

mined in Flintshire, Derbyshire, Yorkshire, and Shropshire. Most of the pigs which have been found bear inscriptions, and some have been officially stamped showing that they had been desilverised. The iron-workings of the Roman period were concentrated in the Weald and in the Forest of Dean, and tin mining was carried out to a small extent in Cornwall.

Velocity of Light

MR. M. E. J. GHEURY DE BRAY, 40 Westmount Road, Eltham Park, London, S.E.9, has published, in the form of a pamphlet entitled "La vitesse de la lumière", a critical and documented discussion of the chief experiments made to determine this constant, from the pioneer work of Römer and of Bradley, down to the latest experiment devised by Michelson. The experiments are carefully analysed, and the accounts contain discussions of certain errors, obscurities, and irrelevancies which disfigure the presentation of the subject in many of the texts. The description of the observations of Römer and of Bradley is specially useful. The author presents a table which shows the results of some twenty-one experiments, beginning with that of Fizeau in 1849 and concluding with the recent work of Michelson. Of these experiments he decides, after critical consideration, that seven give trustworthy results. He divides these into two groups—experiments carried out on a short base line and those carried out on a long base line. The results are summarised as follows:

(1) Bases courtes ; inférieures a 4 Km.		
1879-5	Michelson	299-910
1882-7	Newcomb	299-860
1882-8	Michelson	299-853
(2) Bases longues ; 23 Km. et plus.		
1874-8	Cornu-Helmert	299-990
1902-4	Perrotin	299-901
1924-6	Michelson	299-802
1926-0	Michelson	299-796

The conclusion reached is that "un fait très remarquable est tout de suite révélé par cette classification : dans les deux groupes, la vitesse de la lumière diminue progressivement avec le temps, et le changement de vitesse est approximativement proportionnel à l'intervalle de temps correspondant". However this may be, there is no question that Mr. Gheury de Bray has provided a useful résumé of the literature dealing with a very difficult experimental problem.

Ocean Newspapers

SINCE the first issue of the *Transatlantic Times*, which appeared in the form of a leaflet on the s.s. *St. Paul* on Nov. 15, 1899, maritime journalism has made great progress. All newspapers issued on British ships are now published by an organisation known as the Wireless Press. In the first place, it supplies ships with copies of the journals prepared in such a way that the news can be printed on board ship as it is received by the ship's radio operator. Rugby Radio, the G.P.O. wireless station, daily transmits three news bulletins—in the early morning, at midday,

and during the evening. It also transmits a Saturday night message giving the League football results. This message is in keen demand among the crews on cargo boats all over the world. In the case of general elections, big races, and other events of world-wide interest, it often happens that a passenger in mid-Atlantic is reading the results before they have been distributed on land. The special bulletins, broadcast throughout the day, are exhibited prominently for the passengers to read. Foreign stations also bombard the ship with news. The ship's purser has the task of sub-editing the newspaper. In an interesting paper on maritime journalism, by E. C. Thomson, in the *Wireless World* for March 23, it is stated that there are indications that the 'wireless news' will give place, possibly at no distant date, to a replica of a journal printed on land. This could be achieved without much difficulty by means of facsimile telegraphy. A complete page printed on land could be reproduced on board ship in a shorter time than would be required to carry the actual newspaper from one end of Fleet Street to the other.

Archæological Exploration in Macedonia

THE recently issued *Annual of the British School at Athens*, No. 30, covers the sessions 1928-29 and 1929-1930 (London: Macmillan and Co., Ltd., £3, 3s.). In addition to the annual report and financial statement, it includes the usual complement of papers by members of the School. The excavations in Macedonia have been continued, and although the account of the work carried out by Mr. W. A. Heurtley and others at Saratse provides no sensational discovery, it demonstrates the relation of cultural development in an interesting strip of country to that of the Vardar valley and the area immediately around Salonika. A Troadic site at Thermi in Lesbos was excavated by Miss W. Lamb, who describes the five successive cities of an Anatolian colony which was finally abandoned some time before the sack of Troy II. The excavations are still incomplete after two seasons' work. Messrs. J. D. and H. W. Pendlebury describe two extensive and elaborate protopalatial houses at Knossos, found at the bottom of walled pits in the west court. It is unfortunate that owing to their position they cannot be excavated, but a somewhat hazardous feat of exploration has revealed their character to a considerable extent. The first instalment of a study of the morning hymns of the Emperor Leo by Prof. H. J. W. Tillyard provides evidence on medieval methods of musical notation of considerable interest to students of early music. Mr. J. D. Beazley's "A Dancing Maenad" is a study of the grouping and meaning of figures on a Nolan amphora from Woburn Abbey. Nearly half the volume is devoted to the continuation of the final report on the School's important excavations at Sparta in 1924-28 by the former director, Mr. A. M. Woodward.

Animals Playing at being Hunted

A HAND-REARED female of the prongbuck, or American antelope, owned by Mr. L. T. Murray at Mertzon in Texas, displayed a most remarkable