

by Canon Farrar on 'Fidelity and Bias in Versions of the Bible.'

THE Byron Society at Athens, thanks to whose exertions a statue of Byron was lately unveiled at Missolonghi, now proposes to erect a monument to Canning.

THE edition of the Greek commentaries on Aristotle which Torstrik began under the auspices of the Berlin Academy is nearing publication. Volumes ix. and xi. are announced as ready. The former will contain Simplicius's commentaries on Aristotle's Physics, books i. to iv., edited by Dr. H. Diels, who has succeeded Torstrik in the general supervision of the undertaking. The latter contains Simplicius's commentary on the 'De Anima,' edited by M. Hayduck.

THE daily papers announce the death of Lady Lytton, the widow of the deceased Lord Lytton. She was the author of several novels.

THE peaceful meetings of the Library Association have been troubled by the reading of an abridgment, made by Mr. E. C. Thomas, of an article in the *Preussische Jahrbücher* on the library of the British Museum by Prof. Dziatzko. Some of the professor's strictures are just, and when he complains that the late Mr. Winter Jones discouraged special studies, and sacrificed everything to routine, he is hitting a palpable blot; but others of his criticisms seem to show that a scholar trained in a small library like that of Breslau is scarcely the best judge of the management of a huge collection like that of the Museum. The present pressure on the Reading Room will be much relieved when the room for newspapers, which Mr. Stevens mentioned while discussing the paper, is built, and the new library of 40,000 volumes brought together in the galleries of the Reading Room.

THE Syndics of the Cambridge Press have in preparation an edition of 'Demosthenes against Androtion and against Timocrates,' by Prof. Wayte; an edition of Aristotle's 'Psychology,' with a translation and critical and explanatory notes by Mr. E. Wallace, of Worcester College, Oxford; and a work by the Disney Professor of Archæology, containing the substance of his lectures on Greek coins, which will be illustrated with autotype fac-similes. The first volume of the *Sarum Breviary*, edited by Mr. C. Wordsworth, containing the Calendar and Temporale, is nearly ready. The second volume, containing the Psalter and Commune Sanctorum, has been already issued; and the third and concluding volume is in the press. The second volume of 'A Selection of State Trials,' by Prof. Willis Bund, bringing the trials for treason down to the end of the Popish Plot; and the second volume of 'Theodore of Mopsuestia's Commentary on the Minor Epistles of St. Paul,' edited by Dr. Swete, will soon be published.

SCIENCE

THE INSTITUTION OF NAVAL ARCHITECTS.

THE meeting of the Institution of Naval Architects takes place on the last three days of the present month. It will be remarkable for the number and the varied interest of the papers. On the first day four weighty papers are to be read. The first, 'On Armoured Ships

and Modern Guns,' is by Mr. Samuda, and will deal with the question raised by Sir William Armstrong in his address to the Institution of Civil Engineers, viz., the relative advantages of building armoured or unarmoured war-ships; it will also touch incidentally on the actual fitness of the fleet to protect the country and its commerce. Mr. Dunn, of the Admiralty, will read a paper 'On Modern Merchant Ships,' which will no doubt lead to a discussion on the adaptability of merchant steamers for war purposes in case of need. Mr. A. Kirk, of the firm of Messrs. J. Napier & Sons, and Mr. W. Parker, chief engineer surveyor to Lloyd's Register, follow, with papers of much interest on compound engines. Mr. Kirk has lately placed some triple expansive engines, in which steam of very high pressure is successively expanded in three cylinders, instead of in two as has hitherto been the practice in compound engines. His paper will give an account of the favourable results attained, and will analyze the difference in the performance of the triple and double compound engines, and show step by step to what causes the superior economical performance of the former class is due.

The most interesting papers on the morning of the second day are, one by Mr. W. H. White, 'On the Revision of the Tonnage Laws,' a subject which, in consequence of the recent report of a royal commission, may now be opportunely discussed; and one by Mr. B. Martell, chief surveyor to Lloyd's Register, 'On the Basis of Fixing the Load-line of Mercantile Steamers and Sailing Vessels.' On the evening of the same day Mr. Milton, of Lloyd's Register, will read a paper 'On Marine Boilers,' which will show that Lloyd's rules in no way hinder the development of the marine boiler. Mr. Kirk will follow, with a short but important paper on the subject of the mysterious cracks which sometimes take place in steel plates; and Mr. Farquharson, of the Admiralty, will give the results of certain Admiralty experiments on a subject equally important to builders of steel ships, viz., the corrosive effects of steel on iron in salt water. The remaining papers to be read at these meetings are of a more specially technical character.

