MINOR BOOK NOTICES.

Climatology and mineral waters of the United States. By A. N. BELL. New York, *Wood*, 1885. 8°.

THIS is a work intended especially to present ascertained facts so as to render them available for the promotion of health. In addition to a full and readable discussion of the different meteorological agencies and factors, the author deals with the climatological topography of the different regions of the United States, with weather reviews, and descriptions of the different medicinal waters. To the invalid the work will have its greatest, and we believe a real, value; but to all who are interested in the influences of climate upon health, or even in general meteorology, it will be found very useful. The author arrives at the conclusion that no country in the world possesses a greater variety of climate or climates with a higher degree of salubrity than the United States.

Statics and dynamics for engineering students. By IRVING P. CHURCH. New York, *Wiley*, 1886. 8°.

THIS book, so far as one can judge from the contents, since there is no preface, is intended for use as an elementary text-book in theoretical mechanics by students who are to get elsewhere a good deal of practice in solving problems, and some additional instruction. The text is, on the whole, very clearly written, the diagrams are excellent, and the illustrative examples cannot fail to interest the reader as well as to instruct him. The use of the phrase 'square second' instead of 'per second per second,' in such expressions as "an acceleration equal to 32.2 feet per square second," will probably be new to most engineers. The few typographical errors which we have noticed in text and formulas are not misleading, although the insertion of the few words which have evidently fallen out of the last paragraph on p. 18 might help a beginner.

Drainage for health; or, Easy lessons in sanitary science. By JOSEPH WILSON. Philadelphia, *Blakiston*, 1886. 8°.

THIS is a revised edition of a work on drainage, house-plumbing, etc. It is written in quaint, laconic style, and impresses the reader with having been prepared by one of pronounced opinions. In some parts it is excessive, and as a literary model can hardly be recommended; nevertheless it contains some very good advice and instructions.

De la désinfection des wagons ayant servi au transport des animaux. By Dr. PAUL REDARD. Paris, *Doin*, 1885. 8°.

THIS is a work that should be of service in America, where the questions of cattle transportation have frequently been of no little importance. The work treats of the danger of transportation of diseased cattle in railroad-cars, with evidence of the diffusion of epizoötic diseases from such. It gives also the principal European laws regulating the disinfection of cattle-cars with the comparative values of the different means employed. The author concludes that the various chemical agents, such as phenic acid, chloride and sulphate of zinc, sulphur, etc., are inefficacious. The results obtained by superheated steam (230° F.) were constant and successful. He describes methods by which disinfection may thus be accomplished with speed and certainty.

Mechanical integrators, including the various forms of planimeters. By Prof. H. S. H. SHAW. New York, *Van Nostrand*, 1886. 24°.

IN this convenient little book we have a systematic presentation of the principles on which mechanical integrators and the various forms of planimeters are based. The divisions of the book are as follows; planimeters in which slipping of the measuring roller takes place; planimeters in which only pure rolling motion is assumed to take place; moment planimeters; continuous integrators; limits of accuracy of integrators, both theoretical and experimental. Many forms of these instruments are described, and a host of inventors named from all countries. Among them Professor Amsler still holds the first place for the variety of his inventions, and their adaptability to a wide range of calculations, — to finding areas, average pressure on indicator diagrams, centre of gravity, contents of embankments, etc. From his works at Schaffhausen, more than twelve thousand polar planimeters have been sent out. This paper was originally presented before the Institution of civil engineers, and the report of the discussion that followed it contains many interesting practical points with reference to the use of these instruments. As the importance of such mechanical aids in calculation is becoming more and more felt, a book like this is useful and welcome.

IT is not often that a well-known scientific man has the melancholy pleasure of reading obituary notices of himself, as appears to have been the case with Dr. J. Jacob v. Tschudi, the South American explorer. *Natur* now corrects the error by stating that it was his brother, Friedrich von Tschudi, who died at St. Gall, Switzerland, on Jan. 24 last. Friedrich, though less known to American readers, did much good work in natural history of a popular or general character, the most important of which was his '*Thierleben der Alpenwelt*.' He was nearly sixty-four years of age. J. J. v. Tschudi, though four years his senior, is still actively engaged in research, as the frequent papers from his pen attest.