2 vols., demy 8vo, 3os.

"It is because Mr. Ashton's rich miscellany throws much light upon the inner spirit of a grand generation that we commend it to readers who have not time for more elaborate study."—St. James's Gazette.

PICTURESQUE LONDON. By PERCY FITZGERALD. Extra crown 4to, 25s., with upwards of 100 Illustrations by eminent artists.

"We are delighted to get a book like 'Picturesque London,' itself a triumph of the printer's art."-St.

"It is all about the curiosities of London, the quaint old bouses, and the odds and ends of arcbæology and street lore."—The Daily News.

ANTHROPOLOGICAL STUDIES. By A. W. Buckland. Crown 8vo, 6s.

"Has certainly brought together an immense wealth of facts, and besides giving us his own criticisms, he has stated the theories held by our leading authorities in palæontology, so that his book is a storebouse of information and speculation on the obscure beginnings of our race."—Daily Telegraph.

"The book deserves to be widely read."-Morning Post.

New and Cheaper Edition of "The Insanity of Genius."

THE INSANITY OF GENIUS AND THE GENERAL INEQUALITY

OF HUMAN FACULTY PHYSIOLOGICALLY CONSIDERED. By J. F. NISBET. New edition. Crown 8vo, 6s.

"Mr. Nisbet's recent book on the insanity of genius contains much evidence which appears to show that the most distinguished men of each generation bave had some morbid element which has crossed, or perhaps even constituted, their greatness."—The Times (Leading Article).

"The book is a curious and interesting one."-The Times.

"Open its pages where one will, one is confronted with matter of interest alike to the scientific enquirer and the mere seeker of entertainment."—The Saturday Review.

"'The Insanity of Genius' is a living book,"-Morning Agvertiser.

In a Letter about this Book Professor HUXLEY writes:-

"Genius to my mind means innate capacity of any kind above the average mental level. From a biological point of view, I should say that a genius among men stands in the same position as a 'sport' among animals and plants, and is a product of the variability which is the postulate of selection both natural and artificial. On the general ground that a strong and therefore markedly abnormal variety is not likely to be so well in harmony with existing conditions as the normal standard (which has been brought to what it is largely by the operation of those conditions), I should say that a large proportion of 'genius sports' are likely to come to grief physically and socially, and that the intensity of feeling which is one of the conditions of what is called genius, is especially liable to run into the 'fixed ideas' which are at the bottom of so much insanity."

FICTION IN SINGLE VOLUMES.

By Mrs. MACQUOID.

AT AN OLD CHATEAU. By

Mrs. MACQUOID. Crown 8vo, 6s.

"A gracefully drawn picture of French country life."—Gentlewoman.

AT THE RED GLOVE. By Mrs. MACQUOID. Illustrated by

C. S. REINHART. 3s. 6d.

COSETTE. By Mrs. Macquoid. 3s. 6d.

Two Books for Children.

The LITTLE LADY of LAYEN-DER. By THEODORA ELMSLIE. Illustrated by EDITH SCANNEL. 3s. 6d.

"It is one of the best stories intended for, or at least about, children that have appeared since 'Little Lord Faunt'eroy.'"—Acadeny.
"The illustrations to the book are charming,

"The illustrations to the book are charming, and the moral of the story is excellent."—The Speaker.

TRASH. By Mrs. Blagden.

3s. 6d.
"This is an excellent gift-book for young

people."—Gentlewoman.

WARD & DOWNEY, York Street, Covent Garden, W.C.

BRENTANO'S PUBLICATIONS.

THE DELMONICO COOK-BOOK. How to Buy Food, how to Cook it, and how to Serve it. By ALEXANDRO FILIPPINI (for twenty-five years Chef at Delmonico's, New York). Large 8vo., pp. 438, strongly bound in white American cloth, 12s.

This work is designed not only for Clubs, Hotels and Restaurants, but more especially for Private Families. In it will be found Menus for Breakfast, Luncheon and Dinner for every day in the year, beside Menus for Celebrated Dinners which have been given at Delmonico's from time to time.

The most valuable portion of the work is the collection of 1,394 recipes, which occupy

A complete Index is to be found at the end.

A special feature is the binding in American cloth, which can be washed when greased in the kitchen.

"There are few people to whom the name of Delmonico is unknown. that a cookery book prepared by a chef of that famous establishment should excite some interest in the world of dinners even over here, is only natural. To hegin at the heginning, or rather the outside of Filippini's volume, a word of praise is due to Brentano's, the publishers, for the particularly appropriate and convenient binding of white American cloth, which as long as there is a soft damp duster anywhere handy, can always be kept up to its pristine daintiness—no small recommendation to A BOOK WHICH IS SURE TO FIND ITS WAY TO ANY KITCHEN RULED BY A COOK WORTHY OF THE NAME."—Queen.

"We can strongly recommend the work."—Field.

"Every one, it may be presumed, has heard of Delmonico's, the famous New York Restaurant; a happy minority have heen privileged to dine there."—Spectator.

"There are good things in Filippini."—Saturday Review.

STATESMEN'S DISHES AND HOW TO COOK THEM. Practical Autographic Recipes by Two Hundred Women, prominent in official and social life at the National Capital.

This collection of recipes is of unprecedented interest and value. Nothing approaching it has ever before been offered to the public. All the ladies who have kindly contributed, are noted in Washington circles, and far beyond these confines, as hostesses and housekeepers. They are universally recognised as leaders, and the excellence of their entertainments has done very much toward building up the reputation of the Capital for refined hospitality. 820, cloth, 6s.

THE BERKSHIRE COMIC COOK-BOOK AND DYSPEPTIC'S GUIDE TO THE GRAVE. By F. H. CURTIS. Paper, 1s. 6d.

"This is not a book to he read through at a single reading. It is a volume to he perused between meals and at odd times. Do not ruin your constitution by endeavouring to memorise its contents all at once,"— Author's Preface.

MARGERY DAW'S HOME CONFECTIONERY. By Lucy W. Bostwick, 12mo, 2s. 6d.

"A charming little manual as dainty in appearance as its contents seem enticing; it cannot fail in delighting every household which includes one sweet tooth among its number."—The Queen.

"SHORT SIXES." By H. C. BUNNER.

"This little volume on the whole well deserves a place in that rapidly growing collection of American short stories which find their way across the Atlantic."—The Queen.

"Under this title Messrs, Brentano publish a volume of delightful 'stories to be read while the candle burns,' by Mr. H. C. Bunner, editor of 'Puck,' They all have a quite original humour of their own with which the illustrating artists, Mr. C. Jay Taylor, Mr. F. Opper, and Mr. S. B. Griffin are much in sympathy. Expectation is keenly aroused by the opening tale 'The Tenor,' yet there is not a disappointing story in the whole thirteen. All the plots are laid in the States; but their interest is by no means purely local. No one will regret having sought amusement in 'Short Sixes.' It is to be found there."—Graphic.

HYPNOTIC TALES AND OTHER TALES. By JAMES L. FORD. Illustrated by C. Jay Taylor, F. Opper, S. B. Griffin, and L. Dalrymple. Square 12mo, cloth, price 4s.

A MOTHER'S HELP AND CHILD'S FRIEND. By CARRICA LE FAVRE. Croton 8vo, cloth, 7s. 6d.

THE AMERICAN RACE. A Linguistic Classification and Ethnographic Description of the Native Tribes of North and South America. By DANIEL G. BRINTON, A.M., Crown 8vo, cloth, 10s. 6d.

THE RAILWAY PROBLEM. With many illustrative diagrams. By A. B. STICKNEY. Crown 8vo, cloth, price 10s. 6d.

London: BRENTANO'S, 5, Agar Street, Strand. New York, Chicago, Washington, and Paris.

Selborne Society's Publications.

- NATURE NOTES: THE SELBORNE SOCIETY'S MAGAZINE. Edited by James Britten, Esq., F.L.S., assisted by eminent Specialists in every department of Natural History. All back numbers have been reprinted, and are now to be obtained. Price 2d., post free 2½d. The Volumes for 1890 and 1891, hand-somely bound in cloth gilt, price 3s.; gilt edges, 3s. 6d. each.
- THE SELBORNE MAGAZINE. For lovers and students of Living Nature. Edited by Mr. C. Roberts, F.C.S. Issued in 1888 and 1889. The numbers from January to November, 1889, are still in print. Price 2d., post free 2½d.
- THE SELBORNE SOCIETY'S LETTERS. A series of Pamphlets, Edited by Mr. G. A. Musgrave, F.Z.S., issued in 1887, explaining the objects and work of the Society. Suitable for free distribution. Nos. 1 to 12, price 1d., post free 1½d.
- PROSPECTUSES describing the objects of the Selborne Society, and the ways in which they may be promoted. Price 2s. per 100, post free.
- LIST OF OFFICERS of the Society (1891), Branches, with their Honorary Secretaries, and Rules of the Society. 2s. per 100, post free.
- RECEIPT BOOKS. Price 2s. per book of 50 receipts. Designed by Professor F. E. Hulme, F.L.S., Member of the Executive Council.
- CARDS OF MEMBERSHIP, price 1s. 1½d. for 25 Cards, will be supplied to Honorary Secretaries of Branches.
- **LEAFLETS**, entitled "Bonnets and Hats; or, Don't Waste Birds." Price 1s. per 100.
- **LEAFLET.** "Destruction of Ornamental Plumaged Birds." By Mrs. E. Phillips, Hon. Sec. of the Tunbridge Branch of the S.P.C.A. Printed by the Author for gratuitous distribution.
- POSTERS for the Preservation of Wild Flowers. Price 3d. per dozen.
- FORMS OF PETITION or Warrant for the formation of New Branches will be supplied on application.
 - All the above can be obtained from the Secretary of the Selborne Society,
 - 9, Adam Street, Adelphi, W.C.



WARD & DOWNEY.

ENGLAND AND THE ENGLISH IN THE EIGHTEENTH CENTURY.

By W. C. SYDNEY. 2 vols., 24s.

"Mr. Sydney has succeeded in picturing the men and women, costumes and pastimes, coffee-houses and clubs, vices, follies, and superstitions of the past century, in a highly graphic and realistic manner.

A useful and delightful book."—Daily Telegraph.

"His hook is ahout the most useful modern hook on the life of the last century."—The National Observer.

By Percy Fitzgerald. With upwards of PICTURESQUE LONDON. 100 Illustrations. 25s.

"We are delighted to get a book like 'Picturesque London,' itself a triumph of the printer's art."-St. James's Gazette.

"It is all about the curiosities of London, the quaint old houses, and the odds and ends of archæology and street lore."—The Daily News.

SOCIAL ENGLAND UNDER THE REGENCY. By John Ashton.

Illustrated with Reproductions of Contemporary Sketches. 2 vols., demy 8vo, 3os. "Bright and pleasant reading One of the chief merits of the two volumes is that they reproduce in excellent style a large number of contemporary caricatures by Gilray, Rowlandson, Cruikshank, and others."-Times.

TWO YEARS AMONGST THE SAVAGES OF NEW GUINEA. With

an Introductory Chapter on North Queensland. By W. D. PITCAIRN, F.R.G.S. I vol., crown 8vo, 5s.

"This is a capital work of travel. It records in an unpretentious fashion the experience of a couple of years on the coast of New Guinea and the neighbouring isles; it narrates some thrilling adventures by sea and land; and the author, without having much literary polish, has a happy knack of telling his story clearly and dramatically,"—Morning Post.

ANTHROPOLOGICAL STUDIES. By A. W. Buckland, Member of the Anthropological Institute. I vol., crown 8vo, 6s.

"Has certainly brought together an immense wealth of facts, and hesides giving us his own criticisms, he has stated the theories held by our leading authorities in palæontology, so that his book is a storehouse of information and speculation on the obscure beginnings of our race."—Daily Telegraph.
"The hook deserves to be widely read."—Morning Post.

New and Cheaper Edition of "The Insanity of Genius."

THE INSANITY OF GENIUS AND THE GENERAL INEQUALITY OF HUMAN FACULTY PHYSIOLOGICALLY CONSIDERED. By J. F. NISBET. Crown 8vo, 6s.

"The hook is a curious and interesting one."-Times.

"Open its pages where one will, one is confronted with matter of interest alike to the scientific enquirer and the mere seeker of entertainment."—Saturday Review.

MARRIAGE AND HEREDITY. By the same Author. Second Edition. I vol., crown 8vo, 6s.

New Novels at the Libraries.

A BAFFLING QUEST. By RICHARD DOWLING, Author of "The Mystery of Killard." 3 vols.

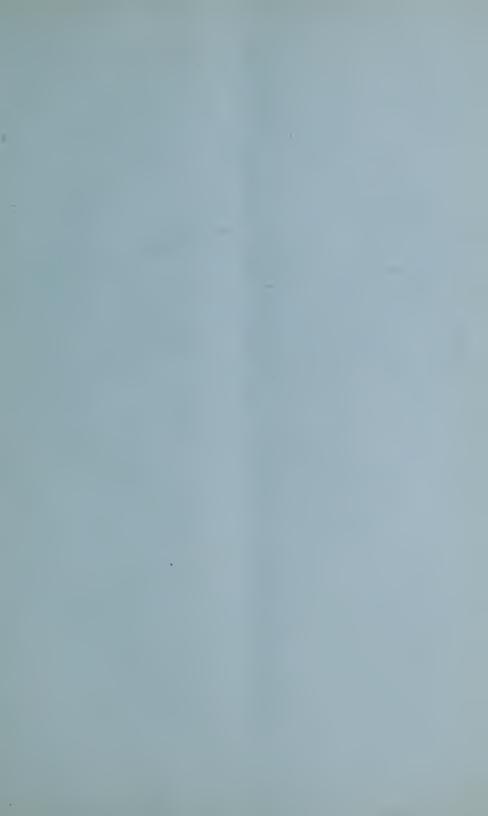
"Its interest, like that of 'The Moonstone' or 'Armadale' is really enthralling. It shows more power and finer quality than most hooks of its kind."—Speaker.

MR. JOCKO. By J. FOGERTY, Author of "Lauterdale," "The Countess Irene." 3 vols., 31s. 6d.
"A very clever novel."—Scotsman.

UNDER FALSE PRETENCES. By Adeline Sergeant, Author of "Jacobi," &c.

"Here in fact is a book full of incident and excitement, and hy far the author's hest work."-National Observer.

WARD & DOWNEY, York Street, Covent Garden, W.C.



The Selborne Society's Magazine.

Edited by JAMES BRITTEN, F.L.S.,

Senior Assistant, Department of Botany, British Museum,

assisted by eminent Specialists in every Department of Natural History.

The circulation of this Magazine has greatly increased during the past year : it is now much enlarged, and several new features have been introduced.

Among the Contributors to NATURE NOTES are the following well-known writers:—

The BISHOP OF WAKEFIELD.

The Hon. Mrs. R. C. BOYLE (E.V.B.), Author of "Days and Hours in a Garden."

