

*engenetic* method. In the inorganic world we have to do with passive *things*, with an externally conditioned series of sequences; in the world of organisms we have to do with *creative agents*, with an internal activity, like that of our own psychical life, with *engenetic* doings, not with *ekgenetic* occurrences. The only way to get at the gist of the organism, its internal creativeness, is as we get at our own internal life—*engenetically*. Man crowns the evolution series, his most distinctive feature is his psychical experience, and it is in the light of this that we must try to read the secret of the dominating, correlating, regulating principle in the life of organisms. This, at least, is what we understand this exceedingly abstract treatise to mean.

J. A. T.

*Pharmakognostisches Praktikum.* By Dr. Ludwig Koch and Dr. Ernst Gilg. Pp. viii+272; illustrated. (Berlin: Gebrüder Borntraeger, 1907.) Price 6.80 marks.

It appears that the recent edition of the German *Pharmacopœia* has placed additional responsibility upon the German pharmacist, and he is now required to be practically cognisant with the microscopical characteristics of the medicinal plants in their entire as well as in their powdered form. The book before us deals with the above subject, and is intended to be used as a laboratory handbook for pharmaceutical students.

The initial chapter is devoted to the methods of preparing microscopical specimens of the respective plants and their powders, and staining them appropriately. In addition, the adequate magnification for drawing and photographing the respective objects is fully dealt with. The microscopical characteristics of all the official medicinal plants, or rather the parts of them which are official, are fully described, and following upon such description is an account of the microscopical appearance presented by the powdered drug. The order followed in the book corresponds to the part of the plant which is official; for instance, the cortices are all considered together, the rhizomes together, the roots together, and so forth. The whole subject is treated in great detail, and abundant illustrations are scattered through the text of the microscopical appearance of the respective preparations. The volume commences with a table of contents and concludes with a register, from which latter it appears that no fewer than eighty drugs are described.

*Die Pendulations-theorie.* By Dr. Heinrich Simroth. Pp. xii+564; maps. (Leipzig: K. Grethleius, 1907.) Price 12 marks.

TAKING as his basis Dr. Paul Reibisch's "Ein Gestaltungsprinzip der Erde" (1901), supplemented by Mr. D. Kreichgauer's "Die Äquatorfrage in der Geologie" (1902), the author of the curious volume before us discusses the effects which would, in his opinion, be produced on the animal life of the globe by secular changes in the direction of the polar axis. Mr. Kreichgauer, it seems, is of opinion that in the course of geological time the two poles have actually changed places, and also that during such oscillations huge "wobbles" or waves have been produced in the earth's crust in the intervening latitudes. These "wobbles," if we understand him rightly, the author believes have produced marked effects on the distribution of animal life, having, so to speak, "shaken" the various groups into particular positions. The distribution of all the chief groups is discussed according to the new theory, and in many cases illustrated by maps.

Without in any way committing ourselves to an opinion on the author's views, it may be pointed out

that several of these maps are inaccurate. The one illustrating the distribution of ichthyosaurs (p. 249) ignores, for instance, the fact that remains of these reptiles have been obtained from more than one locality in Africa, which is left a blank in the map in question. This being so, it is difficult to see what value attaches to Dr. Simroth's conclusions in this and several other cases.

R. L.

*The Minimising of Maurice, being the Adventures of a very small Boy among very small Things.* By Rev. S. N. Sedgwick. Pp. ix+150. (London: Elliot Stock, 1907.) Price 5s. net.

A WORD to "grown-ups" which prefaces this volume asserts "there are quite a lot of things in it *which only children are able to understand*"—the italics are not ours. There are "baby" language, indifferent verse, and talking animals in great profusion, but, despite all these, we are very doubtful as to whether the book will really appeal to children. The illustrations are good, and these at least will set young readers questioning and observing. We should have preferred a simple account in good literary English of the forms of animal life introduced, and so would most of the children we know.

*Les Progrès de la Photographie astronomique.* By Prof. P. Stroobant. Pp. 34; illustrated. (Brussels: M. Hayez, 112 rue de Louvain, 1907.)

THIS thirty-four page extract from *l'Annuaire astronomique de l'Observatoire royal de Belgique pour 1908* is typical of those services which Prof. Stroobant is continually rendering to contemporary astronomy. It contains in a concise and lucid form descriptions of the methods by which photography renders such valuable services to astronomical research. The photography of regions, such as nebulae, the discovery of minor planets and satellites by the photographic method, the investigation of the physical peculiarities of comets and of the solar photosphere, the observations of variable stars and of proper motions are all dealt with in turn, and in each case the text is illustrated by excellent reproductions of actual photographs. Duplicate, detachable plates, for use in a stereoscope, are included in order to illustrate the value of Prof. Wolf's stereocomparator method for the detection of small proper motions and of variations in magnitude.

W. E. R.

- (1) *I laterizi.* By Ing. G. Revere. Pp. x+298; 134 figures. Price 3.50 lire.
- (2) *La Tecnologia delle Saldature autogene dei Metalli.* By Prof. S. Ragno. Pp. iii+129. (Milan: Ulrico Hoepli, 1907.) Price 2 lire.

THESE are recent additions to the "Manueli Hoepli," a collection which numbered 900 of these small pocket-books on April 1, 1907. Mr. Revere's book deals with brickwork. It opens with general and historical information, and then deals in succession with the selection and extraction of the clay, its subsequent preparation, brick-making machinery, the drying process, and finally the brick kiln. The need of such a book has arisen through the great development that has taken place in the brick industry in recent years, notably in Italy, where improved machinery has been largely introduced.

Prof. Ragno's manual deals with the soldering and welding of metals. Five methods are distinguished, namely, the electric, oxy-hydrogen, oxy-acetylene, oxygen, and aluminium methods. The advantages of these methods are discussed. Two appendices deal respectively with the cutting of metals by means of an oxygen jet and the methods of producing oxygen commercially.