

*The Economic Open-air Chalet for the Hygienic Treatment of Consumption and other Diseases.* By R. Foster Owen. Pp. 16. (London: Baillière, Tindall and Cox, 1908.) Price 1s. net.

MUCH attention has of late been bestowed on the open-air treatment of consumption and other tuberculous diseases, but residence in sanatoriums is expensive and only possible for the well-to-do, and the provision of shelters and homes suitable for the poor is deserving of much consideration. The booklet under review describes the construction of a cheap shelter, and the author claims that by the enlargement and multiplication of such shelters, colonies for the tuberculous poor could be founded at comparatively small cost.

The chalet described is constructed wholly of wood, is elevated 3 feet above the ground, and built upon piles of wood. If considered desirable the supports may be of brick with a foundation of old pitch and tar. The superstructure is surrounded by a veranda and approached by a flight of steps of wood. The veranda is of sufficient width to admit of a chair or lounge for the patients to sit or lie out in any weather, and is protected by a sloping, overhanging roof, which covers the whole veranda. The walls are permanently open in panels, chin height (as a rough measure), and fitted with a simple mechanism allowing of the erection of panel shutters should it at any time be found necessary. In case of severe wind, rain, snow, or of intense cold, this provision may be of service. It will, of course, only be used as the doctor-in-charge shall direct, for it must be remembered that the poor have to be taught to overcome their innate dislike to fresh air, which is only too frequently misnamed draught.

The interior of the economic chalet is divided into cubicles, with an ante-room for lavatory purposes. For patients of the working class an open ward is best, with separate washing-room and lavatory. The corners of the chalet are rounded off, and the walls perfectly smooth and washable. The roof is provided with two large dormer windows for the admission of light, at each side of chalet. The author will be pleased to supply particulars as to cost, &c.

R. T. H.

*Welt-Leben-Seele. Ein System der Naturphilosophie in gemeinfasslicher Darstellung.* By Max Kassowitz. Pp. iv+364. (Vienna: Verlag von Moritz Perles, 1908.) Price 5 Kr.

THE author tells us in the preface that he has devoted his intervals of rest during a ten months' tour through the most beautiful countries of Europe to the production of a popular exposition of the three tremendous subjects the names of which form the title of his book. This information puts the critic at an obvious disadvantage, for he is tempted to view indulgently, and as merely the natural efflorescence of holiday spirits, the reckless demolition of respectable opinions and the amazing logical feats that characterise Dr. Kassowitz's progress through his theme. But the reader (like Quintilian) can only stare and gasp when he finds, on the seventh page from the end, that the author regards his work as an attempt to purge the scientific interpretation of nature from the "metaphysical" elements that at present clog it. It is true that by the avoidance of metaphysics he means something quite different from a restriction to positive statements about the actually observed course of phenomena, for he does not feel himself debarred from deciding on *a priori* grounds such questions as the infinite divisibility of matter and the inheritance of acquired characters.

His cardinal maxim is that an assumption or hypo-

thesis is not to be entertained if it is not "analogous to experience," and it leads him to such arguments as the following. We never find motion apart from matter; consequently, if motion has passed over from one thing to another it must have been carried by moving matter. Again, since we know no homogeneous continuous substance, there can be none; therefore the transference of motion, even through the æther, must (from the foregoing proposition) involve the agency of an infinite series of atoms of increasingly higher order. Once more, there can be no natural selection, for this would imply somewhere a supernatural knowledge of the future usefulness of the selected variation. One would have thought that the glare of the fallacies involved in these arguments would have shone even through the delicious obfuscation of a walking tour.

*Abhandlungen über theoretische Physik.* By Prof. H. A. Lorentz. Vol. i., part i., pp. 298. Price 10 marks. Part ii., pp. 299-490. Price 6 marks. (Leipzig: B. G. Teubner, 1906-7.)

ON December 11, 1900, Prof. Lorentz celebrated the twenty-fifth anniversary of his doctorate. His physical researches thus extend over rather more than a quarter of a century. In editing them for publication, Prof. Lorentz has aimed at bringing them into the form of a connected series, and a great many modifications and alterations have been made with the view of rendering the collection more useful in the light of recent developments. A number of papers of minor importance have been omitted and changes of notation have been freely made; instead of adopting a chronological order, the author has classified his papers according to subject-matter, and several new and hitherto unpublished results now find their way into print for the first time.

Vol. i. is divided into two parts, the first dealing with dynamics, hydrodynamics, thermodynamics, and kinetic theory—in short, molecular physics; the second with crystallography and physical optics. The following papers are now published for the first time:—Regions in *n* dimensional space (1905) (p. 151); the second law and its relation to molecular theory; symmetry of crystals; boundaries of crystals (all three based on Prof. Lorentz's lectures); propagation of light in an arbitrarily moving medium (not previously published); propagation of waves as rays in a non-absorbing medium (1906). The papers are now printed in the language in which they were originally published. As Prof. Lorentz points out, Dutch physicists find it necessary to publish their papers in one of the three principal international languages, and Prof. Lorentz did not consider it necessary to translate all the papers into one common language. G. H. B.

*The Wonderful House that Jack Has.* A Reader in Practical Physiology and Hygiene. For use in School and Home. By Columbus N. Millard. Pp. xiii+359. (New York: The Macmillan Co.; London: Macmillan and Co., Ltd., 1908.) Price 3s.

THIS well-printed, well-bound, and well-arranged book adds yet another to the long list of popular physiologies. The author endeavours to convey, without difficult technicalities, all the main points of the physiology of the body—the building of it up from food materials, digestion, the stomach, milk, animal foods, food habits, breathing habits, stimulus, clothing, eyesight, hearing, rest and sleep, infectious diseases, &c. The expositions are very simple and attractive. There are many illustrations. Each chapter has a set of questions appended, and there is a glossary of terms, obviously meant for the most elementary pupils. The book may be thoroughly recommended as a good class book.