GEOGRAPHICAL NOTES.

LETTERS to hand from Axim announce that Capt. Burton and Cameron had spent ten days in visiting some of the gold deposits in Apollonia, of which they report favourably. Capt. Burton's own words are, "The whole land is eminently auriferous"; and, speaking of the climate, he writes, "The evening temperature is delicious, and during the cool dewy nights we found blankets necessary." On returning from Apollonia the two travellers went to see some of the mines near Prince's—the old Fort Brandenburg of the maps—and later on visited the district of Apatim, only four miles north of Axim. They were to start for the interior, *via* the Ankobra river, on February 25th, and would see all the mines and auriferous deposits along their route. Their collection of objects of natural history promises to be very large and interesting.

The Roman Catholic mission appears to have failed to establish itself at the court of the Zulu chief Umzila, on the east coast of South Africa. The death of Father Law, cousin of Lord Ellenborough, has been followed by the death of Father Wehl at Sofala; the lay members of the mission worked their way back to the Matabele country and the kraal of Lo Benguela, where they have another mission. At the same time a rumour has reached France that Father Depelchin, the superior of the Roman Catholic mission on the Upper Zambesi, has been massacred.

The German *Missionary Monthly Report* gives the full details of the way in which the Roman Catholic missionaries have been turned neck and crop out of the country by the chief of Herero Land, on the west coast. They brought it upon themselves by intruding upon the field so long

occupied by the German Rhenish mission, which has established itself in the confidence of the Herero chief by many years of unselfish devotion to the people.

It is a singular coincidence that news has reached us from Boston, U.S., that the American Board of Missions have taken the first step to establish their Protestant mission at Umzila's, and that their agent has been received with great favour.

It must be a strange sensation to the African chiefs south of the Equator to find themselves thus besieged by French, German, English, and American missions, all quarrelling with each other.

ASTRONOMICAL NOTES.

PREPARATIONS are, we understand, being made both by English and French astronomers to observe in Egypt the total solar eclipse of the 17th of May next. The central line crosses the Nile about a degree north of Luxor, which was one of the stations for observing the transit of Venus in 1874. The duration of totality there will be 1 minute 12 seconds, at about half-past eight o'clock (local time) in the morning. From there the line, after crossing the desert of Northern Arabia, passes very near Bagdad and Teheran; at the latter place the duration of totality will amount to 1 minute 43 seconds, which is within five seconds of the maximum, itself only attained in the inaccessible region to the north of Merv. Further to the east the duration of totality diminishes again, and at Shanghai, on the coast of China, there will be only a very large partial eclipse—greatest at 5^h 21^m P.M. (local time). At Greenwich the eclipse will only be visible as a small partial one, greatest phase 0.186 of the sun's diameter at a quarter before seven in the morning. This eclipse and a total eclipse visible in Brazil are the only two total eclipses during the remainder of the nineteenth century which will be easily accessible to observers at stations where the sun will have a sufficient altitude to enable them to make satisfactory observations of the corona. In reply to an inquiry, Messrs. Cook & Son, who have the management of the Khedive steamers on the Nile, state that their tourist steamers will have ceased running, but that they will provide a special steamer from Cairo to Sohag or locality and back to Cairo for 26l. each observer, if a minimum of twenty passengers is guaranteed. The fare will include food during fourteen days, and the carriage of instruments and baggage free of expense. The chance of fine weather at this time of the year is very good in Upper Egypt.

The Report of the Temple Observatory at Rugby for 1881 shows that most of the time available for scientific purposes has continued to be given to observations of double stars known or suspected to be binaries; a summary made by Mr. Seabroke of the results obtained during the preceding three years was published in the forty-sixth volume of the *Memoirs* of the Royal Astronomical Society. Some attention has also been devoted to spectroscopy, principally to observations for the determination of the motion of stars in the line of sight.

During the evening of March 7th Dr. Huggins, in his observatory at Upper Tulse Hill, obtained a photograph of the spectrum of the great nebula in Orion. Its extent, in the language of spectroscopy, is "from a little below F to beyond M in the ultra violet." The time of exposure of the plate was forty-five minutes. A short paper on this feat was read at the meeting of the Royal Society last week.

M. Bigourdan succeeded in observing Swift's comet (VIII., or g, 1881) at the Paris Observatory until the 9th of January, when its place was R.A. 23^h 38^m, N.P.D. 70° 46'. Dr. B. Peter observed it at Leipzig until the 22nd of December, and remarks that it was then very faint, but appeared to be elongated with some condensation.