that, according to their own showing, the Commissioners on Accidents have stated nothing that has not been well-known for many years, the Government could not very well be "convinced of the folly of sanctioning the use of Davy, Clanny, and all non-extinguishing lamps in mines," unless it is favoured with some new reasons for doing so in addition to those that have failed to convince so many generations of its predecessors. The Government could not very well retain its dignity, and at the same time shift its ground at the instance of every comer who thinks he possesses the long-sought-for panacea; but there are some eager spirits in our midst who appear to be for ever bent upon goading it into a hare-like speed, forgetful, evidently, of the moral of the fable which gives the final victory to the more slowly travelling tortoise.

We have only one more remark to make, and then we must conclude this already too long notice, namely, that a book which is written ostensibly for the education and information of even a section of the community ought not to contain recommendations of different kinds of apparatus which are apparently made and sold for the pecuniary benefit of the author. Mr. Bagot can have plenty of opportunities for advertising his improved and patented appliances without scattering notices of them through the pages of his books; and we would fain hope and believe that he was unaware of the gravity of his fault at the time he was in the act of committing it in the present instance.

WILLIAM GALLOWAY

## OUR BOOK SHELF

Theogonie und Astronomie. By A. Krichenbauer. (Vienna: Carl Konegen, 1881.)

DR. KRICHENBAUER believes that he has discovered a new key to ancient mythology. With the help of the Iliad and Odyssey, the gods of Greece are resolved into stars and constellations, and the facts of astronomy are made to explain their nature and attributes, as well as the myths that were told of them. In the deities of Egypt, of Babylonia, of India, and of Iran, Dr. Krichenbauer finds fresh confirmations of his views. The development of this early astronomical theogony falls into two periods, the first period being one of creation and growth, the second of fixity and nationalisation. The first period has its "climacteric" in B.C. 2110, when the Ram already ushered in the year. But its real history belongs to that earlier age when the Bull took the place of the Ram, and it is the Bull, accordingly, which stands at the head of the religious system, and breaks in sunder the egg of the universe. The second period begins with the change of the summer solstice from the Lion to the Crab in consequence of the precession of the equinoxes, and thus falls about 1462 B.C., when the commencement of the year was transferred from the summer solstice to the vernal equinox. The equal division of the path of the sun into the twelve signs of the Zodiac took place about seven centuries later. This, briefly put, is the substance of Dr. Krichenbauer's work. His interpretation, however, of the passages of Homer upon which his theory is based, is purely subjective, and is not likely to commend itself to others. Homeric scholars, at any rate, will not admit that any portion of the Iliad or Odyssey'is anything like so old as he would make them, or can contain traditions of anything like so old a period. His acquaintance, again, with the facts that modern research has recovered from the monuments of Egypt and Babylonia, is of the most meagre kind. Hence he is quite unaware that we happen to know a good deal about ancient Babylonian astronomy, and the history of

the Zodiacal signs, as has lately been pointed out in NATURE, and that what we know is altogether inconsistent with his statements and conclusions. Thus the year began with the vernal equinox, and the heaven was divided into twelve equal portions at least as early as B.C. 2000, and probably much earlier, while it was in Babylonia that the constellations and Zodiacal signs were first named. On the other hand, there was not the remotest connection between the theology and mythology of Babylonia and Egypt. Before Dr. Krichenbauer again writes on this subject it would be advisable for him to be better acquainted with the results of modern Oriental research.

Atlantis: the Antediluvian World. By Ignatius Donnelly. (London: Sampson Low, Marston and Co. 1882).

OUR only reason for noticing this curious book is that the names of writers of authority which constantly appear in its pages may lead some readers astray. But the author, while quoting them, has neither assimilated their method nor understood the bearing of their facts. In spite of the patient labour bestowed upon the work, and the numerous illustrations with which it is adorned, it is merely another contribution to that mass of paradoxical literature which awaits the "Budget" of a second De Morgan.

The Early History of the Mediterranean Populations, &c., in their Migrations and Settlements. By Hyde Clarke. (London: Trübner and Co., 1882.)

DR. HYDE CLARKE has compared together the devices found on the coins and gems of various ancient cities and countries, in the hope of proving the connection of the populations to which they belonged. The list is a useful one, though defective, but it proves no more than that in a very late period of the history of the Mediterranean peoples certain obvious objects were selected in different places alike as emblems and devices upon coins.

## LETTERS TO THE EDITOR

[The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts. No notice is taken of anonymous communications.

[The Editor urgently requests correspondents to keep their letters as short as possible. The pressure on his space is so great that it is impossible otherwise to ensure the appearance even of communications containing interesting and novel facts.]

## Speechless Man

In his notice of my work on "Asia," in last week's issue of NATURE, Mr. Sayce finds fault with me for rejecting the modern doctrine that "man was speechless when the leading races were differentiated from one another." I certainly do reject that doctrine, but not on the ground that he supposes. I reject it as in itself to the last degree improbable, and as utterly inadequate to account for the conditions which have suggested it. Seeing that there are many more radical forms of speech in the world than there are radical physical types, if indeed any of the physical types can be regarded as radical, anthropologists have somewhat rashly concluded that these forms of speech must have sprung up independently of each other after the dispersion of an assumed speechless human race throughout the world. We are in fact asked to believe that the continents were first peopled, here by a black, there by a white, elsewhere by a yellow, a brown, or a red species, all possibly sprung of one stock, but all still ignorant of any except perhaps a sign-language at the time of the dispersion. Then there came a time or times when these diverse species began all of them to babble independently of each other in their diverse independent settlements. Consequently, while the races may have been originally one, the stock languages had each a separate starting-point, and therefore were never originally one. Hence this sufficiently violent assumption is made in order to explain the present diversity of speech on the globe. on the contrary, hold that it is a useless assumption, that it explains nothing, that it is an all but incredible hypothesis, and