inscription on British soil corresponds to the Scandinavian formula by which, "from analogy," Prof. Stephens would read those found, but unfortunately not given, by Sir Herbert Maxwell. JOSEPH LUCAS.

OUR BOOK SHELF.

The Prevention of Consumption. By C. Candler, Melbourne, Victoria. (London: Kegan Paul and Co., 1887.)

THIS may be considered a book of theories. The author promises by "his theory" to revolutionize the treatment of phthisis, and almost to bring the disease to an end among civilized nations.

The theory is briefly stated thus: "Ordinary phthisis is invariably caused by a local bacillary malaria governed by chemical light." When the author speaks of bacillary malaria, he means that the tubercle Bacillus is like a saprophyte, capable of growing and thriving in the soil, and that from the soil, which is its true birthplace and home, the Bacillus or its spores find entrance into the human system: fortunately for humanity solar light destroys many of these Bacilli.

"It will be observed," says the author, on page 191, "that it is presupposed that the consumptive, and they who are sickening with consumption, are, or have recently been, exposed to a bacillary malaria fostered by an insufficiency of solar radiation, and this is one of the inferences which urgently requires to be verified." Quite so; and this the author ought to have done himself, though he hopes that somebody else will furnish the proof.

The prevention of phthisis the author has no doubt of achieving by plenty of sunlight; and he would force the Governments to supply more sunlight to the inhabitants of big cities, where, as is known, consumption is rife. It is a pity the author does not tell us how this is to be achieved in London or Manchester during a great part of the year. E. KLEIN.

Metal Plate Work: Its Patterns and their Geometry. By C. T. Millis. (London: E. and F. Spon, 1887.)

THIS work is one of the series of Finsbury Technical Manuals, and teaches how all ordinary patterns required by sheet metal-workers can be set out on one geometric principle. It is the first work in which the setting out of such patterns has been systematized. The manufacture of every article in common use is treated as a separate problem, but the principle in all cases is that the parts composing it shall be set out mathematically, so that any worker having become accustomed to cut out his work on this principle could equally apply it to new forms. The first chapters are of the most elementary character, so that the work is not necessarily above the head of ordinary mechanics. That the book is an admirable manual there can be no question, but whether such a book will be widely consulted appears doubtful. In the opinion of two of the chief tinplate workers in Birmingham the knowledge it imparts will save time and prevent waste of material, which results when the rule of thumb and guess-work are in vogue, whilst the workman using it will gain confidence, and his value be increased by the certainty of his pattern working out true. Nevertheless, the great mass of workmen in metals are not yet educated up to the use of such a work, and in all probability in a centre like Birmingham it will only fall into the hands of managers of manufacturing establishments and a limited number of first-class workmen. It is a book, however, that must be required by the artisan more and more to meet the rapid strides of education, and it will, we hope, command a satisfactory sale.

Walks in the Ardennes. Edited by Percy Lindley. (London: W. H. Smith and Son, 1887.)

THIS hand-book, which only costs sixpence, contains all the information the ordinary tourist is likely to want in walking in the Ardennes. The writer is very familiar with the country, and describes clearly and simply the various routes and the chief centres of interest. There are a sketch map of the Ardennes, and a good many illustrations.

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 insure the appearance even of communications containing interesting and novel facts.*]

The Parietal Eye in Fishes.

IN my short paper on this subject which appeared in NATURE of July 14 (p. 246) there are one or two points which need better elucidation than I then gave them.

In the first place, for the sake of brevity, my reference to Ahlborn's valuable paper is too scanty, and I am unwilling to do any injustice to that excellent observer. I did not believe he had ever really been fortunate enough to get sections of the "pineal gland" of a fully adult *Petromyzon planeri;* for, judging from what I had found in every adult examined, I imagined that had he possessed fully adult Petromyzon he must have noticed the black pigment in the parietal eye, and moreover must also have seen and figured the deep fossa in the skull (*vide* my figure in NATURE, p. 247), in which, in the adult, the parietal eye rests. It appeared as though his descriptions and figures of the adult brain had been taken from specimens in which the metamorphosis was not quite complete. I have again studied his figures, and must admit that in other respects some of his drawings represent the brain of adult Petromyzon. The apparent contradiction seemed strange, but it is fortunately not inexplicable.

I must here mention that *Petromyzon planeri* is no longer here in Freiburg so plentiful as when Calberla worked on it, now more than ten years ago. Indeed, I have had great difficulty in obtaining adult and very young specimens. The older Ammocœtes, though not common, are not so rare.

This being the case, I could not examine the number of individuals I should have otherwise wished to do. However, I have now found one adult Petromyzon in which there was no black pigment in the parietal eye and no fossa for the eye in the skull. That the specimen was otherwise adult is certain. This find accounts for the non-discovery by other observers of the black pigment I have described. The parietal eye in Petromyzon, which is a rudimentary organ, like many other rudimentary organs is probably also variable in different individuals, and it is not impossible that the black pigment of the parietal eye is entirely absent in the Petromyzon found in many places.

So far as I can judge at present—and I intend to further examine the point—the parietal eye in the Blindworm (*Anguis fragilis*) is also variable. It certainly varies in size and in distinctness.

The second point relates to the black pigment. Wiedersheim and Ahlborn have stated that the pineal gland in Ammocœtes possesses a gray-white pigment. Owing to scarcity of living Ammocœtes I have not verified this, but I do not for a moment doubt it, and I did not mention it, firstly because I did not think it important, and secondly because I did not wish to lengthen the paper.

I did not describe the pigment in the adult as black, but that such was the case could be inferred from the description, and in not stating its colour I was only following an excellent authority, Prof. Carrière, who, in his book "Die Sehorgane der Thiere," in many cases does not state the colour of eye-pigments. One usually assumes that a retinal pigment is black.