

the same number of pages of an ordinary English work in octavo, with small pica type. Of course the style of the original as well as the style of translation may be such as to render this approximate number rather wide of the mark.

The number of copies of works sold up to the end of June, 1879, amounts to 31,111, representing 83,454 volumes. The number of maps and charts published amounts to twenty-seven sheets. Most of them are adaptations of the charts of the British Admiralty, and were printed from copper plates engraved at the Kiangnan Arsenal. The number already sold is 4,774 sheets.

The sum realised by the sale of books and charts may be estimated at about 17,500 dollars, or roughly 3,500*l*.

The numbers sold up to the present time, though considerable, are nothing compared with what might have been expected among such an extensive population. But with no regular means of communication, no postal or railway arrangements, no agencies, and no advertisements or other means of bringing them into general notice or distributing them, it is easy to understand why more have not already been disposed of.

The various periodicals, such as summaries of foreign news, political essays, &c., are not reckoned in the above numbers. From three to five hundred copies of these books are published and distributed gratuitously to various officials both in the vicinity of Shanghai and in distant provinces.

Forty-four works, representing about 142 volumes, have been translated, and are in various stages of preparation, but the publication is not yet commenced.

Thirteen works which are now in the course of translation and of which thirty-one volumes are already completed.

Forty-three books are to be published by the Committee of the "School and Text-book Series." Most of these works are nearly ready to be placed in the printer's hands.

Various treatises on scientific subjects have been published by Protestant missionaries ; but about them it has been impossible to obtain statistics as to the numbers printed and sold.

The following list will give some idea of the number and class of scientific works that have been translated :—

Subjects.	Published.		Translated.		In course of translation.	
	works	vols.	works	vols.	works	vols.
Mathematics, Surveying, &c.	22	52	2	8	3	5
Engineering, &c.	7	17	3	6	1	2
Chemistry, &c.	5	19	1	1	1	4
Geography, &c.	8	12	—	—	—	—
" " " " " " "	27	maps	—	—	2	9
Geology, Mining, &c.	5	20	3	4	—	—
Astronomy, Navigation, &c.	9	27	3	4	—	—
Physical Science	6	14	4	5	1	1
Medicine	2	8	1	6	2	10
Arts and Manufactures	13	15	9	26	—	—
Naval and Military Science	15	41	9	26	2	2
Chronology, News, Periodicals, &c.	6	10	1	1	—	—
Naval Architecture	—	—	3	13	1	1
History	—	—	5	18	—	—
International Law	—	—	2	26	—	—
Miscellaneous	—	—	2	2	—	—
	98	235	45	142	13	34

THE WILLUGHBY SOCIETY¹

IT was a happy thought to found an association under the name of Francis Willughby, having for its object the reprinting of scarce ornithological works, thus keeping the name of the writer of "Ornithologiæ Libri Tres" in remembrance and doing a service to the working ornitho-

¹ Desfontaines's "Mémoire sur quelques Nouvelles Espèces d'Oiseaux des Côtes de Barbarie" (1787). II. "Ornithological Papers," by Sir Andrew Smith (1830-34).

logist. It is nearly nine years over two centuries since Willughby died (July 3, 1672). About seven years younger than John Ray, he studied at Trinity College, Cambridge, under Ray ; but though at first the pupil, he was soon the friend and afterwards the patron of our great English botanist. Belonging to a family of wealth and influence, Willughby soon married (1668), and settled at Middleton Hall, Warwickshire. How hard he must have worked the materials for his great work left at the time of his untimely death amply prove. His second son (the elder died) was created a peer by Queen Anne (Viscount Middleton). An annuity was left to Ray, who edited "The Ornithology," which was printed in London (1676) at the expense of Willughby's widow. Willughby has been called the "father of systematic zoology in this country." The new Willughby Society seems determined to follow in his footsteps.

The reprint in fac-simile of M. Desfontaines's "Mémoire" will be no doubt welcomed by the members, and it is only by members that these reprints can be obtained. Honoured by botanists in the beautiful genus Desfontainea, this account of the birds met by him at Barbary is very rare ; and we agree with Prof. Newton that few papers are less accessible to ornithologists than those published by the late Sir A. Smith in the *South African Quarterly Journal*. We trust the Willughby Society will meet with the support it deserves from the members of *Ibis* and from bird-lovers in general.

ZOOLOGY OF THE DUTCH ARCTIC EXPEDITION¹

A SUPPLEMENTARY number of the *Niederländisches Archiv für Zoologie* just issued is composed of an instalment of five papers describing certain of the animals collected or dredged during the two Arctic voyages of the schooner *William Barents*, together with a list of all the places dredged at, and a map with these and the track marked on it. The ship visited the north of Spitzbergen and the west coast of Novaia Zemlia, and stretched northwards thence almost to Franz-Josef Land. All the dredgings, except two off the north coast of Spitzbergen, were made in the Barents Sea, between Novaia Zemlia and the north of Norway and Bear Island. Dr. R. Horst reports on the Annelids. He found no new species amongst the fifty-one obtained in the Barents Sea. Hjalmar Theel found in the Kara Sea, on the east side of Novaia Zemlia, ninety species. There can be little doubt that the fauna of the two seas, which join in several places, must be nearly identical, yet amongst the thirty-one species from the Barents Sea are fourteen not yet collected in the Kara Sea. The Annelid collection seems to have been rather a meagre one, and must not be taken as representative. The Pycnogonids are described by Dr. P. P. C. Hoek. Examples of these were obtained on fourteen out of the entire thirty dredgings made. They are of eight species, one of which is new. Amongst them is one species of the genus *Colossendeis*, numerous forms of which were obtained by the *Challenger* in southern latitudes, some attaining there gigantic proportions. The Lamellibranchiata are described by Dr. van Haren Noman, who appends to his paper an important memoir, illustrated by three plates, on the anatomy of the eyes, gills, and other parts of *Pecten Granlandicus* and other forms ; Dr. A. A. W. Hubrecht contributes a list of the fishes ; and Dr. F. A. Jentink a few notes on the field-mouse of Novaia Zemlia, *Curriculus torquatus*, which, unlike all of its allies, turns white in winter. The animal ranges over the whole of Arctic America, Europe, and Asia, and in late geological periods extended as far south as England, Germany, and the basin of the Loire.

¹ "Zoological Results of the two *William Barents* Arctic Expeditions in 1878 and 1879."