Mrs. Brightwen, Author of "Wild Nature won by Kindness," &c.

G. S. BOULGER, F.L.S., Author of "Familiar Trees," "The Uses of Plants," &c. WILLIAM CARRUTHERS, F.R.S., Keeper of the Department of Botany, British Museum.

T. D. A. COCKERELL, F.Z.S., Curator of the Jamaica Museum.

The Rev. W. WARDE FOWLER, Author of "A Year with the Birds," &c.

R. J. HARVEY GIBSON, M.A., F.R.S.E., F.L.S., Author of "A Text-book of Biology," &c.

G. C. HAITÉ, F.L.S., Author of "Plant Studies," &c.

The Rev. Prof. GEORGE HENSLOW, M.A., F.L.S., Author of "The Origin of Floral Structures," "Botany for Children," &c.

Prof. F. E. HULME, F.L.S., F.S.A., Author of "Familiar Wild Flowers," "Way-side Sketches," &c.

J. R. JACKSON, Esq., A.L.S., Curator of the Kew Museums.

W. F. Kirby, F.L.S., F.E.S., of the British Museum, Author of "A Handbook of Entomology," "European Butterflies and Moths," &c.

The Rev. F. O. MORRIS, B.A., Author of "A History of British Birds," &c.

GEORGE MURRAY, F.L.S., of the British Museum, Joint Author of "A Handbook of Cryptogamic Botany."

GEORGE A. MUSGRAVE, F.Z.S., F.G.S.

GEORGE NICHOLSON, A.L.S., Curator of the Royal Gardens, Kew; Editor of the "Dictionary of Gardening."

J. L. OTTER, Hon. Treasurer of the Selborne Society.

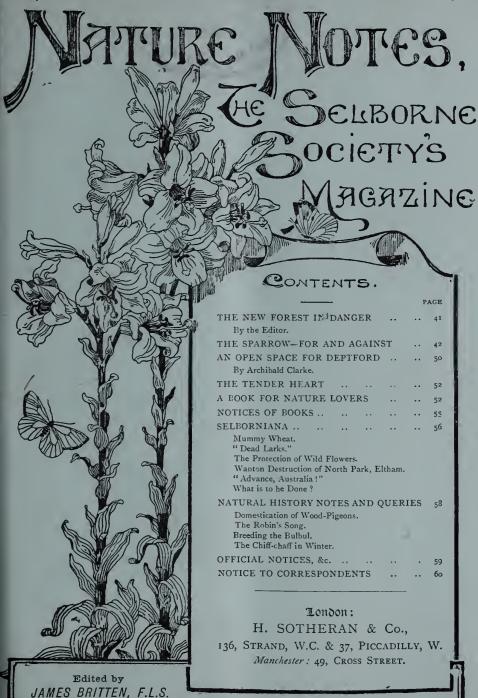
The Rev. H. D. RAWNSLEY, M.A., Author of "A Plea for the Birds," &c.

F. N. WILLIAMS, F.L.S., Author of "The Pinks of Europe," &c.

The special features of NATURE NOTES are fully set forth in the original circular, a copy of which may be obtained on application. It is intended to be a record of progress—progress in the love of Nature, in the knowledge of natural objects, and in the war to be waged in defence of the beauties of Nature against their more or less avowed exterminators.

Special prominence is given to Reviews of Books which bear on the various branches of Natural History, and the Editor will always be glad to give information as to books suitable for any particular study.

Business communications with regard to NATURE NOTES should be addressed to the SECRETARY OF THE SELBORNE SOCIETY, 9, Adam Street, Adelphi. Editorial communications and Books for Review should be addressed to JAMES BRITTEN, Esq., 18, West Square, Southwark, S.E.



THE ZOOLOGIST: A Monthly Journal of Natural History. Edited by J. E. HARTING, F.L.S., &c. Contains original articles on every branch of Zoology, notes on the habits and occurrences of Quadrupeds, Birds, Reptiles, Fishes, Molluscs, and Insects. Proceedings of Societies, Reviews, &c. Occasional woodcuts and Plates. Price 1s.

BIRDSNESTING AND BIRD-SKINNING: A Complete Description of the Nests and Eggs of Birds which Breed in Britain. By EDWARD NEWMAN. SECOND EDITION.—With Directions for Collecting and Preservation, and a Chapter on Bird-skinning. By MILLER CHRISTY. Cloth extra, fcap 8vo, price 1s.

"Very good indeed, and can be thoroughly recommended."-Athenæum.

"A sterling hook for the oologists and hird-skinners in our schools. The arrangement is perfect."— Nat. Hist. Journal.

"A wonderful shillingsworth. No wonder a second edition is called for."-Graphic.

LETTERS OF RUSTICUS ON NATURAL HISTORY. By EDWARD NEWMAN. Containing a great number of miscellaneous observations, after the manner of White's "Selborne." Price 6s. 6d. nett.

"There is a woodcut, some of them most exquisite, to each chapter; and tailpieces, after the delightful manner of Bewick, are scattered through the work. It is a most delightful book."—ferrold's News.

"The most charming contribution to Natural History since the days of good old Gilhert White. These 'Letters' are well worthy of consultation by all gardeners and agriculturists, since the description of these facts are perfectly trustworthy, being in all cases the result of observation."—Westminster Review.

"The collection of facts and observations respecting blights, or insects injurious to vegetation, are especially worthy attention, and we recommend them strongly."—Gardener's and Farmer's Journal.

A NATURALIST'S RAMBLE TO THE ORCADES. By ARTHUR W. CRICHTON, F.L.S. With an exquisite tinted frontispiece by Wolf. Conveying interesting information about the Orcades group of islands and the birds frequenting them. Price 3s. nett.

THE INSECT HUNTER'S COMPANION. Instructions for collecting and preserving Butterflies and Moths, Beetles, Bees, Flies, &c. By the Rev. JOSEPH GREENE, M.A. Third Edition, revised and extended by A. B. FARN. The Chapter on Coleoptera by EDWARD NEWMAN; on Hymenoptera by FREDERICK SMITH; on Breeding Gall-flies by EDWARD A. FITCH. Where to find moths and butterflies; how to catch; how to bring home without injury; how to kill; how to set; how to find the caterpillars; how to manage; how to feed; how to breed the perfect insects; and a hundred similar subjects. Price 15.

THE INSECT HUNTERS; or, First Lessons in Entomology. By EDWARD NEWMAN. This little work, written in simple language and in verse, gives valuable information on the habits and economy of Insects. It deals with the four stages of Insect life, metamorphosis, classification, &c. Price 2s. nett.

"Unrivalled as a First-Book in Entomology."—The late W. Spence.

"We know of no book that contains so much information in so small a compass on the habits and economy of Insects,"—Natural History Review.

N EWMAN'S BRITISH FERNS. Third Edition. Demy 8vo; illustrated by 100 studiously accurate figures. Minute Descriptions, ample Lists of Localities, and full Directions for Cultivating. Price 13s. 6d. nett.

"In accuracy of observation, elaborateness and clearness of description, and beauty of illustration, it does not possess its equal."—Annals and Magazine of Natural History.

"It is just such books as this which render Natural History so attractive." - Gardener's Chronicle.

NEWMAN'S BRITISH FERNS. PEOPLE'S EDITION, Fcap 8vo; with 6 Plates, minute Descriptions, List of Localities, and full Directions for Cultivating. Price 2s.



The Selborne Society's Magazine.

Edited by JAMES BRITTEN, F.L.S.,

Senior Assistant, Department of Botany, British Museum,

assisted by eminent Specialists in every Department of Natural History.

The circulation of this Magazine has greatly increased during the past year : it is now much enlarged, and several new features have been introduced.

Among the Contributors to NATURE NOTES are the following well-known writers:—

The BISHOP OF WAKEFIELD.

The Hon. Mrs. R. C. BOYLE (E.V.B.), Author of "Days and Hours in a Garden."

Mrs. BRIGHTWEN, Author of "Wild Nature won by Kindness," &c.

G. S. BOULGER, F.L.S., Author of "Familiar Trees," "The Uses of Plants," &c.

WILLIAM CARRUTHERS, F.R.S., Keeper of the Department of Botany, British Museum.

T. D. A. COCKERELL, F.Z.S., Curator of the Jamaica Museum.

The Rev. W. WARDE "OWLER, Author of "A Year with the Birds," &c.

R. J. HARVEY GIBSON, M.A., F.R.S.E., F.L.S., Author of "A Text-book of Biology," &c.

G. C. HAITÉ, F.L.S., Author of "Plant Studies," &c.

The Rev. Prof. GEORGE HENSLOW, M.A., F.L.S., Author of "The Origin of Floral Structures," "Botany for Children," &c.

Prof. F. E. Hulme, F.L.S., F.S.A., Author of "Familiar Wild Flowers," "Way-side Sketches," &c.

J. R. JACKSON, Esq., A.L.S., Curator of the Kew Museums.

W. F. KIRBY, F.L.S., F.E.S., of the British Museum, Author of "A Handbook of Entomology," "European Butterflies and Moths," &c.

The Rev. F. O. MORRIS, B.A., Author of "A History of British Birds," &c.

GEORGE MURRAY, F.L.S., of the British Museum, Joint Author of "A Handbook of Cryptogamic Botany."

GEORGE A. MUSGRAVE, F.Z.S., F.G.S.

GEORGE NICHOLSON, A.L.S., Curator of the Royal Gardens, Kew; Editor of the "Dictionary of Gardening."

J. L. STER, Hon. Treasurer of the Selborne Society.

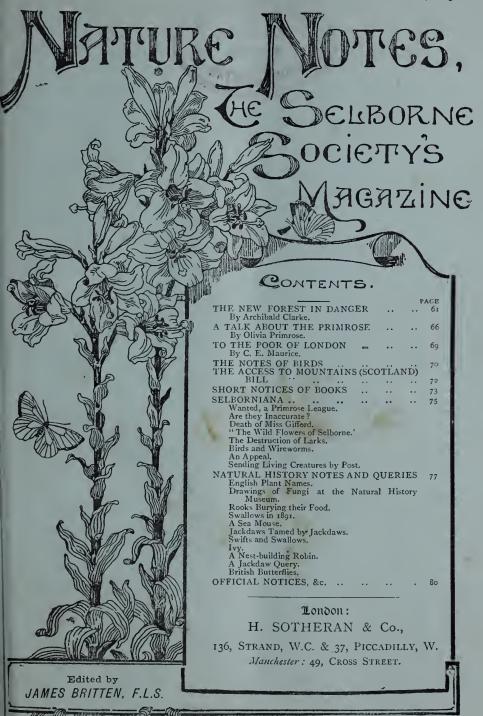
The Rev. H. D. RAWNSLEY, M.A., Author of "A Plea for the Birds," &c.

F. N. WILLIAMS, F.L.S., Author of "The Pinks of Europe," &c.

The special features of NATURE NOTES are fully set forth in the original circular, a copy of which may be obtained on application. It is intended to be a record of progress—progress in the love of Nature, in the knowledge of natural objects, and in the war to be waged in defence of the beauties of Nature against their more or less avowed exterminators.

Special prominence is given to Reviews of Books which bear on the various branches of Natural History, and the Editor will always be glad to give information as to books suitable for any particular study.

Business communications with regard to NATURE NOTES should be addressed to the SECRETARY OF THE SELBORNE SOCIETY, 9, Adam Street, Adelphi. Editorial communications and Books for Review should be addressed to JAMES BRITTEN, Esq., 18, West Square, Southwark, S.E.



THE ZOOLOGIST: A Monthly Journal of Natural History. Edited by J. E. HARTING, F.L.S., &c. Contains original articles on every branch of Zoology, notes on the habits and occurrences of Quadrupeds, Birds, Reptiles, Fishes, Molluscs, and Insects. Proceedings of Societies, Reviews, &c. Occasional woodcuts and Plates. Price 1s.

THE ENTOMOLOGIST. Edited by RICHARD SOUTH, F.E.S., assisted by Messrs. Bates, Billups, Distant, Fitch, Jacoby, Leech, Sharp, Verrall, Warren, Jenner Weir; and Dr. F. Buchanan White. Contains original articles, by well-known Entomologists, on every branch of the science; notes on the habits and occurrence of Lepidoptera, Coleoptera, Hymenoptera, Diptera, &c.; Proceedings of Societies, Reviews, &c. There are frequent lithographed plates and occasional woodcuts. Monthly lists of Duplicates and Desiderata. Price 6d.

LETTERS OF RUSTICUS ON NATURAL HISTORY. By EDWARD NEWMAN. Containing a great number of miscellaneous observations, after the manner of White's "Selborne." Price 6s. 6d. nett.

"There is a woodcut, some of them most exquisite, to each chapter; and tailpieces, after the delightful manner of Bewick, are scattered through the work. It is a most delightful hook."—ferrold's News.

"The most charming contribution to Natural History since the days of good old Gilhert White. These 'Letters' are well worthy of consultation by all gardeners and agriculturists, since the description of these facts are perfectly trustworthy, being in all cases the result of observation."—Westminster Review.

"The collection of facts and observations respecting hlights, or insects injurious to vegetation, are especially worthy attention, and we recommend them strongly."—Gardener's and Farmer's Journal.

A NATURALIST'S RAMBLE TO THE ORCADES. By ARTHUR W. CRICHTON, F.L.S. With an exquisite tinted frontispiece by Wolf. Conveying interesting information about the Orcades group of islands and the birds frequenting them. Price 3s. nett.

THE INSECT HUNTER'S COMPANION. Instructions for collecting and preserving Butterflies and Moths, Beetles, Bees, Flies, &c. By the Rev. Joseph Greene, M.A. Third Edition, revised and extended by A. B. Farn. The Chapter on Coleoptera by Edward Newman; on Hymenoptera by Frederick Smith; on Breeding Gall-flies by Edward A. Fitch. Where to find moths and butterflies; how to catch; how to bring home without injury; how to kill; how to set; how to find the caterpillars; how to manage; how to feed; how to breed the perfect insects; and a hundred similar subjects. Price 1s.

THE INSECT HUNTERS; or, First Lessons in Entomology. By EDWARD NEWMAN. This little work, written in simple language and in verse, gives valuable information on the habits and economy of Insects. It deals with the four stages of Insect life, metamorphosis, classification, &c. Price 2s. nett.

"Unrivalled as a First-Book in Entomology."-The late W. Spence.

"We know of no hook that contains so much information in so small a compass on the habits and economy of Insects."—Natural History Review.

NEWMAN'S BRITISH FERNS. Third Edition. Demy 8vo; illustrated by 100 studiously accurate figures. Minute Descriptions, ample and full Directions for Cultivating. Price 13s. 6d. nett.

"In accuracy of observation, elaborateness and clearness of description, and beauty of illustration, it does not possess its equal."—Annals and Magazine of Natural History.

"It is just such books as this which render Natural History so attractive." - Gardener's Chronicle.

NEWMAN'S BRITISH FERNS. PEOPLE'S EDITION, Fcap 8vo; with 6 Plates, minute Descriptions, and full Directions for Cultivating. Price 2s.

