medusæ it buds off from plant-like masses of fixed hydroid polyps.' As a matter of fact, this medusa forms a conspicuous exception to the general rule and does not arise by budding, as in *Obelia* or *Pennaria*. The typography and press work are excellent. The mode of binding is, however, far from ideal. Much better covers for such notes are now provided, which are far simpler and more effective than the rather crude 'shoe-string' method used in this book.

C. W. H.

The Subconscious. Joseph Jastrow. Boston and New York, Houghton, Mifflin and Co. Pp. ix + 549.

This book is not so much a theory of the subconscious or an analysis of the concept of subconsciousness, as an attempt to schematize certain portions of normal and abnormal psychology, on the basis of a definite assumption of a subconscious, the conception of which, however, is very indefinitely outlined. The course of the whole exposition is directed toward a specific development of a familiar theory of the self. The treatise throughout is furnished with a wealth of illustration which may be of use to the instructing psychologist, but it is embellished with a profusion of metaphor, simile and analogy, which, under the author's mastery of polysyllabic verbiage, gives rise to a florid fluency apt to cause the newly introduced reader to lose the path of the argument amidst the rhetorical gardens which surround it.

In the ten chapters of Part I., which deals with the normal consciousness, the author takes us through an elaborate exposition of the doctrines of habit, attention, automatic action, will and self-consciousness, with which we have been made familiar by James. This part seems apt to be found of much use for students covering intensively these topics of psychology.

It is in this part, however, that the concept of the subconscious (or perhaps we should say the term subconscious) is made a useful basket for the reception of the odds and ends left loose by more timid authors. First is shown how processes go on without consciousness. Then in Chapter VI. (The Mechanism of Consciousness) is assumed a subconscious control without definite definition of the same, and the 'apportionment of mental life to the subconscious and conscious participants' is discussed, the topic being continued through the succeeding chapters.

In the course of this discussion, not only are various types of automatic and habitual action handed over to the responsibility of the subconscious, but active recall, and spontaneous trains of association in sleep or waking, are construed as the 'bringing of the subconscious activity to bear for the service of the conscious.' The associative mechanism in general is said to 'find its sphere of activity largely in the subconscious realm.' Self feeling is said to be strongly tinged with subconscious elements; subconscious feelings of our own importance, of the attitude of others, etc. By way of strengthening the useful concept, the experimentally ascertained effects of imperceptible stimuli on consciousness are cited.

So far, the term subconscious covers the general field of (1) unconscious control of activity, (2) production of conscious effects by factors not themselves in consciousness, and (3) vague consciousness.

In Part II., which deals with abnormal phenomena, dreams, hypnagogic hallucinations, deliria, drug intoxications, somnambulisms, hypnotic states, hysterias, and alterations of personality, or the psychological side of these, are considered and described on the basis of the same concept (or term) of the subconscious. The principal factor in these abnormalities is almost stated to be the dominance of the subconscious as over against the dominance of the conscious in normal experience.

In general the rôle this subconscious plays is shown as identical with that in the actions, perceptions and associations of normal consciousness. The important new phases which are reduced to a basis of subconscious activity are: (1) anesthesias, which are shown to be not physical losses of sensibility, and to be even psychically contradictory, (2) confusion of hallucination with reality, and (3) the loss of conscious control over actions which yet go

on with physical perfection and certain teleologicality, and are somehow registered. The standard cases of alteration of personality are cited in some detail, but their bearing on the general problem, aside from their nature as extreme cases of dissociation, is not made clear.

This part of the book is rather a miscellany of illustration and comment which might be interesting to the lay reader, than a systematic treatise available for the student.

In the third or theoretical part the author goes again over the whole field, discussing the participation of the subconscious, and raising the question of its status, but evading any answer more definite than that it 'though not in consciousness may be said to be of it.' In the second part he expressed his belief that dissociation involves a 'central dominating agency from which the dissociation takes place,' that an experience is made ours only by a synthetic 'act of incorporation,' and that the nebulously conceived subconscious is the 'non-personal, non-synthetized' experience. To this factor of selfhood he now adds two others, leading finally to the statement that it is the privilege of the psychic experience to arouse a realization of its place in the series (*incorporation*), and of the background that is passing (*orientation*), and of the fact that it is moving (*initiative*). Such realization involves the conception of a conscious self. Anesthesias of abstraction, somnambulism, hypnosis and hysteria are 'practical symbols' of impairments of incorporation, 'a state of mind in which the psychic movement persists, but without obtaining normal acknowledgment.' Loss of orientation manifests itself characteristically as confusion of subjective and objective: the crediting of hallucination as in hypnosis, delirium and hysteria, being consequent on anesthesia, which cuts off the normal corrective judgment on which orientation is based. Light forms may be mere bewilderment or doubt. Impaired initiative is 'impulsion' or loss of control over motor activities, as in automatism. The typical form is 'substitution for spontaneous action of an impulse imposed from another source than the directive will.'

These three realizations are the characteristics of self, and therefore, when they are impaired, the self is impaired. The various abnormalities previously treated lend themselves very nicely to generalization under these heads, which, however, to the reviewer seem to add very little to the explanation or better understanding of the phenomena.

The general course of the schematization in terms of the three components of selfhood would lead us to expect a vital impairment of all three in decided alteration of personality. 'With the conjoint impairment of all, an altered state (of the self) is induced,' the author says, but comes no nearer to an analytical application to the cases of alteration cited in Part II., leaving us, therefore, to be content with the inference that although 'conjoint impairment' *would* produce decided alteration of personality, the typical and accepted cases depend entirely or largely on 'loss of incorporation.'

In spite of the few criticisms above incorporated the book is a strong and interesting one, displaying the extent and intent of Dr. Jastrow's grasp on the field which it covers. It is to be hoped that the volume is what it appears to be, namely, an expression of intention or preliminary filing on the said field, and that it will be followed shortly by a more exact and basic work from his pen, a contribution which would be highly appreciated by all students of this obscure portion of the psychological domain.

KNIGHT DUNLAP.

SCIENTIFIC JOURNALS AND ARTICLES.

Bird-Lore for November-December opens with an account, by Edgar F. Stead, of 'The Wry-bill Plover of New Zealand,' the only bird in which the bill is noticeably bent sidewise. It is stated that this bird is dying out without apparent cause. Other articles are 'Our Garden Mockingbird,' by Mrs. F. W. Roe; 'Tame Wild Geese' (visitors to Golden Gate Park), by W. K. Fisher and 'Italian Bird Life as it impresses an American Today,' by F. H. Herrick. This might better be called, the *absence* of bird life, small birds being scarce in Italy, their place as insect