Man and Woman: A Study of Human Secondary Sexual Characters. By HAVELOCK ELLIS. London: Walter Scott, Limited. 1894.

Mr. Ellis is to be congratulated on the difficult task which he has successfully accomplished in this book, of collecting the enormous material scattered in books and periodicals concerning the differential characteristics of man and woman, sifting it, and presenting it to his readers in an agreeable and methodical manner. He steers remarkably clear of the marked bias which has vitiated in the past the conclusions of various writers on this fascinating subject, and a great feature of the work is, therefore, the calm judicial way in which evidence is presented and the scientific spirit which pervades it.

A careful study of its pages will, we feel sure, be a good means of clearing away the thick undergrowth of prepossession and superstition which flourishes in the region considered. In establishing comparisons between man and woman, the standards adopted are the infantile and the senile type, as having a more definite or fixed significance in the evolutionary process. Beginning with the sexual differences observed in the growth and proportions of the body and its various parts, the senses, metabolism, reaction to hypnotic phenomena, to disease, insanity, etc., are all considered in turn, and well-founded deductions or conclusions made.

In comparing the characteristics in the growth and proportions of the body of man and woman we find indications of a superior evolution in woman from the greater length of the index finger, and the tendency for the little toe to possess only two joints; this feature and the more common abbreviated type of foot in them denotes rather a retrogressive than a progressive evolution. It seems that the girth of the thigh is the only measurement in which the women do absolutely exceed the men.

In Chap. IV. we find an interesting account of the pelvis and its relation to the erect posture, and the future of the pelvis is discussed. As we would expect, we find women as the natural leaders of evolution here, the large pelvis being best adapted to propagate the race, and being necessary to its higher evolution.

In spite of much that has been written and said to the

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contrary, the appearance of the skull is comparatively of little importance as a characteristic of sex; at all events there is no one constant sexual character in the skull, although, generally speaking, we find in the male (a) a prominent glabella; (β) less prominence of the parietal and frontal bosses; and (γ) better marked muscular prominences. The significance of the cephalic index has also been overrated, and Mr. Ellis, after quoting various observations and opinions, cautiously remarks:—"The opinion may be hazarded that if any sexual difference is ultimately found, it will be in favour, on the whole, of the somewhat greater brachycephaly of women among the darker and more primitive races, and a possibly greater tendency to dolichocephaly among the fair and civilized European races."

Marked alveolar prognathism and a small maxillary angle are more common in women. Again, as regards cranial capacity, there seems no reason for supposing that the frontal region is higher or more characteristically human than any other cranial region, and there is just as little reason for supposing that the frontal region is more highly developed in men. We may say, on the whole, that women's skulls approach more the infantile type, and men's the senile

or simian.

To those who are familiar with the history of opinion regarding cerebral sexual differences, with its prejudices, assumptions, fallacies, and overhasty generalizations, it will be refreshing to peruse the fair and analytical remarks of Mr. Ellis on the subject. In Europe, men, it is agreed, possess absolutely larger brains than women; but in relation to body weight, women's brains are at least as large as men's, and are usually larger if we take care to eliminate the chief disturbing errors which the author draws attention to, and which have marred the value of many observations. At the same time, although some men of genius have had large brains, we must remember that it is a possession of very uncertain value, and may only denote a tendency to convulsive disorder (Benedikt). While it has recently become clear that women have, so far as there is any sexual difference at all, some frontal superiority over man, it has at the same time been for the first time clearly recognized that there is no real ground for assigning any specially exalted functions to the frontal lobes. (We could well excuse a female ironical smile at the reception of this information.) On the other hand, the parietal portion of the cerebrum, physiclogically probably the most important, predominates in men. Mr. Ellis concludes that from the present standpoint of our knowledge of the brain there is no scientific warrant for attributing any superiority of one sex over another.

From an analysis of observations on the various senses we may conclude that man does not feel pain more keenly, but has a keener smell, tastes better, sees better (although men are more subject to colour-blindness). Men have generally keener and more delicate sensory perceptions than women, but in women there is a greater irritability or affectability

(not to be confused with sensibility).

Concerning the intellectual impulse our reliable data are quite recent (the researches of Prof. Jastrow, e.g.), so that our knowledge is yet but limited. Mr. Ellis discusses reaction-time (less in women), the tendency to ruse noticed in women, their ready wit, the results of women competing with men in certain employments, etc. We may say, speaking generally, that women exhibit a certain docility and receptiveness; they are less able than men to stand alone; there is a tendency to be vividly impressed by immediate facts, and to neglect those that are remote—an attitude of mind, in short, fatal to the philosophic thought. As Paul Lafitte says, "The woman's mind is more concrete, the man's more abstract." At the same time, training tends to abolish these differences. In religion, women have initiated but few religious sects, although they form the larger body of followers, often reckless and devoted. In politics, women probably possess in as high a degree as men the power of dealing with its practical questions.

In the chapter on metabolism and in that on the viscera there is a very good résumé of our knowledge on the sexual differences in the blood, the pulse, respiration, susceptibility to poisons (chloroform, lead, opium, etc.), the thyroid gland,

larynx, etc., etc.

The author deals next with menstruation and its psychic phenomena—the greater impressionability, greater suggestibility, and more or less diminished self-control of women at that time—a subject of much practical importance.

The subject of hypnotic phenomena occupies Chap. XII. Mr. Ellis has carefully collected a number of observations showing that somnambulism is more common in women, who are also greater dreamers; a slightly larger proportion of men talk in their sleep, but the percentage of women who

answer questions when asleep is much larger than that of men. Hallucinations in the sane are more frequent in women (Sedgwick). The lower nervous centres in women are more rebellious to control than those of men, and more readily brought into action. This appears from Dr. Silk's observations on the action of anæsthetics. If we consider also neurasthenia, hysteria, religious hypnotic phenomena, we find that hypnotic phenomena generally are decidedly more frequent and more marked in women.

Chap. XIII. deals with the affectability of women, Lay-cock's expression to indicate their quick psychic and physical response to stimuli. The vaso-motor system of women responds more readily to stimuli, as we see by considering the phenomena of blushing, the mobility of the face, the action of the pupil, the bladder, etc. The irascibility of women and their greater destructiveness when insane are related to this characteristic.

If we investigate the artistic impulse, we note the supremacy of men in painting, in the evolution of music, metaphysics, etc. In fiction and in the art of acting, women find a more congenial sphere, and often excel men. Leaving out of consideration the interpretative arts, the artistic impulse is vastly more spontaneous, more pronounced, and more widely spread among men than among women.

In the chapter on morbid psychic phenomena the questions of suicide, insanity, criminality, and their sexual incidence and characteristics are considered.

"Variational tendency of men" occupies an important and interesting chapter. We find abnormal variations of nearly all kinds more frequently in men (hare lip, talipes, supernumerary digits, abnormal ear, arithmetical prodigies, genius, idiocy, etc.), although the narrowness of the human pelvic outlet tends to establish equality and mediocrity, and to minimize these variations. From an organic standpoint, men represent the more variable and the more progressive element, women the more stable and conservative element in evolution.

In Chap. XVII. we find a good deal of evidence in proof of the greater physical frailty of men and the greater tenacity of life in women.

In the concluding chapter Mr. Ellis remarks that, although women bear the special characteristics of humanity in a higher degree than men, and in many ways women are leading evolution, it is futile to talk of the superiority or inferiority 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 extracranial, 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