KEY TO THE GENERA AND SPECIES OF BRITISH MOSSES: with Plate. By the Rev. H. G. JAMESON, M.A. Price 1s. 6d.

The Selborne Society's Magazine.

Edited by JAMES BRITTEN, F.L.S.,

Senior Assistant, Department of Botany, British Museum,

assisted by eminent Specialists in every Department of Natural History.

The circulation of this Magazine has greatly increased during the past year: it is now much enlarged, and several new features have been introduced.

Among the Contributors to NATURE NOTES are the following well-known writers:—

The BISHOP OF WAKEFIELD.

The Hon. Mrs. R. C. BOYLE (E.V.B.), Author of "Days and Hours in a Garden."

Mrs. BRIGHTWEN, Author of "Wild Nature won by Kindness," &c.

G. S. BOULGER, F.L.S., Author of "Familiar Trees," "The Uses of Plants," &c.

WILLIAM CARRUTHERS, F.R.S., Keeper of the Department of Botany, British Museum.

T. D. A. COCKERELL, F.Z.S., Curator of the Jamaica Museum.

The Rev. W. WARDE FOWLER, Author of "A Year with the Birds," &c.

R. J. HARVEY GIBSON, M.A., F.R.S.E., F.L.S., Author of "A Text-book of Biology," &c.

G. C. HAITÉ, F.L.S., Author of "Plant Studies," &c.

The Rev. Prof. GEORGE HENSLOW, M.A., F.L.S., Author of "The Origin of Floral Structures," "Botany for Children," &c.

Prof. F. E. HULME, F.L.S., F.S.A., Author of "Familiar Wild Flowers," "Way-side Sketches," &c.

J. R. JACKSON, Esq., A.L.S., Curator of the Kew Museums.

W. F. KIRBY, F.L.S., F.E.S., of the British Museum, Author of "A Handbook of Entomology," "European Butterflies and Moths," &c.

The Rev. F. O. MORRIS, B.A., Author of "A History of British Birds," &c.

GEORGE MURRAY, F.L.S., of the British Museum, Joint Author of "A Handbook of Cryptogamic Botany."

GEORGE A. MUSGRAVE, F.Z.S., F.G.S.

GEORGE NICHOLSON, A.L.S., Curator of the Royal Gardens, Kew; Editor of the "Dictionary of Gardening."

J. L. Otter, Hon. Treasurer of the Selborne Society.

The Rev. H. D. RAWNSLEY, M.A., Author of "A Plea for the Birds," &c.

F. N. WILLIAMS, F.L.S., Author of " The Pinks of Europe," &c.

The special features of NATURE NOTES are fully set forth in the original circular, a copy of which may be obtained on application. It is intended to be a record of progress—progress in the love of Nature, in the knowledge of natural objects, and in the war to be waged in defence of the beauties of Nature against their more or less avowed exterminators.

Special prominence is given to Reviews of Books which bear on the various branches of Natural History, and the Editor will always be glad to give information as to books suitable for any particular study.

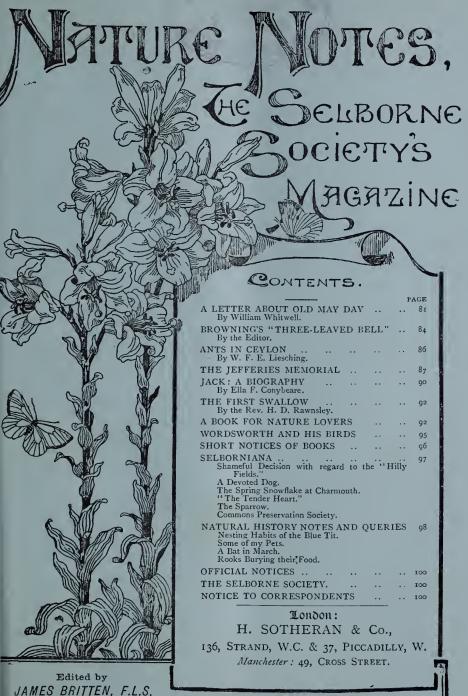
Business communications with regard to NATURE NOTES should be addressed to the SECRETARY OF THE SELEORNE SOCIETY, 9, Adam Street, Adelphi. Editorial communications and Books for Review should be addressed to JAMES BRITTEN, Esq., 18, West Square, Southwark, S.E.

Selborne Society's Publications.

- NATURE NOTES: THE SELBORNE SOCIETY'S MAGAZINE. Edited by James Britten, Esq., F.L.S., assisted by eminent Specialists in every department of Natural History. All back numbers have been reprinted, and are now to be obtained. Price 2d., post free 2½d. The Volumes for 1890 and 1891, hand-somely bound in cloth gilt, price 3s.; gilt edges, 3s. 6d. each.
- THE SELBORNE MAGAZINE. For lovers and students of Living Nature. Edited by Mr. C. Roberts, F.C.S. Issued in 1888 and 1889. The numbers from January to November, 1889, are still in print. Price 2d., post free 2½d.
- THE SELBORNE SOCIETY'S LETTERS. A series of Pamphlets. Edited by Mr. C. Roberts, F.C.S., and Mr. G. A. Musgrave, F.Z.S., issued in 1887, explaining the objects and work of the Society. Suitable for free distribution. Nos. 1 to 12, price 1d., post free 1½d.
- **PROSPECTUSES** describing the objects of the Selborne Society, and the ways in which they may be promoted. Price 2s. per 100, post free.
- RULES OF THE SOCIETY. is. per 100, post free.
- RECEIPT BOOKS. Price 2s. per book of 50 receipts. Designed by Professor F. E. HULME, F.L.S., Member of the Executive Council.
- **CARDS OF MEMBERSHIP,** price 1s. 1½d. for 25 Cards, will be supplied to Honorary Secretaries of Branches.
- **POSTERS** for the Preservation of Wild Flowers. Price 3d. per dozen.
- **FORMS OF PETITION** or Warrant for the formation of New Branches will be supplied on application.

All the above can be obtained from the Secretary of the Selborne Society,

9, Adam Street, Adelphi, W.C.



EYRE & SPOTTISWOODE,

Government and General Publishers.

ALSO AGENTS TO THE NEW ZEALAND GOVERNMENT.

MY GARDENER (Illustrated). By H. W. WARD, F.R.H.S., Head Gardener to the Right Hon. the Earl of Radnor, Longford Castle, Salishury. 2s. 6d.

"The hook is replete with valuable cultural notes indispensable to the millions who are now turning to

gardening as a source of pleasure and profit."—Gardeners' Chronicle.

"Clear, sensible, and full of instruction. We know of no hetter hook to put into the hands of the owners of small gardens who are anxious to make the hest of their opportunities, whether in the cultivation of flowers, vegetables, or fruit."—Times.

"As a practical handhook for the million it has no superior on the subject."—Bell's Weekly Messenger.

POTATO CULTURE FOR THE MILLION. By H. W. WARD, F.R.H.S., Head Gardener to the Right Hon. the Earl of Radnor, Longford Castle, Salishury. 3d.; hy post, 4d.

"Should have a good effect in improving the system adopted by small gardeners and cottagers."—Times. "We may safely say that the pamphlet will be found most useful to potato growers, whether in field or in den."—Farmers' Gazette.

"The hook is eminently practical, thoroughly trustworthy, and will be found of much value for distribution amongst cottagers and allotment holders, the cheap rate at which it can be obtained admirably adapting it for that purpose."—Gardeners' Magazine.

- OUR HARDY FRUITS. A Practical Guide to their Cultivation, for Landowners, Tenant Farmers, Cottagers, and Allotment Holders. By Brian Wynne, F.R.H.S., Editor of the "Gardening World." Paper covers, 6d.; cloth, 1s.

 - "Should have a good effect in extending the fruit areas of the country."—The Times.
 "The contents have heen carefully compiled, and evidently out of genuine experience."—Field.

"A really practical treatise."-Farm.

- INSECTS, FUNGI, AND WEEDS INJURIOUS TO FARM CROPS. Illustrated with original drawings. By ROBERT E. MATHESON. 10d.
- INSECTS INJURIOUS TO CROPS, &c. By C. WHITEHEAD, Esq., F.L.S., F.G.S.

Part I. Hop Plants. 21d.

II. Corn, Grass, Pea, Bean, and Clover Crops. 6d.

" III. Fruit Crops. 91/2d.

,, IV. Root and certain other Crops (Celery, Onions, &c.) 7d.

The life history of the farmers' diminutive but deadly foes is carefully traced, and the hest modes of destroying them are explained.

ENSILAGE (STACKS AND SILOS)-The Practical Guide for making. Issued by the Ensilage Society. Price 6d.

- "Of much interest to farmers."—Morning Post.
 "Contains a great deal of useful information."—Agricultural Gazette.
 "Practically contains all the information that is needed by farmers on the subject."—IVestern Times.
- PHILOSOPHICAL NOTES ON BOTANICAL SUBJECTS. By E. Bonavia, M.D., Brigade-Surgeon, I.M.D. With 160 Illustrations. 2s. 6d.
- "Are well worth reading, for they are pleasantly, sometimes even amusingly written, and in many instances are both original and ingenious."—Westminster Review.

 "The author sees modifications and traces developments not obvious to ordinary observers."—Nature.

- BULLETIN. A Monthly Record issued by the Director of the Royal Gardens, Kew, containing valuable Notes on Economic Produce and Plants. Largely increasing circulation. Subscription for 12 months, including postage, 3s. 9d.; Volume for 1287, in boards, hy post, 2s. 7d.; 1888, 2s. 8d.; 1889, 2s. 8d.; 1890, 3s. 2d.; 1891, 3s. 4d.
- FOREST FLORA OF NEW ZEALAND. By T. KIRK, F.L.S., late Chief Conservator of State Forests, N.Z., &c. Numerous Plates. Fcap folio, cloth, 128. 6d.
- INDIGENOUS GRASSES OF NEW ZEALAND. By John Buchanan. Full-page Illustrations. Imp. 4to, half morocco, 15s. Royal 8vo, 5s.
- ORANGE CULTURE IN NEW ZEALAND. By G. C. ALDERTON. Demy 8vo, cloth, 25.
- By WALTER L. BULLER, C.M.G., MANUAL OF BIRDS OF NEW ZEALAND. Sc.D., F.R.S. Numerous Plates. Royal 8vo. 10s.
- HANDBOOK OF NEW ZEALAND FISHES. By R. A. A. SHERRIN. Demy 8vo, cloth, 2s.

EYRE & SPOTTISWOODE. London: East Harding Street.

THE ZOOLOGIST: A Monthly Journal of Natural History. Edited by J. E. HARTING, F.L.S., &c. Contains original articles on every branch of Zoology, notes on the habits and occurrences of Quadrupeds, Birds, Reptiles, Fishes, Molluscs, and Insects. Proceedings of Societies, Reviews, &c. Occasional woodcuts and Plates. Price 1s.

THE ENTOMOLOGIST. Edited by RICHARD SOUTH, F.E.S., assisted by Messrs. Bates, Billups, Distant, Fitch, Jacoby, Leech, Sharp, Verrall, Warren, Jenner Weir; and Dr. F. Buchanan White. Contains original articles, by well-known Entomologists, on every branch of the science; notes on the habits and occurrence of Lepidoptera, Coleoptera, Hymenoptera, Diptera, &c.; Proceedings of Societies, Reviews, &c. There are frequent lithographed plates and occasional woodcuts. Monthly lists of Duplicates and Desiderata. Price 6d.

LETTERS OF RUSTICUS ON NATURAL HISTORY. By EDWARD NEWMAN. Containing a great number of miscellaneous observations, after the manner of White's "Selborne." Price 6s. 6d. nett.

"There is a woodcut, some of them most exquisite, to each chapter; and tailpieces, after the delightful manner of Bewick, are scattered through the work. It is a most delightful book."—Jerrold's News.

"The most charming contribution to Natural History since the days of good old Gilbert White. These 'Letters' are well worthy of consultation by all gardeners and agriculturists, since the description of these facts are perfectly trustworthy, being in all cases the result of observation."—West minster Review.

"The collection of facts and observations respecting blights, or insects injurious to vegetation, are especially worthy attention, and we recommend them strongly."—Gardener's and Farmer's Journal.

A NATURALIST'S RAMBLE TO THE ORCADES. By ARTHUR W. CRICHTON, F.L.S. With an exquisite tinted frontispiece by Wolf. Conveying interesting information about the Orcades group of islands and the birds frequenting them. Price 3s. nett.

THE INSECT HUNTER'S COMPANION. Instructions for collecting and preserving Butterflies and Moths, Beetles, Bees, Flies, &c. By the Rev. JOSEPH GREENE, M.A. Third Edition, revised and extended by A. B. FARN. The Chapter on Coleoptera by EDWARD NEWMAN; on Hymenoptera by FREDERICK SMITH; on Breeding Gall-flies by EDWARD A. FITCH. Where to find moths and butterflies; how to catch; how to bring home without injury; how to kill; how to set; how to find the caterpillars; how to manage; how to feed; how to breed the perfect insects; and a hundred similar subjects. Price Is.

THE INSECT HUNTERS; or, First Lessons in Entomology. By EDWARD NEWMAN. This little work, written in simple language and in verse, gives valuable information on the habits and economy of Insects. It deals with the four stages of Insect life, metamorphosis, classification, &c. Price 2s. nett.

"Unrivalled as a First-Book in Entomology."-The late W. Spence.

"We know of no book that contains so much information in so small a compass on the habits and economy of Insects." — Natural History Review.

NEWMAN'S BRITISH FERNS. Third Edition. Demy 8vo; illustrated by 100 studiously accurate figures. Minute Descriptions, ample and full Directions for Cultivating. Price 13s. 6d. nett.

"In accuracy of observation, elaborateness and clearness of description, and beauty of illustration, it does not possess its equal."—Annals and Magazine of Natural History.

"It is just such books as this which render Natural History so attractive."-Gardener's Chronicle.

NEWMAN'S BRITISH FERNS. PEOPLE'S EDITION, Fcap 8vo; with 6 Plates, minute Descriptions, and full Directions for Cultivating. Price 2s.

KEY TO THE GENERA AND SPECIES OF BRITISH MOSSES: with Plate. By the Rev. H. G. JAMESON, M.A. Price 1s. 6d.

First produced and designated CORN FLOUR by BROWN & POLSON in 1856.

BROWN & POLSON'S CORN FLOUR

Is a Household Requisite of Constant Utility.

