than 13,000 books are offered for sale in the catalogue, which is classified under 23 headings. The list should be useful to librarians and book-buyers generally.

A VERY interesting catalogue (No. 487) of works relating to the sea, including autograph letters of famous navigators, original ships' log-books, atlases, etc., has reached us from Mr. F. Edwards, 83A High Street, Marylebone, W.I. Upwards of 1000 works are listed. The catalogue is illustrated by reproductions of some of the title-pages.

Messrs. Ernest Benn have in preparation a work entitled "Dogs: Their History and Development," by Edward C. Ash. The work will be published in two quarto volumes with nearly 700 illustrations. Mr. Ash tells for the first time all that is known of the history of dogs, of their breeds and development, from the earliest historical time to the present day.

WE have received from the publishers, Messrs. Heffer and Sons, Ltd., Cambridge, a copy of the Decennial Index. (vols. 41-50, 1916–1925) of the Analyst. This is arranged as an author index and a subject index, and comprises 353 pages. The book will also be found useful to chemists who are not members of the Society of Public Analysts, to the journal of which references are given, since it provides indications of a large number of analytical methods published during the period named.

The Royal Society for the Protection of Birds has just published another leaflet in its series from the writings of the late Mr. W. H. Hudson. It is entitled "Three Water Birds," and the matter was selected by Mr. Hudson himself from his book "Hampshire Days." The leaflet describes the coot, dabchick, and moorhen, and includes a coloured illustration showing a moorhen and her chicks. The leaflet may be obtained from the Society's offices, 82 Victoria Street, London, S.W.I (price 3½d. by post).

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:-A pathologist at the laboratory of the City of Nottingham — The Town Clerk, Guildhall, Nottingham (December 14). An assistant lecturer in agriculture under the Cornwall County Council Education Committee-The Education Department, County Hall, Truro (December 20). A professor of organic chemistry in the Egyptian University, Cairo—The Dean of the Faculty of Science, Egyptian University, Cairo (December 30). A senior entomologist and a senior mycologist under the Commonwealth of Australia Council for Scientific and Industrial Research—The Official Secretary, Australia House, Strand, W.C.2 (January 31). A temporary resident lecturer in biology and hygiene at the Hereford Training College for Women—The Principal.

Our Astronomical Column.

COMET COMAS SOLA.—Mr. F. J. Hargreaves obtained a photograph of this comet on November 28. With its aid, Dr. A. C. D. Crommelin has revised the orbit as follows:

T 1927, March 21·314 U.T. ω 38° 9′ 25″ Ω 65 44 55 i 13 38 5 ϕ 34 47 49 $\log a$ 0·614843 $\log q$ 0·247635 Period 8·36 years.

The period is so much longer than that (6.4 years) found for 1890 VII. (Spitaler) that identity is possible only if a very close approach to Jupiter took place about 1912. A longer series of observations will be required before a decision can be reached.

EPHEMERIS FOR Oh U.T. N. Decl. R.A. $\log \Delta$. Dec. 11 10° 5 2h 25m 8s 0.304 0.066 2 23 27 2 22 19 10 43 0.300 15 0.070 0.076 19 II 23 0.296 2 21 50 23 5 0.293 0.082 2 21 57 12 49 0.280 0.089

The Geminid Meteoric Shower.—Mr. Denning writes: "The return of these meteors is due on December 12 and 13 and the display is likely to be more than usually interesting this year. In 1922 on the early morning of December 13 a very rich exhibition of the Geminids was observed, the number of meteors visible having been estimated at 5 per minute. The astronomical conditions will be somewhat similar on the morning of December 13 next, when a careful watch should be maintained if the sky is clear. The moon will not seriously interfere, as it will be near first quarter and only visible in the evening hours. The radiant point of the shower changes

with the time, but on the night of maximum this point is very near, if not coincident with, the position of the bright double star Castor in Gemini."

CONJUNCTION OF MERCURY AND SATURN.-On the early morning of December 15, at 3h 54m G.M.T., the planets Mercury and Saturn will approach each other to within 18', which is equivalent to little more than half the apparent diameter of the moon. The objects will rise at about 6h G.M.T. and may be observed, should the sky favour observation, about half an hour afterwards near the south-east horizon. A field-glass should enable the two orbs to be picked up readily, and it will then be interesting to compare their relative lustre and colour. Mercury will pass north of Saturn and will be the brighter object of the pair. It may be easily distinguished from Saturn by its fitful, scintillating light, which will contrast strongly with the steady rays of the latter planet. As the morning of December 15 may be cloudy, it will be advisable to obtain a view, if possible, of the planets on the mornings of December 13 or 14 or even after the date of conjunction.

The Total Eclipse of June 29, 1927.—The B.A.A. Handbook for 1927 reproduces maps of the eclipse track across Wales, England, southern Norway, northern Norway, with notes on the weather prospects. These are rather more favourable in Wales than on the east coast of England. Al, in southern Norway, has a good record of weather, and is on the railway between Bergen and Oslo. The B.A.A. is endeavouring to arrange an expedition to Al. The cost will be 30% inclusive, provided sufficient names are obtained.

The track in northern Norway passes very near Vadso on the Varanger Fjord, which was occupied in 1896, but the weather experienced on that occasion was very unfavourable.

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