

"The observatory, however, is not very easy to find in the labyrinth of the world-city. It is well concealed behind the great South Kensington Museum, in a backyard of the museum, with access to it through an insignificant-looking side entrance in the Exhibition Road. The observatory buildings themselves, five or six in number, also present a very plain appearance, giving the impression, when seen from a distance, of being part of a travelling menagerie or circus.

"But on passing within these wooden walls and tents one is deeply impressed by the wonderful instruments and apparatus with which Sir Norman Lockyer and his son, Dr. William Lockyer, aided by a staff of assistants, draw forth the sun's secrets by astronomical, spectroscopic, and photographic means. The instrumental equipment of the observatory is probably unique of its kind, and in the meteorology of the future the Lockyers' Solar Physics Observatory in South Kensington will rank among the first to be counted with."

Since that time I have followed the publications from the observatory with much interest, observing the great progress in all branches of solar inquiry and its relations to meteorological and other terrestrial phenomena. It is my sincere hope that the new position of your observatory may be such that you, dear Sir, and your admirable scientific staff, may carry on your work on the same lines as before, untroubled by difficulties arising from local disturbances.

I am, dear Sir,

Sincerely yours,

AKSEL S. STEEN.

Vice-Director of the Norwegian Meteorological Institute.

President of the Norwegian Geographical Society.

SOLWAY BIRDS.¹

COUNTY histories of birds have followed each other in such rapid succession during the past few years that the majority of those the geographical situation of which gives them special importance, have found historians. This the latest addition deals with the avifauna of Dumfriesshire and the Solway area, which is to say that the neighbouring counties of Kirkcudbright and Wigton are included in the author's purview. Mr. Gladstone's survey, therefore, covers the whole of the very interesting south-west corner of Scotland along the shores of which the Solway ebbs and flows.

The region is indeed very fortunate in its historian. He has supplied all that the ornithologist can wish to know concerning the occurrence of its birds. His book is also a meritorious production from the publishers' and bookbinders' point of view. It is light to hold and very attractive on account of its excellent paper, bold, clear type, and the beauty of its illustrations. Messrs. Witherby, the publishers, one of whom is a well-known ornithologist, now appear as the worthy rivals in London of the distinguished place which the house of Douglas in Edinburgh has so long

held for the production of ornate books on natural history.

Mr. Gladstone has added interest to his work by placing on record the names, with a short biography, of each of the ornithologists of the county, of whom from about 1650 there appear to have been a goodly number. Among them occur such well-known or distinguished names as Captain Clark Kennedy, Robert Gray, Dr. Grierson, Sir William Jardine, William Laidlaw (Sir Walter Scott's amanuensis), the Rev. Hugh Macpherson, and Sir John Richardson,



Short eared Owl on the Nest, photographed by Mr. F. Barber-Starkey. From "The Birds of Dumfriesshire," by Hugh S. Gladstone.

naturalist to the Franklin Arctic expedition, and the discoverer of Huxley.

The physical features of the county, which embraces an area of a little more than 686,000 acres of land surface and 21,000 of water and foreshore, are very varied. The northern part is mountainous, rising into hills more than 2000 feet, "intersected by glens and valleys"; the southern "breaks into three great 'dales,' named from the Nith, the Annan, and the Esk." The wide Solway firth is an area of special importance to the natural history of the district, for

¹ "The Birds of Dumfriesshire—a Contribution to the Fauna of the Solway Area." By Hugh S. Gladstone. Pp. xcix+432. (London: Witherby and Co., 1910.) Price 25s. net.

it provides vast feeding grounds for shore birds, although, in the absence of cliffs, rock-breeding species are scarce or absent. Dumfriesshire has been re-afforested to a wide extent since the earlier parts of the last century. Consequently suitable habitats have been provided for many species which would not otherwise be included in its register, while "hedge enclosures with rows, belts, or clumps of ornamental or 'wind-breaking' trees have greatly encouraged the increase of passerine birds." The firth opens its arms also to welcome home-coming immigrants and birds of passage. "There is no doubt," as Mr. Gladstone remarks, "that in comparatively recent geologic times the Irish Channel was a great tidal river, of which the Solway streams were its northernmost tributaries, and that this ancient river valley was the route by which the birds went and came in long by-past ages—a route which has left so strong an impression on posterity that the birds travel along what is now a broad sea-way."