FOR

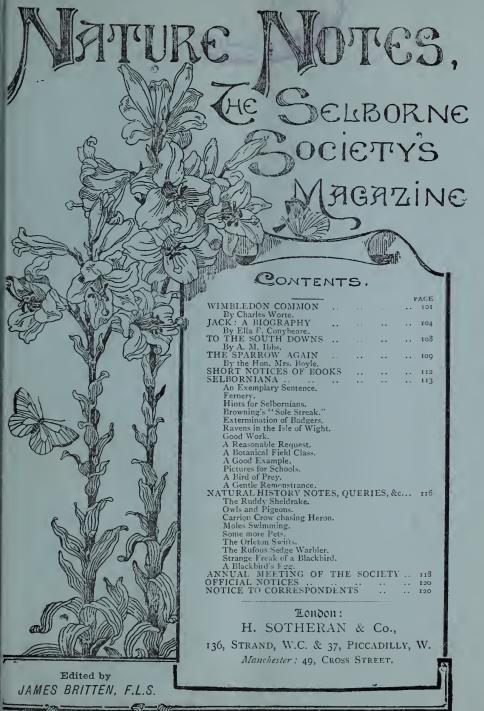
THE NURSERY, THE FAMILY TABLE & THE SICK ROOM.

That BROWN & POLSON'S CORN FLOUR possesses very valuable qualities as a food for all classes, at all periods of life except earliest infancy, has been attested by eminent dietetic authorities, as well as by universal public experience during over thirty years.

Interested attempts to set aside these facts in favour of other foods can only appeal to ignorance and prejudice, and it remains true that no other kind of food can serve the special purposes of Corn Flour.

JOHN BROWN. JOHN POLSON.

Manufacturers and Purveyors to the Queen.



THREE VALUABLE REFERENCE BOOKS.

- Griffith and Henfrey's Micrographic Dictionary. A Guide to the Examination and Investigation of the Structure and Nature of Microscopic Objects. Fourth Edition. Edited by J. W. GRIFFITH, M.D., &c.; assisted by the Rev. M. J. BERKELEY, M.A., F.R.S., F.L.S., and T. RUPERT JONES, F.R.S., F.G.S., Professor of Geology, Sandhurst, &c. Illustrated by 53 Plates and numerous Woodcuts, giving Figures of nearly 3,000 Objects. Medium 8vo, £2 12s. 6d.
- British Wild Flowers. Illustrated by John E. Sowerby. Described with an Introduction and a Key to the Natural Orders, by C. PIERPOINT JOHNSON. Re-issue, to which is added a SUPPLEMENT comprising later discovered Flowering Plants, and the Ferns, Horse-tails and Club-mosses. Super royal, 8vo, with 1780 Coloured Figures, £3 3s.
- An Illustrated Manual of British Birds. By Howard Saunders, F.L.S., F.Z.S., &c., Editor of the Third and Fourth Volumes of "Yarrell's History of British Birds," Fourth Edition. In One Volume, 750 pages, demy 8vo, with 367 fine Woodcuts and 3 Maps, f. I Is.

GURNEY & JACKSON, 1, Paternoster Row

(Mr. VAN VOORST'S SUCCESSORS).

MBLES OF A DOMINI

By FRANCIS A. KNIGHT, Author of 'By Leafy Ways,' 'Idylls of the Field,' &c. Illustrated by E. T. Compton. Large crown 8vo, cloth, bevelled boards, 5s. Also on Large Paper, with Illustrations printed on Japanese Paper, and mounted, bound in vellum, 21s. net.

Each copy signed and numbered. Only a few left. This Edition is limited to 100. "Those who mean to take their summer holiday in English lanes and woodlands, will find 'The Rambles

Those win hear to take their summer honday in English lanes and woodlands, will find "The Rambles of a Dominie' an excellent preparation for their wanderings." —Graphic.

"Of striking excellence. Both in style and matter they are honourably distinguished from the crowd of similar articles. . . . All will hope that Mr. Knight may live to write many more such 'Rambles.' They give information even to those who have long lived in and loved the country. It should be added that several good steel engravings illustrate the book. No pleasanter companion for an autumnal holiday can easily be found than this unpretentious little book."—Attermedia.

PLAYING AT BOTANY.

By PHEBE ALLEN, Author of 'Gilmary,' &c. With Coloured Frontispiece, by MAUD NAFTEL. Crown Svo, cloth boards, 3s. 6d.

"A most winning and delightful little volume ever written."—The LADY.

"The explanations are so clear and concise that a fairly intelligent child will easily understand them."—MORNING POST.

ABOUT BEES.

Their History, Habits and Instincts; also the first principles or Modern Bee-keeping, for Young Readers. By the Rev. F. G. JENYNS, M.A., Rector of Knebworth.

With an introduction by the BARONESS BURDETT-COUTTS.

With over FIFTY ILLUSTRATIONS. Crown 8vo. cloth boards, 2s. 6d.

"It will be found very readable by children."—Saturday Review. "A useful and interesting book."—LITERARY WORLD.

WELLS GARDNER, DARTON & Co.,

44. Victoria Street, Westminster, S.W.; and 2, Paternoster Buildings, E.C.

THE ZOOLOGIST: A Monthly Journal of Natural History. Edited by J. E. HARTING, F.L.S., &c. Contains original articles on every branch of Zoology, notes on the habits and occurrences of Quadrupeds, Birds, Reptiles, Fishes, Molluscs, and Insects. Proceedings of Societies, Reviews, &c. Occasional woodcuts and Plates. Price 15.

THE ENTOMOLOGIST. Edited by RICHARD SOUTH, F.E.S., assisted by Messis. Bates, Billups, Distant, Fitch, Jacoby, Leech, Sharp, Verrall, Warren, Jenner Weir; and Dr. F. Buchanan White. Contains original articles, by well-known Entomologists, on every branch of the science; notes on the habits and occurrence of Lepidoptera, Coleoptera, Hymenoptera, Diptera, &c.; Proceedings of Societies, Reviews, &c. There are frequent lithographed plates and occasional woodcuts. Monthly lists of Duplicates and Desiderata. Price 6d.

LETTERS OF RUSTICUS ON NATURAL HISTORY. By EDWARD NEWMAN. Containing a great number of miscellaneous observations, after the manner of White's "Selborne." Price 6s. 6d. nett.

"There is a woodcut, some of them most exquisite, to each chapter; and tailpieces, after the delightful manner of Bewick, are scattered through the work. It is a most delightful book."—Jerrold's News.

"The most charming contribution to Natural History since the days of good old Gilbert White. These 'Letters' are well worthy of consultation by all gardeners and agriculturists, since the description of these facts are perfectly trustworthy, being in all cases the result of observation."—Westminster Review.

"The collection of facts and observations respecting blights, or insects injurious to vegetation, are especially worthy attention, and we recommend them strongly." - Our dener's and Farmer's Journal.

A NATURALIST'S RAMBLE TO THE ORCADES. By ARTHUR W. CRICHTON, F.L.S. With an exquisite tinted frontispiece by Wolf. Conveying interesting information about the Orcades group of islands and the birds frequenting them. Price 3s. nett.

THE INSECT HUNTER'S COMPANION. Instructions for collecting and preserving Butterflies and Moths, Beetles, Bees, Flies, &c. By the Rev. JOSEPH GREENE, M.A. Third Edition, revised and extended by A. B. FARN. The Chapter on Coleoptera by EDWARD NEWMAN; on Hymenoptera by FREDERICK SMITH; on Breeding Gall-flies by EDWARD A. FITCH. Where to find moths and butterflies; how to catch; how to bring home without injury; how to kill; how to set; how to find the caterpillars; how to manage; how to feed; how to breed the perfect insects; and a hundred similar subjects. Price 1s.

THE INSECT HUNTERS; or, First Lessons in Entomology. By EDWARD NEWMAN. This little work, written in simple language and in verse, gives valuable information on the habits and economy of Insects. It deals with the four stages of Insect life, metamorphosis, classification, &c. Price 2s. nett.

"Unrivalled as a First-Book in Entomology."-The late W. Spence.

"We know of no book that contains so much information in so small a compass on the habits and economy of Insects."—Natural History Review.

NEWMAN'S BRITISH FERNS. Third Edition. Demy 8vo; illustrated by 100 studiously accurate figures. Minute Descriptions, ample and full Directions for Cultivating. Price 13s. 6d. nett.

"In accuracy of observation, elaborateness and clearness of description, and beauty of illustration, it does not possess its equal."—Annals and Magazine of Natural History.

"It is just such books as this which render Natural History so attractive," -Gardener's Chronicle.

NEWMAN'S BRITISH FERNS. PEOPLE'S EDITION, Fcap 8vo; with 6 Plates, minute Descriptions, and full Directions for Cultivating. Price 2s.

KEY TO THE GENERA AND SPECIES OF BRITISH MOSSES: with Plate. By the Rev. H. G. JAMESON, M.A. Price 1s. 6d.

The Selborne Society's Magazine.

Edited by JAMES BRITTEN, F.L.S.

Senior Assistant, Department of Botany, British Museum,

Assisted by eminent Specialists in every Department of Natural History.

The circulation of this Magazine has greatly increased during the past year : it is now much enlarged, and several new features have been introduced.

Among the Contributors to NATURE NOTES are the following well-known writers:—

The BISHOP OF WAKEFIELD.

The Hon. Mrs. R. C. Boyle (E.V.B.), Author of "Days and Hours in a Garden."

Mrs. Brightwen, Author of "Wild Nature won by Kindness," &c.

G. S. BOULGER, F.L.S., Author of "Familiar Trees," "The Uses of Plants," &c.

WILLIAM CARRUTHERS, F.R.S., Keeper of the Department of Botany, British Museum.

T. D. A. COCKERELL, F.Z.S., Curator of the Jamaica Museum.

The Rev. W. WARDE FOWLER, Author of "A Year with the Birds," &c.

R. J. HARVEY GIBSON, M.A., F.R.S.E., F.L.S., Author of "A Text-book of Biology," &c.

G. C. HAITÉ, F.L.S., Author of "Plant Studies," &c.

The Rev. Prof. GEORGE HENSLOW, M.A., F.L.S., Author of "The Origin of Floral Structures," "Botany for Children," &c.

Prof. F. E. HULMF, F.L.S., F.S.A., Author of "Familiar Wild Flowers," "Way-side Sketches," &c.

J. R. JACKSON, Esq., A.L.S., Curator of the Kew Museums.

W. F. KIRBY, F.L.S., F.E.S., of the British Museum, Author of "A Handbook of Entomology," "European Butterflies and Moths," &c.

The Rev. F. O. MORRIS, B.A., Author of "A History of British Birds," &c.

GLORGE MURRAY, F.L.S., of the British Museum, Joint Author of "A Handbook of Cryptogamic Botany."

GEORGE A. MUSGRAVE, F.Z.S., F.G.S.

GEORGE NICHOLSON, A.L.S., Curator of the Royal Gardens, Kew; Editor of the "Dictionary of Gardening."

J. L. OTTER, Hon. Treasurer of the Selborne Society.

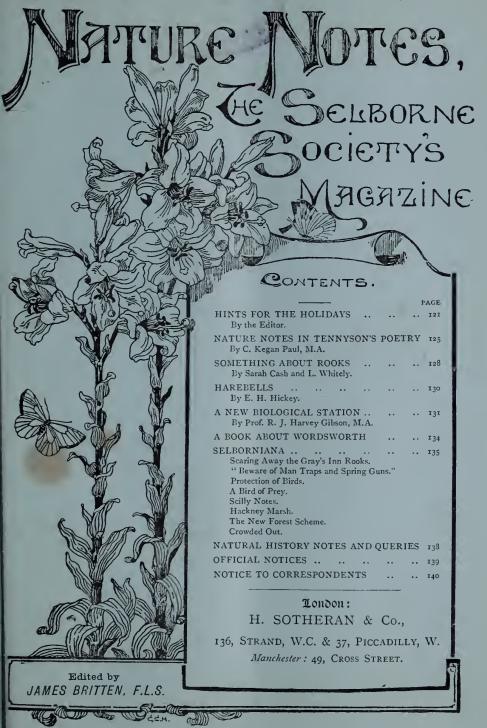
The Rev. H. D. RAWNSLEY, M.A., Author of "A Plea for the Birds," &c.

F. N. WILLIAMS, F.L.S., Author of "The Pinks of Europe," &c.

The special features of NATURE NOTES are fully set forth in the original circular, a copy of which may be obtained on application. It is intended to be a record of progress—progress in the love of Nature, in the knowledge of natural objects, and in the war to be waged in defence of the beauties of Nature against their more or less avowed exterminators.

Special prominence is given to Reviews of Books which bear on the various branches of Natural History, and the Editor will always be glad to give information as to books suitable for any particular study.

Business communications with regard to NATURE NOTES should be addressed to the SECRETARY OF THE SELBORNE SOCIETY, 9, Adam Street, Adelphi. Editorial communications and Books for Review should be addressed to JAMES BRITTEN, Esq., 18, West Square, Southwark, S.E.



THREE VALUABLE REFERENCE BOOKS.

- Griffith and Henfrey's Micrographic Dictionary. A Guide to the Examination and Investigation of the Structure and Nature of Microscopic Objects. Fourth Edition. Edited by J. W. GRIFFITH, M.D., &c.; assisted by the Rev. M. J. BERKELEY, M.A., F.R.S., F.L.S., and T. RUPERT JONES, F.R.S., F.G.S., Professor of Geology, Sandhurst, &c. Illustrated by 53 Plates and numerous Woodcuts, giving Figures of nearly 3,000 Objects. Medium 8vo, £2 12s. 6d.
- British Wild Flowers. Illustrated by John E. Sowerby. Described with an Introduction and a Key to the Natural Orders, by C. PIERPOINT JOHNSON. Re-issue, to which is added a SUPPLEMENT comprising later discovered Flowering Plants, and the Ferns, Horse-tails and Club-mosses. Super royal, 8vo, with 1780 Coloured Figures, f_3 3s.
- An Illustrated Manual of British Birds. By Howard Saunders, F.L.S., F.Z.S., &c., Editor of the Third and Fourth Volumes of "Yarrell's History of British Birds," Fourth Edition. In One Volume, 750 pages, demy 8vo, with 367 fine Woodcuts and 3 Maps, £1 Is.

GURNEY & JACKSON, 1, Paternoster Row

(Mr. VAN VOORST'S SUCCESSORS).

By FRANCIS A. KNIGHT, Author of 'By Leafy Ways,' 'Idylls of the Field,' &c. Illustrated by E. T. Compton. Large crown 8vo, cloth, bevelled boards, 5s. Also on Large Paper, with Illustrations printed on Japanese Paper, and mounted, bound in vellum, 21s. net.

Each copy signed and numbered. This Edition is limited to 100. Only a few left.

"Those who mean to take their summer holiday in English lanes and woodlands, will find 'The Rambles of a Dominie' an excellent preparation for their wanderings."—Graphic.

"Of striking excellence. Both in style and matter they are honourably distinguished from the crowd of similar articles. . . . All will hope that Mr. Knight may live to write many more such 'Rambles.' They give information even to those who have long lived in and loved the country. It should be added that several good steel engravings illustrate the book. No pleasanter companion for an autumnal holiday can easily be found than this unpretentious little book."—Athenæum.

PLAYING AT BOTANY.

