

feriority of one sex. The earlier arrest of development in women and the variational tendency of men are also factors to be considered; moreover, in many important directions men lead evolution. As regards the respective fitness of men and women for any kind of work or any kind of privilege, we can form no opinion *à priori* on scientific grounds; it can only be ascertained by actual experiment.

We have said enough to show that this is a very valuable scientific work which should appeal to a wide circle of readers. We wish it every success.

Headache and other Morbid Cephalic Sensations. By HARRY CAMPBELL, M.D., B.S.(Lond.). London: H. K. Lewis, 136, Gower Street. 1894.

This is unquestionably a very able and carefully-written monograph on a symptom of the greatest practical importance, and one which is present, as the author well remarks, in the majority of diseases. At the same time, headache is so often of such a distressing character, and so obtrusive that it may be the only complaint of the patient, or the only symptom for which he seeks relief, so that any contribution which helps us in our efforts to grasp its meaning, to clear up its association or relation, and diagnose its cause, is most welcome; and it is not too much to say that anyone mastering this complete work should be most familiar with the complex subject of headache. In the search for material, the author has waded through an enormous mass of literature, of which he gives the bibliography and index, and he seems to have extracted therefrom the best essence, which, added to the results of his own observations, based on an analysis of 1,300 cases, contributes to the formation of an admirable treatise.

The book is divided into four parts, of which the first is of an introductory nature, and deals with the seat of the pain in headache. The author concludes that, in functional headache, the structures chiefly implicated are the extra-cranial, the *intra-osseous* (frontal and other sinuses), and the dura-mater; while in organic headache, in addition to these, the bone, membranes, and brain itself may be painful.

Part II., on causation, takes up over 200 pages (*i.e.*, more than half the book), and is the most important as well as

most difficult part of the subject. The excellent clinical classification on p. 27 is founded upon causation, which Dr. Harry Campbell regards as the only logical method to adopt; although we must bear in mind that the causation of headache being often infinitely complex we cannot expect an ideal classification.

As regards age, headache is comparatively rare during the first few years of life; but we find it rapidly increasing after the age of four; in the old it becomes again uncommon, the chief cause being then granular kidney.

Under atmospheric conditions, the author especially mentions the effects of strong sun, cold, low barometric pressure, the presence of electricity in the air, sharp winds, etc., in producing headache.

Among mental causes, the principal ones which affect the head are retinal irritation and certain smells in the sensory sphere; suppressed excitement, especially, in the emotional sphere; and more rarely intellectual work, when of an intricate nature.

Then follows a discussion on headache due to intra-cranial disease (disease of the meninges and brain), one of the most important of all; and the author remarks on the great tendency of organic as distinguished from functional headache to interfere with sleep, a point on which Gowers lays great stress. In the headache following injuries to the head we must remember the possibility of its dependence upon slight localized meningitis, and the likelihood of relief by a surgical operation.

The chapter on disorders of the eyes in relation to headache is very fully and ably handled. The author divides the subject of irritation of the ophthalmic area into:—(a) Irritation of the retina (*e.g.*, a bright light), and (b) Irritation of the 5th nerve (glaucoma, eye-strain, etc.).

The connection between eye-strain and nervous disturbances has been especially investigated during the last 20 years; as the headache in these cases presents no special characters, it is very important to test the sight in every case. Dr. Campbell finds that, as we might expect, the blind suffer less frequently from headache than those who use their eyes for close work.

Among the nasal disorders producing headache, catarrh and polypus are probably the commonest, but practically any disease of the nasal cavity is capable of producing it, and no variety of headache more disturbs the intellectual process.

Aural and dental headache are also fairly common, and carefully described by the author.

In Chapters XIII. to XXI. the important relation of the condition of the blood to headache is fully discussed. According to Dr. H. Campbell it may be associated with:—

(1). Superabundance or undue richness of blood. General plethora.

(2). Blood impoverished in oxygen and food-stuffs. General anæmia.

(3). Poisoned blood—toxæmia (from drugs, foul air, renal and hepatic disease, uric-acidæmia, etc., etc.).

(4). Local modifications in cephalic blood-supply; active or passive congestion or anæmia of the head.

(5). Increased tension in the systemic arteries.

Haig's views on the association between megrim and uric-acidæmia are here considered, and the account of arterial tension in its relation to headache (Chapter XX.) is particularly good. As regards the relief obtained in certain headaches by lying down, the author attributes it rather to the complete rest secured than to the modification in cephalic blood-supply which is induced.

Under the heading of "Disorders of the digestive organs" the connection between megrim and gastric disturbance is considered, and we find very good reasons for the belief that many so-called dyspeptic headaches are in reality megrinous, although lacking the cardinal marks of classical megrim.

