It seems almost superfluous to refer to the style of presentation of the results in this treatise. Every one in the least familiar with Darboux's writings is conscious of their lucidity and charm of style. And here we have the final product of this great expositor.
L. P. Eisenhart.

## SHORTER NOTICES.

## On Growth and Form. By D’Arcy W. Thompson. Cambridge, University Press, 1917. 8vo. 16+793 pages. Price 21 shillings.

Until his recent appointment to the chair of natural history at the University of St. Andrews, the author of this work was professor of natural history at University College, Dundee. He has long been prominent as a member of various fishery boards and conferences, serving, for example, as the British delegate to the Bering Sea fishery conference of 1897. He is the author of "A Glossary of Greek Birds," has edited Aristotle's Historia Animalium and various blue-books on North Sea investigations, and he has translated and edited Hermann Müller's Fertility of Flowers.

And now we have this elaborate volume containing the results of many years of observation and study in widely separated fields and constituting an "easy introduction to the study of organic form." The author tells us: "It is not the biologist with an inkling of mathematics, but the skilled and learned mathematician who must ultimately deal with such problems as are merely sketched and adumbrated here. I pretend to no mathematical skill, but I have made what use I could of what tools I had; I have dealt with simple cases, and the mathematical methods which I have introduced are of the easiest and simplest kind."

After the Introduction we have chapters with the following titles: 2. On magnitude; 3. The rate of growth (106 pages); 4. On the internal form and structure of the cell; 5. The forms of cells; 6. A note on absorption; 7-8. The form of tissues or cell-aggregates; 9 . On concretions, spicules, and spicular skeletons; 10. A parenthetic note on geodetics; 11. The