By PHŒBE ALLEN, Author of 'Gilmary,' &c. With Coloured Frontispiece, by MAUD NAFTEL. Crown 8vo, cloth boards, 3s. 6d.
"A most winning and delightful little volume ever written."—The Ladv.
"The explanations are so clear and concise that a fairly intelligent child will easily understand them."—MORNING POST.

ABOUT BEES,

Their History, Habits and Instincts; also the first principles or Modern Bee-keeping, for Young Readers. By the Rev. F. G. JENYNS, M.A., Rector of Knebworth. With an introduction by the BARONESS BURDETT-COUTTS.

Crown 8vo. cloth boards, 2s. 6d. With over FIFTY ILLUSTRATIONS.

"It will be found very readable by children."—SATURDAY REVIEW. "A useful and interesting book."—LITERARY WORLD.

WELLS GARDNER, DARTON & Co.,

44, Victoria Street, Westminster, S.W.; and 2, Paternoster Buildings, E.C.

THE ZOOLOGIST: A Monthly Journal of Natural History. Edited by J. E. HARTING, F.L.S., &c. Contains original articles on every branch of Zoology, notes on the habits and occurrences of Quadrupeds, Birds, Reptiles, Fishes, Molluscs, and Insects. Proceedings of Societies, Reviews, &c. Occasional woodcuts and Plates. Price 15.

THE ENTOMOLOGIST. Edited by RICHARD SOUTH, F.E.S., assisted by Messrs. Bates, Billups, Distant, Fitch, Jacoby, Leech, Sharp, Verrall, Warren, Jenner Weir; and Dr. F. Buchanan White. Contains original articles, by well-known Entomologists, on every branch of the science; notes on the habits and occurrence of Lepidoptera, Coleoptera, Hymenoptera, Diptera, &c.; Proceedings of Societies, Reviews, &c. There are frequent lithographed plates and occasional woodcuts. Monthly lists of Duplicates and Desiderata. Price 6d.

LETTERS OF RUSTICUS ON NATURAL HISTORY. By EDWARD NEWMAN. Containing a great number of miscellaneous observations, after the manner of White's "Selborne." Price 6s. 6d. net.

"There is a woodcut, some of them most exquisite, to each chapter; and tailpieces, after the delightful manner of Bewick, are scattered through the work. It is a most delightful hook."—ferrold's News.

"The most charming contribution to Natural History since the days of good old Gilhert White. These 'Letters' are well worthy of consultation by all gardeners and agriculturists, since the description of these facts are perfectly trustworthy, being in all cases the result of observation."—Westminster Review.

"The collection of facts and observations respecting blights, or insects injurious to vegetation, are especially worthy attention, and we recommend them strongly." - Gardener's and Farmer's Journal.

A NATURALIST'S RAMBLE TO THE ORCADES. By ARTHUR W. CRICHTON, F.L.S. With an exquisite tinted frontispiece by Wolf. Conveying interesting information about the Orcades group of islands and the birds frequenting them. Price 3s. nett.

THE INSECT HUNTER'S COMPANION. Instructions for collecting and preserving Butterflies and Moths, Beetles, Bees, Flies, &c. By the Rev. JOSEPH GREENE, M.A. Third Edition, revised and extended by A. B. FARN. The Chapter on Coleoptera by EDWARD NEWMAN; on Hymenoptera by FREDERICK SMITH; on Breeding Gall-flies by EDWARD A. FITCH. Where to find moths and butterflies; how to catch; how to bring home without injury; how to kill; how to set; how to find the caterpillars; how to manage; how to feed; how to breed the perfect insects; and a hundred similar subjects. Price 1s.

THE INSECT HUNTERS; or, First Lessons in Entomology. By EDWARD NEWMAN. This little work, written in simple language and in verse, gives valuable information on the habits and economy of Insects. It deals with the four stages of Insect life, metamorphosis, classification, &c. Price 2s. net.

"Unrivalled as a First-Book in Entomology."-The late W. Spence.

"We know of no book that contains so much information in so small a compass on the habits and economy of Insects."—Natural History Review.

N EWMAN'S BRITISH FERNS. Third Edition. Demy 8vo; illustrated by 100 studiously accurate figures. Minute Descriptions, ample and full Directions for Cultivating. Price 13s. 6d. net.

"In accuracy of observation, elahorateness and clearness of description, and beauty of illustration, it does not possess its equal."—Annals and Magazine of Natural History.

"It is just such books as this which render Natural History so attractive."-Gardener's Chronicle.

NEWMAN'S BRITISH FERNS. PEOPLE'S EDITION, Fcap 8vo; with 6 Plates, minute Descriptions, and full Directions for Cultivating. Price 2s.

KEY TO THE GENERA AND SPECIES OF BRITISH MOSSES with Plate. By the Rev. H. G. JAMESON, M.A. Price 1s. 6d.

The Selborne Society's Magazine.

Edited by JAMES BRITTEN, F.L.S.

Senior Assistant, Department of Botany, British Museum,

Assisted by eminent Specialists in every Department of Natural History.

The circulation of this Magazine has greatly increased during the past year : it is now much enlarged, and several new features have been introduced.

Among the Contributors to NATURE NOTES are the following well-known writers:—

The BISHOP OF WAKEFIELD.

The Hon. Mrs. R. C. Boyle (E.V.B.), Author of "Days and Hours in a Garden." Mrs. Brightwen, Author of "Wild Nature won by Kindness," &c.

G. S. BOULGER, F.L.S., Author of "Familiar Trees," "The Uses of Plants," &c. WILLIAM CARRUTHERS, F.R.S., Keeper of the Department of Botany, British Museum.

T. D. A. COCKERELL, F.Z.S., Curator of the Jamaica Museum.

The Rev. W. WARDE FOWLER, Author of "A Year with the Birds," &c.

R. J. HARVEY GIBSON, M.A., F.R.S.E., F.L.S., Author of "A Text-book of Biology," &c.

G. C. HAITÉ, F.L.S., Author of "Plant Studies," &c.

The Rev. Prof. GEORGE HENSLOW, M.A., F.L.S., Author of "The Origin of Floral Structures," "Botany for Children," &c.

Prof. F. E. HULME, F.L.S., F.S.A., Author of "Familiar Wild Flowers," "Way-side Sketches," &c.

J. R. JACKSON, Esq., A.L.S., Curator of the Kew Museums.

W. F. KIRBY, F.L.S., F.E.S., of the British Museum, Author of "A Handbook of Entomology," "European Butterflies and Moths," &c.

The Rev. F. O. MORRIS, B.A., Author of "A History of British Birds," &c.

GEORGE MURRAY, F.L.S., of the British Museum, Joint Author of "A Handbook of Cryptogamic Botany."

GEORGE A. MUSGRAVE, F.Z.S., F.G.S.

GEORGE NICHOLSON, A.L.S., Curator of the Royal Gardens, Kew; Editor of the "Dictionary of Gardening."

J. L. OTTER, Hon. Treasurer of the Selborne Society.

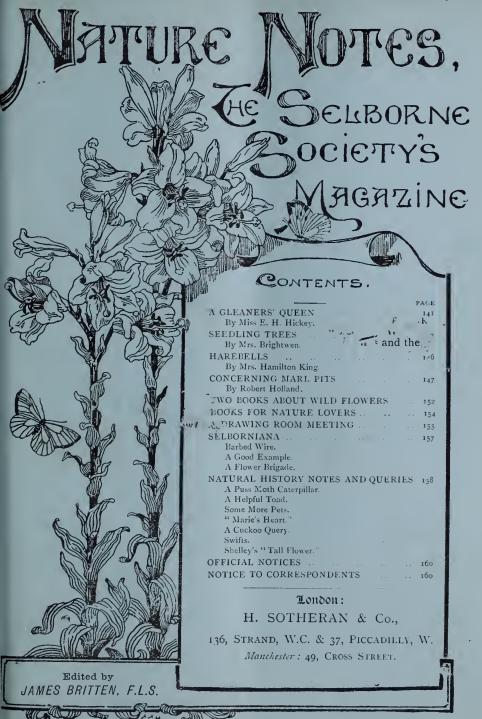
The Rev. H. D. RAWNSLEY, M.A., Author of "A Plea for the Birds," &c.

F. N. WILLIAMS, F.L.S., Author of "The Pinks of Europe," &c.

The special features of NATURE NOTES are fully set forth in the original circular, a copy of which may be obtained on application. It is intended to be a record of progress—progress in the love of Nature, in the knowledge of natural objects, and in the war to be waged in defence of the beauties of Nature against their more or less avowed exterminators.

Special prominence is given to Reviews of Books which bear on the various branches of Natural History, and the Editor will always be glad to give information as to books suitable for any particular study.

Business communications with regard to NATURE NOTES should be addressed to the SECRETARY OF THE SELBORNE SOCIETY, 9, Adam Street, Adelphi. Editorial communications and Books for Review should be addressed to JAMES BRITTEN, Esq., 18, West Square, Southwark, S.E.



THREE VALUABLE REFERENCE BOOKS.

- Griffith and Henfrey's Micrographic Dictionary. A Guide to the Examination and Investigation of the Structure and Nature of Microscopic Objects. Fourth Edition. Edited by J. W. GRIFFITH, M.D., &c.; assisted by the Rev. M. J. Berkeley, M.A., F.R.S., F.L.S., and T. Rupert Jones, F.R.S., F.G.S., Professor of Geology, Sandhurst, &c. Illustrated by 53 Plates and numerous Woodcuts, giving Figures of nearly 3,000 Objects. Medium 8vo, £2 12s. 6d.
 - British Wild Flowers. Illustrated by John E. Sowerby. with an Introduction and a Key to the Natural Orders, by C. PIERPOINT JOHNSON. Re-issue, to which is added a SUPPLEMENT comprising later discovered Flowering Plants, and the Ferns, Horse-tails and Club-mosses. Super royal, 8vo, with 1780 Coloured Figures, £3 3s.
 - An Illustrated Manual of British Birds. By Howard Saunders, F.L.S., F.Z.S., &c., Editor of the Third and Fourth Volumes of "Yarrell's History of British Birds," Fourth Edition. In One Volume, 750 pages, demy 8vo, with 367 fine Woodcuts and 3 Maps, €I IS.

GURNEY & JACKSON, 1, Paternoster Row

(Mr. VAN VOORST'S SUCCESSORS).

By FRANCIS A. KNIGHT, Author of 'By Leafy Ways,' 'Idylls of the Field,' &c. Illustrated by E. T. Compton. Large crown 8vo, cloth, bevelled boards, 5s. Also on Large Paper, with Illustrations printed on Japanese Paper, and mounted, bound in vellum, 21s. net.

Each copy spential Add numbered. Only a few left. This Edition is limited to 100.

"Those who mean to take their summer holiday in English lanes and woodlands, will find 'The Rambles of a Dominie' an excellent preparation for their wanderings." —GRAPHIC.

"Of striking excellence. Both in style and matter they are honourably distinguished from the crowd of similar articles. . . . All will hope that Mr. Knight may live to write many more such 'Rambles.' They give information even to those who have long lived in and loved the country. It should be added that several good steel engravings illustrate the book. No pleasanter companion for an autumnal holiday can easily be found than this unpretentious little book."—ATHEN.EUM.

PLAYING AT BOTANY.

By PHCEBE ALLEN, Author of 'Gilmary,' &c. With Coloured Frontispiece, by MAUD NAFTEL. Crown 8vo, cloth boards, 3s. 6d.

"A most winning and delightful little volume ever written."—The LADY.
"The explanations are so clear and concise that a fairly intelligent child will easily understand them."—
MORNING POST.

ABOUT BEES.

Their History, Habits and Instincts; also the first principles or Modern Bee-keeping, for Young Readers. By the Rev. F. G. JENYNS, M.A., Rector of Knebworth. With an introduction by the BARONESS BURDETT-COUTTS.

With over FIFTY ILLUSTRATIONS. Crown 8vo. cloth boards, 2s. 6d.

"It will be found very readable by children."—SATURDAY REVIEW.

"A useful and interesting book."-LITERARY WORLD.

WELLS GARDNER, DARTON & Co.,

44, Victoria Street, Westminster, S.W.; and 2, Paternoster Buildings, E.C.

THE ZOOLOGIST: A Monthly Journal of Natural History. Edited by J. E. HARTING, F.L.S., &c. Contains original articles on every branch of Zoology, notes on the habits and occurrences of Quadrupeds, Birds, Reptiles, Fishes, Molluscs, and Insects. Proceedings of Societies, Reviews, &c. Occasional woodcuts and Plates. Price 1s.

THE ENTOMOLOGIST. Edited by RICHARD SOUTH, F.E.S., assisted by Messrs. Bates, Billups, Distant, Fitch, Jacoby, Leech, Sharp, Verrall, Warren, Jenner Weir; and Dr. F. Buchanan White. Contains original articles, by well-known Entomologists, on every branch of the science; notes on the habits and occurrence of Lepidoptera, Coleoptera, Hymenoptera, Diptera, &c.; Proceedings of Societies, Reviews, &c. There are frequent lithographed plates and occasional woodcuts. Monthly lists of Duplicates and Desiderata. Price 6d.

LETTERS OF RUSTICUS ON NATURAL HISTORY. By EDWARD NEWMAN. Containing a great number of miscellaneous observations, after the manner of White's "Selborne." Price 6s. 6d. net.

"There is a woodcut, some of them most exquisite, to each chapter; and tailpieces, after the delightful manner of Bewick, are scattered through the work." It is a most delightful book."—Jerrold's News.

"The most charming contribution to Natural History since the days of good old Gilbert White. These 'Letters' are well worthy of consultation by all gardeners and agriculturists, since the description of these facts are perfectly trustworthy, being in all cases the result of observation."—Westminster Review.

"The collection of facts and observations respecting blights, or insects injurious to vegetation, are especially worthy attention, and we recommend them strongly."—Gardener's and Farmer's Journal.

A NATURALIST'S RAMBLE TO THE ORCADES. By ARTHUR W. CRICHTON, F.L.S. With an exquisite tinted frontispiece by Wolf. Conveying interesting information about the Orcades group of islands and the birds frequenting them. Price 3s. nett.

THE INSECT HUNTER'S COMPANION. Instructions for collecting and preserving Butterflies and Moths, Beetles, Bees, Flies, &c. By the Rev. JOSEPH GREENE, M.A. Third Edition, revised and extended by A. B. FARN. The Chapter on Coleoptera by EDWARD NEWMAN; on Hymenoptera by FREDERICK SMITH; on Breeding Gall-flies by EDWARD A. FITCH. Where to find moths and butterflies; how to catch; how to bring home without injury; how to kill; how to set; how to find the caterpillars; how to manage; how to feed; how to breed the perfect insects; and a hundred similar subjects. Price 1s.

THE INSECT HUNTERS; or, First Lessons in Entomology. By EDWARD NEWMAN. This little work, written in simple language and in verse, gives valuable information on the habits and economy of Insects. It deals with the four stages of Insect life, metamorphosis, classification, &c. Price 2s. net.