The headaches of puberty, the climacteric, etc., are discussed in Chapter XXIII.

To syphilis Chapter XXIV. is devoted. We find two varieties of headache in association with this disease—(a), functional; (b), organic—the latter characterized by (1) being circumscribed and localized; (2), tenderness; (3), nocturnal exacerbation; although these characteristics must not be looked upon as in themselves diagnostic.

In connection with rheumatism, it is observed that the subjects of this disease are prone to megrim, though less liable to non-megrinous headaches. Headache, it is important to remember, may alternate with joint-pain, gastric pain, backache, eczema, etc., and Dr. Campbell gives briefly the notes of many such cases.

Chapter XXVII. deals with the relation of sleep to headache—a very interesting question; the nature of morning headache, the headache coming on after torpid sleep, etc. Headache is not a marked feature in insanity, but Dr. Campbell

agrees with Mr. Bevan Lewis that cephalic dysæsthesiæ are common prodromal symptoms. Headache is, on the other hand, common in hypochondriasis, and, according to Briquet, in hysteria (*e.g.*, he gives 300 out of 356 cases).

Part III. is devoted to the question of symptomatology, with an account of the influence of headache upon the special senses (*e.g.*, disturbance of sight, diminution of hearing, presence of tinnitus, etc.); upon the emotions (*e.g.*, "the patient feels as if he were going out of his mind"); and upon the intellect (which is usually clouded, though occasionally sharpened, drowsiness, etc.).

The appearance of the eyes is often characteristic in headache, *e.g.*, drooping of the eyelids, sinking in of the globe, loss of lustre, etc., which one recognizes so frequently as belonging to the physiognomy of headache.

In talking of *clavus*, among other morbid cephalic sensations, Dr. Campbell shows how the halo of antiquity or that surrounding an illustrious name may help in handing down an error or imperfect observation; for *clavus*, which is usually looked upon as a definite localized stigma of hysteria, is in reality variable in its situation; it may accompany various conditions, and is rare in hysteria. This more or less applies to *globus*, which is so often looked upon as pathognomonic of hysteria.

Chapter VI. in this part deals with the subject of painful areas.

Among the structural changes in extra-cranial tissues consequent on headache, the author refers to scurf, premature greyness, alopecia, xanthelasma, etc.

Tenderness of the scalp, Dr. Campbell finds to be very common in headache, and occurs also independently of it, as in cases of "nervousness;" it is usually most felt after the pain has disappeared, and the presence of hair predisposes to it.

Besides headache, the author discusses other sensations which are frequently described about the head; a sensation of pressure upon the head, sensations in which the head seems heavy, and other vaguer sensations (lightness, etc.); these may occur with or without pain.

A sensation of heat in the head is common and often accompanies pain; a sensation of cold is much less frequent. These, like the preceding ones, are commonly felt on the crown.

Chapters XII. and XIII. deal with nervous itching of the

head, common in highly nervous patients ; with sensations of bursting, usually due to vascular distension, numbness, giddiness, and tinnitus aurium.

Chapter XIV., on cervico-occipital and occipital headache, of which the author has made a special study, is very interesting and complete. And this also applies to Chapter XV., on "periodical sick-headache" and megrim, the former being frequently only a form of the latter. The chief factors in the causation of genuine megrim Dr. Campbell considers are hereditary predisposition, abundant nitrogenous diet, and eye-strain.

Part IV. is devoted to the treatment of headaches. A proper understanding of headache, practically embracing the entire field of medicine, the treatment of headache, which means the treatment of its causes, involves a complete knowledge of therapeutics, so that the author has wisely but sketched the main factors which must guide us in our treatment. At the same time, the *resumé* which he gives in the concluding chapters is a very useful addition to the book. In Chapter I. we have in a few pages an excellent description of the method which may be followed in investigating a case of headache in order to arrive at a diagnosis, upon the accuracy of which, of course, we are dependent for legitimate treatment. Chapter XV., on drugs employed in the treatment of headache, includes all those which have been found at all efficient in his and others' experience, with good directions as to the cases in which they are likely to be of service.

This sterling book is dressed in a befitting garb, for which the publishers are to be congratulated.

A Rejoinder to Professor Weismann. By HERBERT SPENCE.
Reprinted from "The Contemporary Review." London :
Williams and Norgate, Covent Garden. 1893.

A perusal of this pamphlet, dealing with the vitally important question of the "inheritance of acquired characters," and in which the author meets the arguments urged against his criticisms of Weismann's doctrines, should prove most interesting, and it is not claiming too much for it to say that it will cause many a one to hesitate before proclaiming that "the last bulwark of the Lamarckian principle is untenable," to quote Weismann.