The number of species recorded from Dumfries is of residents, 70; summer visitants, 31; winter visitants, 31; occasional visitors, 30; very rare or accidental visitors, 56; or, in all, 218. One reads with regret that eagles and harriers have ceased to nest; that martins, barn-owls, and swallows are scarcer; but, on the other hand, it is pleasant to know that pied flycatchers, tufted ducks, great spotted woodpeckers, jays, woodcock, and peregrine falcons have become more numerous. The author's biographies—all of them just what they should be—of the different species, abound with interesting observations. In speaking of the dipper, by the way, Mr. Gladstone records that there has been a nest in a certain stream for 123 years in succession. There are a score of heronries in the county, and the list of rookeries is a long one, the site of some of them dating back for more than 600 years. Notwithstanding that 36,000 rooks have been killed in the last three years, the stock shows few signs of decimation. Incursions of sand-grouse and of continental crossbills are recorded, the latter species nesting apparently only for a few seasons after such visitations.

We commend heartily "The Birds of Dumfriesshire" to all British ornithologists, and especially to those north of the Solway. The volume is provided with what is too often forgotten in faunistic books, an excellent map, and, with a good index, a *sine qua non* of a book of reference, if it is to be fully useful. By the courtesy of the publishers we are able to exemplify its illustrations by a specimen of the twenty-four full-page pictures which adorn it.

NOTES.

ON Monday next, January 23, an important development in Oceanographical Science will take place by the inauguration of the Oceanographical Institute in Paris, which has been founded and endowed by the Prince of Monaco. In NATURE of April 14 and November 3, 1910, notices appeared of the opening of the Oceanographical Museum founded by the Prince at Monaco, and a description of the museum and its objects was given by Mr. J. Y. Buchanan. With the opening of the Institute next week, a further development will take place; for the Institute will now be composed of, first, the Institute at Paris; secondly, the Museum at Monaco. The Prince has described the Museum at Monaco as the workshop, and the Institute in Paris as the retail house. The Institute is French and international—French because its seat is in Paris, directed by a French administrative committee consisting of M. Emile Loubet, M. W. Darboux, M. Cailletet, Dr. P. Regnard, Mr. Georges Kohn, and Mr. Louis Mayer; international

because the scientific and technical direction is in the hands of what is termed the "Comité de Perfectionnement," of which the president is the Prince of Monaco, and the vice-president Mr. J. Y. Buchanan, while the other British members are Sir John Murray, K.C.B., and Dr. W. S. Bruce. The committee also includes the names of many eminent French, German, Scandinavian, and other oceanographers. While the Museum is under the direction of Dr. Jules Richard, the Institute in Paris is under the administration of Dr. P. Regnard. Three professors are connected with the Institute—M. Joubin for biological oceanography, M. Berget for physical oceanography, and M. Portier for the physiology of marine creatures. After the opening of the Institute on January 23 the Comité de Perfectionnement will meet, and future arrangements for the development of the Institute will be duly considered.

SIR DAVID GILL, K.C.B., F.R.S., has been elected a foreign member of the Swedish Royal Academy of Sciences, Stockholm.

A REUTER message from St. Petersburg announces that the Russian Academy of Sciences has conferred honorary membership on Prince Albert of Monaco, and has elected the following as corresponding members:—Mr. Bryce, British Ambassador to the United States; Prof. Lorentz, Leyden; Prof. Strasburger, Bonn; and Prof. Lewes, Albany.

At the meeting of the Paris Academy of Sciences on January 3, the incoming president, M. Armand Gautier, comparing the practice of the Academy with that of the Royal Society, mentioned the fact that during the half-hour preceding the formal opening of each meeting of the latter, the fellows meet in the ante-room for informal conversation, and he expressed the hope that a similar arrangement could be organised for the Academy. This would avoid the necessity for private conversations being carried on during the actual meeting.

It is reported from Sydney that the Science Congress—which, we suppose, is the Australasian Association for the Advancement of Science—has voted 1000l. for Dr. Mawson's Australian Antarctic expedition, which is starting in November for the purpose of exploring the regions between Cape Adare and the Kaiser Wilhelm II. Land. Three Australian citizens are each contributing 1000l. to the expedition, and other generous help has been promised.

THE report referred to in a paragraph last week (p. 342), that the town of Prjevalsk in Turkestan was destroyed by waves of the Issil-Kul Lake during the Vyernyi earthquake of January 3-4, proves to have been incorrect. The towns along the northern shore of the lake, however, suffered severely, and fifty persons were killed. It will be noticed that the position of the epicentre as given in Dr. W. N. Shaw's letter (p. 335) is in the immediate neighbourhood of the lake.

ACCORDING to a Press message from Winnipeg, information has reached there from Fort Churchill, on Hudson's Bay, that the schooner *Jeanie*, with fifteen geological surveyors on board, was wrecked on September 9, 1910, in a gale near Wagner inlet. After suffering great hardships the party reached Fort Churchill on December 1, and is now on its way to Winnipeg by dog train. The party left Ottawa last spring to investigate the flora and fauna in the Hudson's Bay district.

A REUTER message from Washington states that the members of the U.S. Geodetic Survey who have been examining Commander Peary's Arctic observations