"Unrivalled as a First-Book in Entomology."-The late W. Spence.

"We know of no book that contains so much information in so small a compass on the habits and economy of Insects."—Natural History Review.

NEWMAN'S BRITISH FERNS. Third Edition. Demy 8vo; illustrated by 100 studiously accurate figures. Minute Descriptions, ample and full Directions for Cultivating. Price 13s. 6d. net.

"In accuracy of observation, elaborateness and clearness of description, and beauty of illustration, it does not possess its equal."—Annals and Magazine of Natural History.

"It is just such books as this which render Natural History so attractive." - Gardener's Chronicle.

NEWMAN'S BRITISH FERNS. PEOPLE'S EDITION, Fcap 8vo; with 6 Plates, minute Descriptions, and full Directions for Cultivating. Price 2s

KEY TO THE GENERA AND SPECIES OF BRITISH MOSSES with Plate. By the Rev. H. G. JAMESON, M.A. Price 1s. 6d.

The Selborne Society's Magazine.

Edited by JAMES BRITTEN, F.L.S.

Senior Assistant, Department of Botany, British Museum,

Assisted by eminent Specialists in every Department of Natural History.

The circulation of this Magazine has greatly increased during the past year: it is now much enlarged, and several new features have been introduced.

Among the Contributors to NATURE NOTES are the following well-known writers:—

The BISHOP OF WAKEFIELD.

The Hon. Mrs. R. C. Boyle (E.V.B.), Author of "Days and Hours in a Garden."

Mrs. Brightwen, Author of "Wild Nature won by Kindness," &c.

G. S. BOULGER, F.L.S., Author of "Familiar Trees," "The Uses of Plants," &c. WILLIAM CARRUTHERS, F.R.S., Keeper of the Department of Botany, British Museum.

T. D. A. COCKERELL, F.Z.S., Curator of the Jamaica Museum.

The Rev. W. WARDE FOWLER, Author of "A Year with the Birds," &c.

R. J. HARVEY GIBSON, M.A., F.R.S.E., F.L.S., Author of "A Text-book of Biology," &c.

G. C. HAITÉ, F.L.S., Author of "Plant Studies," &c.

The Rev. Prof. GEORGE HENSLOW, M.A., F.L.S., Author of "The Origin of Floral Structures," "Botany for Children," &c.

Prof. F. E. HULME, F.L.S., F.S.A., Author of "Familiar Wild Flowers," "Way-side Sketches," &c.

J. R. JACKSON, Esq., A.L.S., Curator of the Kew Museums.

W. F. KIRBY, F.L.S., F.E.S., of the British Museum, Author of "A Handbook of Entomology," "European Butterflies and Moths," &c.

The Rev. F. O. MORRIS, B.A., Author of "A History of British Birds," &c.

GEORGE MURRAY, F.L.S., of the British Museum, Joint Author of "A Handbook of Cryptogamic Botany."

GEORGE A. MUSGRAVE, F.Z.S., F.G.S.

GEORGE NICHOLSON, A.L.S., Curator of the Royal Gardens, Kew; Editor of the "Dictionary of Gardening."

J. L. OTTER, Hon. Treasurer of the Selborne Society.

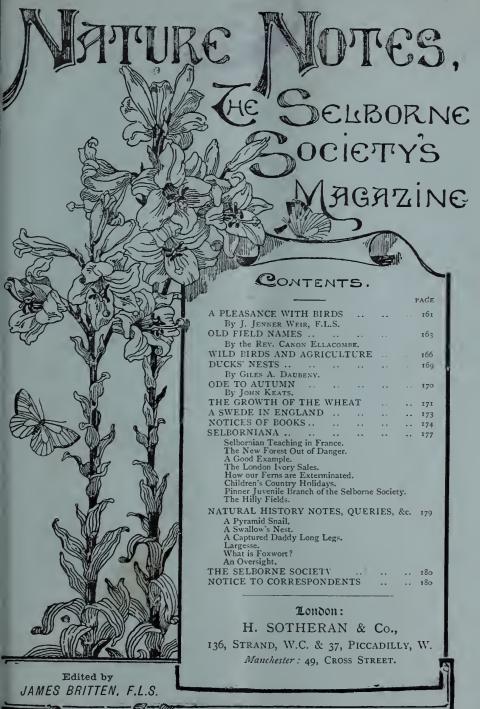
The Rev. H. D. RAWNSLEY, M.A., Author of "A Plea for the Birds," &c.

F. N. WILLIAMS, F.L.S., Author of " The Pinks of Europe," &c.

The special features of NATURE NOTES are fully set forth in the original circular, a copy of which may be obtained on application. It is intended to be a record of progress—progress in the love of Nature, in the knowledge of natural objects, and in the war to be waged in defence of the beauties of Nature against their more or less avowed exterminators.

Special prominence is given to Reviews of Books which bear on the various branches of Natural History, and the Editor will always be glad to give information as to books suitable for any particular study.

Eusiness communications with regard to NATURE NOTES should be addressed to the SECRETARY OF THE SELEORNE SOCIETY, 9, Adam Street, Adelphi. Editorial communications and Books for Review should be addressed to JAMES BRITTEN, Esq., 18, West Square, Southwark, S.E.



EYRE & SPOTTISWOODE,

Government and General Publishers,

ALSO AGENTS TO THE NEW ZEALAND GOVERNMENT.

MY GARDENER (Illustrated). ARDENER (Illustrated). By H. W. WARD, F.R.H.S., Head Gardener to the Right Hon. the Earl of Radnor, Longford Castle, Salisbury. 2s. 6d.

"The hook is replete with valuable cultural notes indispensable to the millions who are now turning to gardening as a source of pleasure and profit."—Gardeners' Crhonicle.

"Clear, sensible, and full of instruction. We know of no hetter book to put into the hands of the owners of small gardens who are anxious to make the hest of their opportunities, whether in the cultivation of flowers, vegetables, or fruit."—Times.

"As a practical handbook for the million it has no superior on the subject."—Bell's Weekly Messenger.

POTATO CULTURE FOR THE MILLION. By H. W. WARD, F.R.H.S., Head Gardener to the Right Hon. the Earl of Radnor, Longford Castle, Salisbury. 3d.; hy post, 4d

"Should have a good effect in improving the system adopted by small gardeners and cottagers."—Times.
"We may safely say that the pampblet will be found most useful to potato growers, whether in field or in den."—Farmers' Gazette.

"The hook is eminently practical, thoroughly trustwortby, and will be found of much value for distribution amongst cottagers and allotment holders, the cheap rate at which it can be obtained admirably adapting it for that purpose."—Gardeners' Magazine.

POTATO DISEASE. Report on Recent Experiments in Checking Potato Disease in the United Kingdom and abroad. Issued by the Agricultural Department. od.

OUR HARDY FRUITS. A Practical Guide to their Cultivation, for Landowners, Tenant Farmers, Cottagers, and Allotment Holders. By Brian Wynne, F.R.H.S., Editor of the "Gardening World." Paper covers, 6d.; cloth, 1s.

"Should bave a good effect in extending the fruit areas of the country."—The Times.
"The contents have been carefully compiled, and evidently out of genuine experience."—Field.

"A really practical treatise."—Farm.

INSECTS, FUNGI, AND WEEDS INJURIOUS TO FARM CROPS. Illustrated with original drawings. By ROBERT E. MATHESON. 10d.

AGRICULTURAL ADVISER to the Lords of the Committee of Council for Agriculture— First Annual Report of the. By post 4d.
Second Annual Report, by post 4½d.

Tbird ,, ,, ,, 5d. Fourth

Contain valuable information with reference to Insects and Fungi injurious to the crops of the farm, the orchard, and the garden.

ENSILAGE (STACKS AND SILOS)-The Practical Guide for making. Issued by the Ensilage Society. Price 6d.

"Of much interest to farners."—Morning Post.
"Contains a great deal of useful information."—Agricultural Gazette.
"Practically contains all the information that is needed by farmers on the subject."—Western Times.

PHILOSOPHICAL NOTES ON BOTANICAL SUBJECTS. By E. Bonavia, M.D., Brigade-Surgeon, I.M.D. With 160 Illustrations. 2s. 6d.

"Are well worth reading, for they are pleasantly, sometimes even amusingly written, and in many instances are both original and ingenious."—Westminster Review.
"The author sees modifications and traces developments not obvious to ordinary observers."—Nature.

A Monthly Record issued by the Director of the Royal Gardens, Kew, containing valuable Notes on Economic Produce and Plants. Largely increasing circulation. Subscription for 12 months, including postage, 3s. 9d.; Volume for 1887, in boards, by post, 2s. 7d.; 1888, 2s. 8d.; 1889, 2s. 8d.; 1890, 3s. 2d.; 1891, 3s. 4d.

FOREST FLORA OF NEW ZEALAND. By T. KIRK, F.L.S., late Chief Conservator of State Forests, N.Z., &c. Numerous Plates. Fcap. folio, cloth, 12s. 6d.

INDIGENOUS GRASSES OF NEW ZEALAND. By JOHN BUCHANAN. Illustrations. Imp. 4to, half morocco, 15s. Royal 8vo, 5s.

ORANGE CULTURE IN NEW ZEALAND. By G. C. ALDERTON. Demy 8vc, cloth, 2s.

MANUAL OF BIRDS OF NEW ZEALAND. By WALTER L. BULLER, C.M.G., Sc. D., F.R.S. Numerous Plates. Royal 8vo. 10s.

HANDBOOK OF NEW ZEALAND FISHES. By R. A. A. SHERRIN. Demy 8vo, cloth, 2s.

WILD BIRDS PROTECTION ACT, 1880, 2d.; 1881, 2d. post free.

London: East Harding Street. EYRE & SPOTTISWOODE.

THREE VALUABLE REFERENCE BOOKS.

Griffith and Henfrey's Micrographic Dictionary. A Guide to the Examination and Investigation of the Structure and Nature of Microscopic Objects. Fourth Edition. Edited by J. W. Griffith, M.D., &c.; assisted by the Rev. M. J. Berkeley, M.A., F.R.S., F.L.S., and T. Rupert Jones, F.R.S., F.G.S., Professor of Geology, Sandhurst, &c. Illustrated by 53 Plates and numerous Woodcuts, giving Figures of nearly 3,000 Objects. Medium 8vo, £2 12s. 6d.

British Wild Flowers. Illustrated by John E. Sowerby. Described with an Introduction and a Key to the Natural Orders, by C. Pierpoint Johnson. Re-issue, to which is added a SUPPLEMENT comprising later discovered Flowering Plants, and the Ferns, Horse-tails and Club-mosses. Super royal, 8vo, with 1780 Coloured Figures, £3 3s.

An Illustrated Manual of British Birds. By Howard Saunders, F.L.S., F.Z.S., &c., Editor of the Third and Fourth Volumes of "Yarrell's History of British Birds," Fourth Edition. In One Volume, 750 pages, demy 8vo, with 367 fine Woodcuts and 3 Maps, £1 1s.

GURNEY & JACKSON, 1, Paternoster Row

(Mr. VAN VOORST'S SUCCESSORS).

AGENT FOR
"Nature Notes."
"The Library Review."
"Church Missionary
Intelligencer."
"Life and Work."
"Church of Scotland
Mission Record."
"Morning Rays."
"Free Church
Monthly."
"Youth."

Monthly."
"Youth."
"United Presbyterian
Missionary Record."
&c., &c.

J. I. BAXTER,

Advertising Agent,

29, Paternoster Square, E.C.

Advertisements inserted in "NATURE NOTES," and generally in Magazines and Newspapers.

JOHNSTON'S CORN FLOUR.

"Is decidedly superior."—The Lancet.

NATURE NOTES:

The Selborne Society's Magazine.

Edited by JAMES BRITTEN, F.L.S.

Senior Assistant, Department of Botany, British Museum,

Assisted by eminent Specialists in every Department of Natural History.

The circulation of this Magazine has greatly increased during the past year : it is now much enlarged, and several new features have been introduced.

Among the Contributors to NATURE NOTES are the following well-known writers:—

The BISHOP OF WAKEFIELD.

The Hon. Mrs. R. C. Boyle (E.V.B.), Author of "Days and Hours in a Garden."

Mrs. Brightwen, Author of "Wild Nature won by Kindness," &c.

G. S. BOULGER, F.L.S., Author of "Familiar Trees," "The Uses of Plants," &c. WILLIAM CARRUTHERS, F.R.S., Keeper of the Department of Botany, British Museum.

T. D. A. COCKERELL F.Z.S., Curator of the Jamaica Museum.

The Rev. W. WARDE FOWLER, Author of "A Year with the Birds," &c.

R. J. HARVEY GIBSON, M.A., F.R.S.E., F.L.S., Author of "A Text-book of Biology," &c.

G. C. HAITÉ, F.L.S., Author of "Plant Studies," &c.

The Rev. Prof. GEORGE HENSLOW, M.A., F.L.S., Author of "The Origin of Floral Structures," "Botany for Children," &c.

Prof. F. E. Hulme, F.L.S., F.S.A., Author of "Familiar Wild Flowers," "Way-side Sketches," &c.

J. R. JACKSON, Esq., A.L.S., Curator of the Kew Museums.

W. F. KIRBY, F.L.S., F.E.S., of the British Museum, Author of "A Handbook of Entomology," "European Butterflies and Moths," &c.

The Rev. F. O. MORRIS, B.A., Author of "A History of British Birds," &c.

GEORGE MURRAY, F.L.S., of the British Museum, Joint Author of "A Handbook of Cryptogamic Botany."

GEORGE A. MUSGRAVE, F.Z.S., F.G.S.

GEORGE NICHOLSON, A.L.S., Curator of the Royal Gardens, Kew; Editor of the " Dictionary of Gardening."

J. L. OTTER, Hon. Treasurer of the Selborne Society.

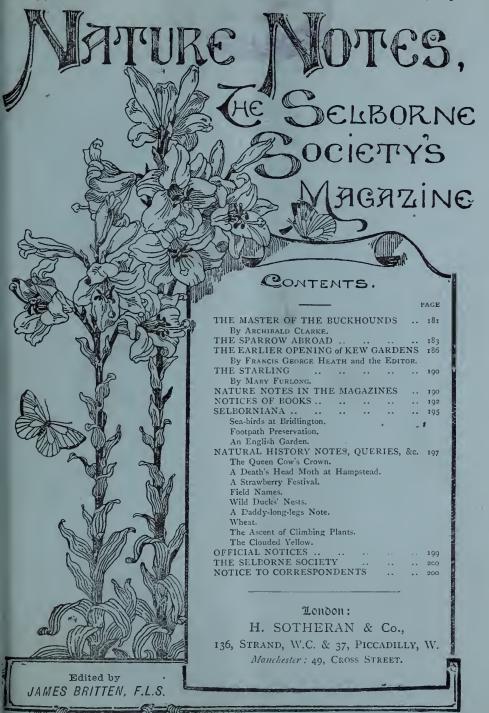
The Rev. H. D. RAWNSLEY, M.A., Author of "A Plea for the Birds," &c.

F. N. WILLIAMS, F.L.S., Author of "The Pinks of Europe," &c.

The special features of NATURE NOTES are fully set forth in the original circular, a copy of which may be obtained on application. It is intended to be a record of progress—progress in the love of Nature, in the knowledge of natural objects, and in the war to be waged in defence of the beauties of Nature against their more or less avowed exterminators.

Special prominence is given to Reviews of Books which bear on the various branches of Natural History, and the Editor will always be glad to give information as to books suitable for any particular study.

Business communications with regard to NATURE NOTES should be addressed to the SECRETARY OF THE SELBORNE SOCIETY, 9, Adam Street, Adelphi. Editorial communications and Books for Review should be addressed to JAMES BRITTEN, Esq., 18, West Square, Southwark, S.E.



JUST PUBLISHED.

8vo, cloth, 448 pp., with Sixteen Illustrations and a Map, 15s.

FUR-BEARING ANIMALS, in Nature and in Commerce. By HENRY POLAND, F.Z.S. Giving descriptions of the Animals, Quantities of Skins imported, Values, Duties, and other information.

8vo, Cloth, 297 pages, with Map and Twelve Illustrations. 10s, 6d.

THE BIRDS OF LANCASHIRE, by F. S. MITCHELL. Second Edition, Revised and Annotated by Howard Saunders, F.L.S., &c., with Additions by R. J. Howard, and other local authorities.

AN ILLUSTRATED MANUAL OF BRITISH BIRDS. By Howard Saunders, F.L.S., F.Z.S., &c., Editor of the Third and Fourth Volumes of "Yarrell's History of British Birds," Fourth Edition. In One Volume, 750 pages, demy 8vo, with 367 fine Woodcuts and 3 Maps, £1 1s.

GURNEY & JACKSON, 1, Paternoster Row.

(Mr. VAN VOORST'S SUCCESSORS).

AGENT FOR

"Nature Notes."

"The Library Review."

"Church Missionary
Intelligencer."

"Life and Work."

"Church of Scotland
Mission Record."

"Morning Rays."

"Free Church
Monthly."

"Youth."

"United Presbyterian
Missionary Record."

&c., &c.

J. I. BAXTER,

Advertising Agent,

29, Paternoster Square, E.C.

Advertisements inserted in "NATURE NOTES," and generally in Magazines and Newspapers.

JOHNSTON'S CORN FLOUR.

"Is decidedly superior."—The Lancet.

NATURE NOTES:

The Selborne Society's Magazine.

Edited by JAMES BRITTEN, F.L.S.

Senior Assistant, Department of Botany, British Museum,

Assisted by eminent Specialists in every Department of Natural History.

The circulation of this Magazine has greatly increased during the past year : it is now much enlarged, and several new features have been introduced.

Among the Contributors to NATURE NOTES are the following well-known writers:—

The BISHOP OF WAKEFIELD.

The Hon. Mrs. R. C. BOYLE (E.V.B.), Author of "Days and Hours in a Garden."

Mrs. BRIGHTWEN, Author of "Wild Nature won by Kindness," &c.

G. S. BOULGER, F.L.S., Author of "Familiar Trees," "The Uses of Plants," &c.

WILLIAM CARRUTHERS, F.R.S., Keeper of the Department of Botany, British Museum.

T. D. A. COCKERELL, F.Z.S., Curator of the Jamaica Museum.

The Rev. W. WARDE FOWLER, Author of "A Year with the Birds," &c.

R. J. HARVEY GIBSON, M.A., F.R.S.E., F.L.S., Author of "A Text-book of Biology," &c.

G. C. HAITÉ, F.L.S., Author of "Plant Studies," &c.

The Rev. Prof. GEORGE HENSLOW, M.A., F.L.S., Author of "The Origin of Floral Structures," "Botany for Children," &c.

Prof. F. E. HULME, F.L.S., F.S.A., Author of "Familiar Wild Flowers," "Way-side Sketches," &c.

J. R. JACKSON, Esq., A.L.S., Curator of the Kew Museums.

W. F. KIRBY, F.L.S., F.E.S., of the British Museum, Author of "A Handbook of Entomology," "European Butterflies and Moths," &c.

The Rev. F. O. MORRIS, B.A., Author of "A History of British Birds," &c.

GEORGE MURRAY, F.L.S., of the British Museum, Joint Author of "A Handbook of Cryptogamic Botany."

GEORGE A. MUSGRAVE, F.Z.S., F.G.S.

GEORGE NICHOLSON, A.L.S., Curator of the Royal Gardens, Kew; Editor of the "Dictionary of Gardening."

J. L. OTTER, Hon. Treasurer of the Selborne Society.

The Rev. H. D. RAWNSLEY, M.A., Author of "A Plea for the Birds," &c.

F. N. WILLIAMS, F.L.S., Author of "The Pinks of Europe," &c.

The special features of NATURE NOTES are fully set forth in the original circular, a copy of which may be obtained on application. It is intended to be a record of progress—progress in the love of Nature, in the knowledge of natural objects, and in the war to be waged in defence of the beauties of Nature against their more or less avowed exterminators.

Special prominence is given to Reviews of Books which bear on the various branches of Natural History, and the Editor will always be glad to give information as to books suitable for any particular study.

Business communications with regard to NATURE NOTES should be addressed to the SECRETARY OF THE SELBORNE SOCIETY, 9, Adam Street, Adelphi. Editorial communications and Books for Review should be addressed to JAMES BRITTEN, Esq., 18, West Square, Southwark, S.E.

MESSRS. WARD & DOWNEY'S LIST.

GOSSIP OF THE CENTURY:

Personal and Traditional Memories—Social, Literary, Artistic,

WITH MORE THAN ONE HUNDRED PORTRAITS.

By the Author of "FLEMISH INTERIORS."

Two Vols., Royal 8vo, 1,050 pp.

"The book is far too readable to be found much fault with. It is better conceived and better written than nine-tenths of its class. Our author appears to have had more or less acquaintance with nearly all the literary celebrities of the past half-century; and about some of them—especially Rogers, Crabb Robinson, Harrison Ainsworth, and Bulwer Litton—he gives interesting reminiscences."—The Athenaum.

"In these two large and heautifully-printed volumes we have a great amount of the century's best gossip.
. . . The two volumes are, in fact, a kind of encyclopædia of gossip about monarchs, statesnen, doctors, writers, actors, singers, soldiers, men of fashion."—The Daily News.

"Covering so wide a range, they (the volumes) should be of great value to the student of manners in the earlier half of the present century, the more as the old order is so rapidly changing."—The Standard.

"The copious illustrations, consisting principally of portraits of the celebrities mentioned, are full of interest."—The Times.

Morning Post.

Angelica Kauffmann: A Biography. With a List of her Paintings and Drawings, and some Illustrative Reproductions thereof. By Frances A. Gerard. I Vol. 158. Now Ready.

Roundabout Recollections. By John Augustus O'Shea, Author of "Leaves from the Life of a Special Correspondent," 2 Vols. 218.

"A hook so lively in tone as these 'Roundabout Recollections' is not vouchsafed to us every day."—

A NEW BOOK OF POEMS.

Fate in Arcadia and other Poems. By Edwin J. Ellis. With numerous Illustra-

tions by the Author. 7s. 6d. ** A large-paper edition of 100 copies only at £1 1s. each, with 10 additional Illustrations, has been printed on hand-made paper.

"He who huys it will have obtained a wise comrade and an ever fascinating friend."-The Bookman.

THE TRIPLE ALLIANCE.

Comedy and Comedians in Politics. By the Countess Hugo. 2s. 6d. "The niece of Victor Hugo poses as the champion of Italy and the enemy of Signor Crispi. The book she has written is really a smart resumé of contemporaneous Italian History."—Publishers' Circular.

FENWICK MILLER'S BIOGRAPHICAL ESSAYS.

In Ladies' Company. Six Interesting Women. By Mrs. Fenwick Miller. Fcap. 5s. "Mrs. Miller has given us a volume to be grateful for."—Daily Chronicle.
Club Cameos. Portraits of the Day. Demy 8vo, 2s. 6d.
'Twixt Old Times and New. By Baron de Malortie. Demy 8vo. 3s. 6d. A

New Edition.

"We may safely say that people who care for curious characters, military adventures, and the byways of history and politics, will find few dull pages in this book."—Spectator.

Picturesque London. By PERCY FITZGERALD. With upwards of 100 Illustrations. 25s.

"We are delighted to get a hook like 'Picturesque London,' itself a triumph of the printer's art."—

St. James's Gazette.
"It is all about the curiosities of London, the quaint old houses, and the odds and ends of archaeology and street lore."—Daily News.

NEW NOVELS NOW READY.

Honours Easy. By C. T. C. James, Author of "Holy Wedlock." 3 Vols.

Miss Eyon, of Eyon Court. By Mrs. Macquoid. I Vol. 6s.

The Incomplete Adventurer. By Tighe Hopkins, Author of "The Nugents of Carriconna." I Vol. 6s.

Ben Clough. By William Westall. I Vol. 6s.

"No modern novelist appears to be so well acquainted with the details of manufacturing and commercial life in Lancashire as Mr. William Westall."—Manchester Examiner.

In Fool's Paradise. By H. B. Finlay Knight. I Vol. 6s.

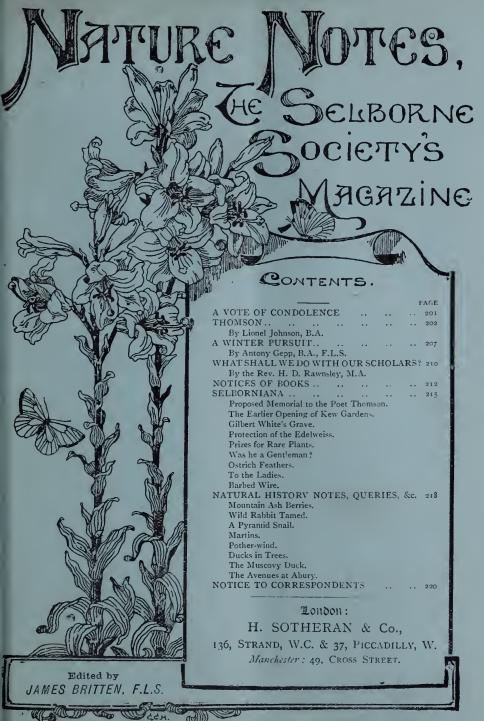
"Amongst the strongest of one-volume novels which have lately appeared. The faults are those common to a first work—a certain lavishness of good things not necessary to the story, and a want of connection about the whole."—Daily News.

NEW EDITIONS.

NEW EDITIONS.

Miss Wentworth's Idea. By W. E. Norris. 3s. 6d. A Baffling Quest. By RICHARD DOWLING. 3s. 6d.

WARD & DOWNEY, York Street, Covent Garden.



PRICE TWOPENCE.

JUST PUBLISHED.

8vo, cloth, 448 pp., with Sixteen Illustrations and a Map, 15s.

FUR-BEARING ANIMALS, in Nature and in Commerce. By Henry Poland, F.Z.S. Giving descriptions of the Animals, Quantities of Skins imported, Values, Duties, and other information.

8vo, Cloth, 297 pages, with Map and Twelve Illustrations. 10s. 6d.

THE BIRDS OF LANCASHIRE, by F. S. MITCHELL. Second Edition, Revised and Annotated by Howard Saunders, F.L.S., &c., with Additions by R. J. Howard, and other local authorities.

AN ILLUSTRATED MANUAL OF BRITISH BIRDS. By HOWARD SAUNDERS, F.L.S., F.Z.S., &c., Editor of the Third and Fourth Volumes of "Yarrell's History of British Birds," Fourth Edition. In One Volume, 750 pages, demy 8vo, with 367 fine Woodcuts and 3 Maps, £1 is.

GURNEY & JACKSON, 1, Paternoster Row.

(Mr. VAN VOORST'S SUCCESSORS).

AGENT FOR "Nature Notes." "The Library Review." "Church Missionary Intelligencer." "Life and Work." "Church of Scotland Mission Record." "Morning Rays." "Free Church

"Youth."
"United Presbyterian
Missionary Record."
&c., &c.

Monthly."

J. I. BAXTER,

Advertising Agent,

29, Paternoster Square, E.C.

Advertisements inserted in "NATURE NOTES," and generally in Magazines and Newspapers.

JOHNSTON'S CORN FLOUR.

"Is decidedly superior."—The Lancet.

NATURE NOTES:

The Selborne Society's Magazine.

Edited by JAMES BRITTEN, F.L.S.

Senior Assistant, Department of Botany, British Museum,

Assisted by eminent Specialists in every Department of Natural History.

The circulation of this Magazine has greatly increased during the past year: it is now much enlarged, and several new features have been introduced.

Among the Contributors to NATURE NOTES are the following well-known writers:—

The BISHOP OF WAKEFIELD.

The Hon. Mrs. R. C. BOYLE (E.V.B.), Author of "Days and Hours in a Garden."

Mrs. BRIGHTWEN, Author of "Wild Nature won by Kindness," &c.

G. S. BOULGER, F.L.S., Author of "Familiar Trees," "The Uses of Plants," &c.

WILLIAM CARRUTHERS, F.R.S., Keeper of the Department of Botany, British Museum.

T. D. A. COCKERELL, F.Z.S., Curator of the Jamaica Museum.

The Rev. W. WARDE FOWLER, Author of "A Year with the Birds," &c.

R. J. HARVEY GIBSON, M.A., F.R.S.E., F.L.S., Author of "A Text-book of Biology," &c.

G. C. HAITÉ, F.L.S., Author of "Plant Studies," &c.

The Rev. Prof. George Henslow, M.A., F.L.S., Author of "The Origin of Floral Structures," "Botany for Children," &c.

Prof. F. E. HULME, F.L.S., F.S.A., Author of "Familiar Wild Flowers," "Way-side Sketches," &c.

J. R. JACKSON, Esq., A.L.S., Curator of the Kew Museums.

W. F. KIRBY, F.L.S., F.E.S., of the British Museum, Author of "A Handbook of Entomology," "European Butterflies and Moths," &c.

The Rev. F. O. MORRIS, B.A., Author of "A History of British Birds," &c.

GEORGE MURRAY, F.L.S., of the British Museum, Joint Author of "A Handbook of Cryptogamic Botany."

GEORGE A. MUSGRAVE, F.Z.S., F.G.S.

GEORGE NICHOLSON, A.L.S., Curator of the Royal Gardens, Kew; Editor of the "Dictionary of Gardening."

J. L. OTTER, Hon. Treasurer of the Selborne Society.

The Rev. H. D. RAWNSLEY, M.A., Author of "A Plea for the Birds," &c.

F. N. WILLIAMS, F.L.S., Author of "The Pinks of Europe," &c.

The special features of NATURE NOTES are fully set forth in the original circular, a copy of which may be obtained on application. It is intended to be a record of progress—progress in the love of Nature, in the knowledge of natural objects, and in the war to be waged in defence of the beauties of Nature against their more or less avowed exterminators.

Special prominence is given to Reviews of Books which bear on the various branches of Natural History, and the Editor will always be glad to give information as to books suitable for any particular study.

Business communications with regard to NATURE NOTES should be addressed to the SECRETARY OF THE SELBORNE SOCIETY, 9, Adam Street, Adelphi, Editorial communications and Books for Review should be addressed to JAMES BRITTEN, Esq., 18, West Square, Southwark, S.E.

EYRE & SPOTTISWOODE,

Government and General Publishers.

ALSO AGENTS TO THE NEW ZEALAND GOVERNMENT.

ARDENER (Illustrated). By H. W. WARD, F.R.H.S., Head Gardener to the Right Hon. the Earl of Radnor, Longford Castle, Salisbury. 2s. 6d. MY GARDENER (Illustrated).

"The book is replete with valuable cultural notes indispensable to the millions who are now turning to gardening as a source of pleasure and profit."—Gardeners' Chronicle.

"Clear, sensible, and full of instruction. We know of no better hook to put into the hands of the owners of small gardens who are anxious to make the best of their opportunities, whether in the cultivation of flowers, vegetables, or fruit."—Times.

"As a practical handbook for the million it has no superior on the subject."—Beli's Weekly Messenger.

POTATO CULTURE FOR THE MILLION. By H. W. WARD, F.R.H.S., Head Gardener to the Right Hon. the Earl of Radnor, Longford Castle, Salisbury. 3d.; by post, 4d

"Should have a good effect in improving the system adopted by small gardeners and cottagers."—Times.
"We may safely say that the pamphlet will be found most useful to potato growers, whether in field or in garden."—Farmers' Gazette.

"The book is eminently practical, thoroughly trustworthy, and will be found of much value for distribution amongst cottagers and allotment holders, the cheap rate at which it can be obtained admirably adapting it for that purpose."—Gardeners' Magazine.

POTATO DISEASE. Report to the President of the Board of Agriculture on Recent Experiments in Checking Potato Disease in the United Kingdom and Abroad. 9d. By post 11½d. "It extends over 183 pages, and is by far the most voluminous publication yet issued upon the use of modern specifics against the potato disease. . . . The report is of a bighly practical character, and as such it will well repay the careful study of all potato-growers."—Alorning Post.

MULBERRY TREES AND SILKWORMS. Manual of Instruction for raising. By G. A. Schoch. Demy 8vo. 6d.

PRUNE INDUSTRY. Report (with I'lates) of the Prune Industry of California. By Mr. Vice-Consul Moore, 1892. 111d.

HARDY FRUITS. A Practical Guide to their Cultivation, for Landowners, Tenant Farmers, Cottagers, and Allotment Holders. By Brian Wynne, F.R.H.S., Editor of the "Gardening World." Paper covers, 6d.; cloth, 1s. OUR HARDY FRUITS.

"Should have a good effect in extending the fruit areas of the country."—The Times. "The contents have been carefully compiled, and evidently out of genuine experience."—Field. "A really practical treatise."—Farm.

INSECTS, FUNGI, AND WEEDS INJURIOUS TO FARM CROPS. with original drawings. By ROBERT E. MATHESON. 10d.

INSECTS INJURIOUS TO CROPS, &c. By C. WHITEHEAD, Esq., F.L.S., F.G.S.
Part I. Hop Plants, 2½d. Part II. Corn, Grass, Pea, Bean, and Clover Crops. 6d. Part II.
Fruit Crops. 9½d. Part IV. Root and certain other Crops (Celery, Onions, &c.) 7d. Part III.

PHYLOXERA AND OTHER DISEASES OF THE GRAPE VINE. the Department of Agriculture, New Zealand, 1891. 18.

PHILOSOPHICAL NOTES ON BOTANICAL SUBJECTS. By E. BONAVIA, M.D., Brigade-Surgeon, I.M.D. With 160 Illustrations. 2s. 6d.

"Are well worth reading, for they are pleasantly, sometimes even amusingly written, and in many instances are both original and ingenious."—Westminster Review.

"The author sees modifications and traces developments not obvious to ordinary observers."—Nature.

KEW BULLETIN. A Monthly Record issued by the Director of the Royal Gardens, Kew, containing valuable Notes on Economic Produce and Plants. Largely increasing circulation. Subscription for 12 months, including postage, 3s. 9d.; Volume for 1887, in boards, by post, 2s. 7d.; 1888, 2s. 8d.; 1889, 2s. 8d.; 1890, 3s. 2d.; 1891, 3s. 4d.

FOREST FLORA OF NEW ZEALAND. By T. KIRK, F.L.S., late Chief Conservator of State Forests, N.Z., &c. Numerous Plates. Fcap. folio, cloth, 128. 6d.

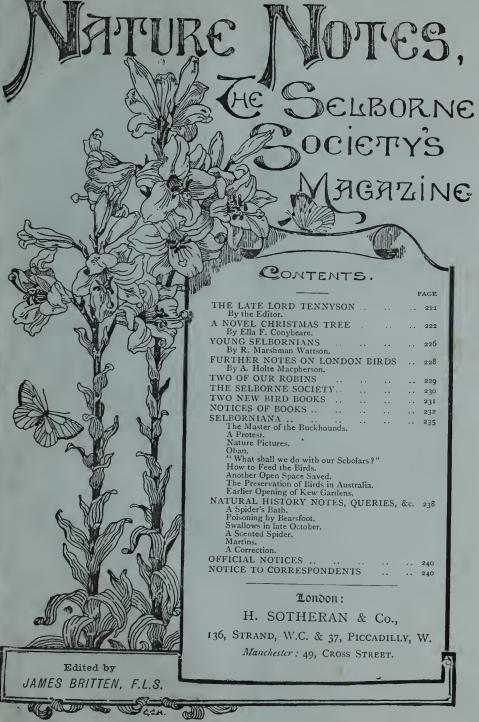
INDIGENOUS GRASSES OF NEW ZEALAND. By John Buchanan. Full-page Illustrations. Imp. 4to, half morocco, 15s. Royal 8vo, 5s.

ORANGE CULTURE IN NEW ZEALAND. By G. C. ALDERTON. Demy 8vg,

MANUAL OF BIRDS OF NEW ZEALAND. By WALTER L. BULLER, C.M.G., Sc.D., F.R.S. Numerous Plates. Royal 8vo. 10s.

HANDBOOK OF NEW ZEALAND FISHES. By R. A. A. SHERRIN. Demy 8vo, cloth, 25.

London: East Harding Street. EYRE & SPOTTISWOODE.



EDWARD STANFORD'S PUBLICATIONS.

ELEGANT PRESENT. AN

MENDIP VALLEY.

The Hatural History and Geology of the Mendin Hills,

With Notices of the Archæology, Inhabitants, and many other particulars of the Valley of Winscombe and surrounding Country.

By THEODORE COMPTON.

Member of the Somersetshire Archaelogical Society, and the Selborne Society.

Illustrated by EDWARD THEODORE COMPTON.

Price 10s. 6d. Large paper, 21s.

"Graphic description enriched by charming illustrations."-Morning Post.

"The landscape drawings are especially charming."—Saturday Review.
"There are upwards of fifty delightful illustrations—simply gems."—Science Gossip.

POPULAR SCIENTIFIC BOOKS

By ARABELLA B. BUCKLEY (Mrs. FISHER).

- THE FAIRYLAND OF SCIENCE. Twenty-fourth Thousand. With 74 Illustrations. Cloth gilt, gilt edges, 6s.; calf, marble edges, 11s.
- "Her methods of presenting certain facts and phenomena difficult to grasp are most original and striking, and admirably calculated to enable the reader to realize the trutb......It deserves to take a permanent place in the literature of youth."—Times.
- THROUGH MAGIC GLASSES, and other Lectures. A Sequel to the Fairyland of Science. With nearly 100 Illustrations. Cloth, gilt, gilt edges, price 6s.; bound in calf, IIs.
- "A sequel to that very delightful book, 'The Fairyland of Science,' and deals with the marvels revealed by the telescope, the microscope, and the photographic camera. For young people of scientific tastes a better book could not be found than this."—Saturday Review.
- LIFE AND HER CHILDREN. Glimpses of Animal Life, from the Amoeba to the Insects. Thirteenth Thousand. With upwards of 100 Illustrations. Cloth gilt, gilt edges, price 6s.; calf extra, 11s.
- "The work forms a charming introduction to the study of zoology—the science of living things—which, we trust, will find its way into many hands."—Nature.
- WINNERS IN LIFE'S RACE; or, the Great Back-boned Family. With numerous Illustrations. Cloth extra, gilt edges, prics 8s. 6d.; calf extra, 14s.
 - "We can conceive no better gift-book than this."-Spectator.
- A SHORT HISTORY OF NATURAL SCIENCE; and of the Progress of Discovery, from the time of the Greeks to the Present Time. Fourth Edition, Revised and Rearranged. With 77 Illustrations. Cloth gilt, gilt edges, price 8s. 6d.; calf extra, 14s.
- MORAL TEACHINGS OF SCIENCE. Crown 8vo, cloth, gilt edges, price 3s. "Many readers will welcome it whom Huxley would repel or Sir John Lubbock overawe." - Scotsman.
- ANIMALS FROM THE LIFE. 255 Coloured Illustrations, drawn by Heinrich Leutemann. With Descriptive Letterpress, Edited by Arabella B. Buckley. Crown 4to, handsome cloth binding, price 10s. 6d.
 - "Irresistibly attractive to all youthful lovers of natural history."-Manchester Examiner.

London: EDWARD STANFORD, 26 & 27, Cockspur Street, S.W.

PUBLICATIONS OF GEORGE NEWNES, Ltd.

7th Thousand Ready.

The Adventures of Sherlock Holmes. By A. Conan Doyle. Beautifully printed on extra thick paper, with 104 Illustrations; 324 pages; tastefully bound in cloth, with gilt edges. Price 6/-

Now Ready. 2nd Edition.

The Sign of Four. (Being an Earlier Adventure of the celebrated Sherlock Holmes.) By Dr. A. Conan Doyle. 2nd Edition, 284 pages, cloth, 3/6.

Ready 14th December.

Strand Magazine. Volume 4, with 684 pages, and nearly 1000 Illustrations, cloth, gilt edges. Price 6/6.

Now Ready.

1,000 Tit-Bits of Curious Information. Being the 5th series of 1,000 Answers to 1,000 Questions. 438 pages, cloth, 2/6.

8th Thousand.

What's Bred in the Bone. £1,000 Prize Story, by Grant Allen. 420 pages, 3/6.

4th Thousand.

For God and the Czar. By J. E. Muddock. A Thrilling Story of the Jewish Persecutions in Russia. Cloth, 3/6.

6th Thousand.

Memoirs of a Mother-in-Law. By George R. Sims. 308 pages, cloth, 2/6.

8, 9, 10 & 11, SOUTHAMPTON ST. & EXETER ST., STRAND, LONDON.

AGENT FOR
"Nature Notes."
"The Library Review."
"Church Missionary
Intelligencer."
"Life and Work."
"Church of Scotland
Mission Record."
"Morning Rays."
"Free Church
Monthly."

"Youth."
"Youth."
"United Presbyterian
Missionary Record."
&c., &c.

J. I. BAXTER,

Advertising Agent,

29, Paternoster Square, E.C.

•••••

Advertisements inserted in "NATURE NOTES," and generally in Magazines and Newspapers.

JOHNSTON'S CORN FLOUR.

"Is decidedly superior."—The Lancet.

SELBORNIAN GIFT BOOKS.

THE LIBRARY EDITION.

2 vols, demy 8vo, £1 11s. 6d.

THE NATURAL HISTORY AND ANTIQUITIES OF SELBORNE, in the County of Southampton. By the late Rev. GILBERT WHITE. Edited by Thomas Bell, F.R.S. F.L.S. F.G.S., &c., Professor of Zoology in King's College, London. With Steel Plate and other Illustrations, comprising: Front View of the Wakes, West portion of the Village, South View of Church with Vicarage, Garden View of Gilbert White's House, Cottage at Dorton, The Plestor, etc., etc., with an Appendix on the Roman-British Antiquities of Selborne, by LORD SELBORNE. (A few copies on large paper, price £3 3s.)

BRITISH WILD FLOWERS. Illustrated by John E. Sowerby. Described with an Introduction and a Key to the Natural Orders by C. P. Johnson. Re-Issue, super royal 8vo, with 1780 illustrations

on 89 Plates, £3 3s.

This work gives, in one large volume, a characteristic figure, coloured by hand, of each species of indigenous plant, with a short description of its habit, habitat, height, and time of

AN ILLUSTRATED MANUAL OF BRITISH BIRDS. By HOWARD SAUNDERS, F.L.S., F.Z.S., &c., Editor of the Third and Fourth Volumes of "Yarrell's History of British Birds," Fourth Edition. One volume, 750 pages, demy 8vo, with 367 fine Woodcuts and Three Maps, £1 1s.

"Excellent alike in style and matter, it ought to be in the hands of every lover of birds, and should take the place of several inferior books on the subject now before the public."-

Annals of Natural History.

BIRD-LIFE OF THE BORDERS: Records of Wild Sport and Natural History on Moorland and Sea. By ABEL CHAPMAN. Demy 8vo,

"Mr. Chapman is a naturalist of Gilbert White's school in the keenness and accuracy of his perceptions. He sees things for himself and takes nothing upon trust. Every lover of a country life will delight in his vivid sketches of sporting experience and wild life on the moors."—Saturday Review.

"Will enchant all who are fond of birds. Sympathy with all living creatures, careful observation, with cautious deductions, and strong love for the bleak moors and wild scenery of the Cheviots—such are the characteristics of this most interesting book. The illustrations of the Cheviots—such are the characteristics of this most interesting book. The illustrations add a great charm to a book redolent of wild life and careful observation."—ACADEMY.

WEEDS AND WILD FLOWERS: Their Uses, Legends, and Literature. By LADY WILKINSON. Illustrated by Twelve Plates tastefully painted in Water-colours and Twenty-six Woodcuts. Post 8vo. cloth, gilt edges, 10s. 6d.

ORNITHOLOGY OF SHAKESPEARE, Critically Examined, Explained, and Illustrated. By J. E. HARTING, F.L.S., F.Z.S.

With Thirty-four Wood Engravings, 8vo, 12s. 6d.

BRITISH POISONOUS PLANTS. Illustrated by John E. Sowerby.

Described by Charles Johnson, Botanical Lecturer at Guy's Hospital, and C. PIERPOINT JOHNSON. Second Edition, containing the principal Poisonous Fungi. Post 8vo, with 32 Coloured Plates. 9s. 6d.

GURNEY AND JACKSON, 1, PATERNOSTER ROW

(Successors to Mr. Van Voorst).





