

"for students of all denominations who can command the means and have the wish to construct for themselves a histological cabinet," and that it has been produced "between the numerous and unavoidable interruptions of a family medical practice."

G. B. H.

### OUR BOOK SHELF.

*Precious Stones in Nature, Art, and Literature.* By S. M. Burnham. (Boston: Bradlee Whidden. London: Trübner and Co.)

MR. BURNHAM is the author of a work on limestones and marbles published a few years ago in which he indicated the resources of the United States and other countries in stone for decorative purposes. In the present volume he treats of precious stones in that exhaustive and thorough fashion which we are accustomed to regard as a special characteristic of German writers. He begins by describing, as far as is known, the origin, properties, classification, localities, imitations, and antiquity, of precious stones (antiquity here applies of course to their use as ornaments), and then proceeds to treat of their prices, the trade in them, the sumptuary laws relating to them, those of remarkable size, and notorious jewel robberies. This chapter is followed by a description of various notable collections, and of the Crown jewels of different countries, from which the author passes on to some very interesting chapters on the secular uses of precious stones, the different kinds of ornaments, and their sacred uses. A chapter on precious stones in literature, and their mystical properties, is succeeded by one on the curious art of engraving on precious stones, and then commences a series of chapters on the various stones. First, of course, comes an account of the diamond, its home, and of historical and remarkable diamonds, which is followed by descriptions of all the precious stones at present known, from the sapphire, emerald, and ruby, to coral, amber, jet, cat's-eye, and rock-crystal, to the number of about one hundred. The appendices give the sizes of large and remarkable diamonds, a classification of precious stones according to their principal constituents, the hardness and specific gravity of precious stones, their relative hardness, relative specific gravity, and finally a list of the localities in the United States in which gem-minerals have been found. It will be perceived from this very brief indication of the contents of the book that the work is perfectly encyclopædic in its treatment of its subject; nothing relating to precious stones is strange to or disregarded by Mr. Burnham. Of the value of the book to the gem collector, expert, or mineralogist, it is needless to speak, but we can answer for it that it is highly interesting to the general reader, or at least to all who like to hear about those rare and beautiful products of Nature to which man in all ages and in every country has attached a high value.

*Hydrophobia: An Account of M. Pasteur's System.* By Renaud Suzor. (London: Chatto and Windus, 1887.)

DR. RENAUD SUZOR is the delegate commissioned by the Government of the colony of Mauritius to come to Europe to study M. Pasteur's treatment of hydrophobia, and this volume is the result of his mission. It is greatly to the credit of Sir John Pope Hennessy, the Governor of that colony, and of the members of the Legislative Council, that they perceived the value to science and humanity of adequately studying M. Pasteur's recent discoveries on the subject of hydrophobia, and that they "unanimously voted" the appointment of a delegate to proceed to Paris to work under the distinguished discoverer. It is to be hoped that other and more prominent colonies may be led to follow this excellent example. This little volume amply justifies the selection of Dr. Suzor as delegate. It opens with an historical

account of hydrophobia and its treatment from the earliest times—for this dreadful disease has been known and studied for more than 2000 years—down to the end of 1880. The second and principal part of the volume is occupied by translations of all M. Pasteur's communications on the subject to the Academy of Sciences, beginning with his first note in January 1881, and ending with a lengthy paper presented in November 1886. Finally, there is a description of the technique of M. Pasteur's method. The book is valuable as a clear and comparatively untechnical exposition of the Pasteur method; but it is still more valuable as an example of the manner in which Pasteur's wonderful discovery should be met and treated by Governments and others in authority, who are responsible for the prevention, as far as possible, of disease amongst the populations which they govern. The Governor of Mauritius has taken care that the neglect of this primary duty, in relation at least to hydrophobia, cannot be laid to his charge.

### LETTERS TO THE EDITOR.

[The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts. No notice is taken of anonymous communications.]

[The Editor urgently requests correspondents to keep their letters as short as possible. The pressure on his space is so great that it is impossible otherwise to insure the appearance even of communications containing interesting and novel facts.]

#### A Monstrous Foxglove.

A SOLITARY specimen of *Digitalis purpurea* was found last month in a damp wood near Old Colwyn, North Wales, which exhibited the following curious abnormalities in the structure of its flowers. In only one out of the six opened flowers of the raceme was the calyx normal (*i.e.* consisting of four broad and one narrow segment); in all the others it was divided almost to the base into five equal linear segments. The corolla in four out of the six flowers consisted of merely two narrow petals with long claws, placed at opposite points on the receptacle; in one flower these two distinct floral leaves were deeply divided into two and three lobes respectively, thus forming a perfect two-lipped flower, the lips, however, being quite separate from one another. In the only other flower the upper lip was altogether wanting, the three-lobed lower one alone being present, upon which, alternating with its lobes, were inserted one long and one short stamen. This was the only flower which possessed stamens.

The form and number of the styles also was variable and abnormal. In one flower only was the usual single shortly two-cleft style met with; two other flowers possessed each a single style forked below the middle; in two others there were two, and in the remaining flower three styles, all separate and similar.

The same abnormalities were seen in the corolla and styles of two unopened buds.

I should be happy to learn if such monstrous forms are at all usual in the foxglove.

F. R. TENNANT.

Longport, Staff.

#### The Law of Error.

DR. VENN, in a letter published in NATURE, September 1 (p. 411), adduces certain meteorological statistics which do not conform to the typical law of error or probability-curve. To discover the cause of this failure there would be required both a special knowledge of the subject-matter and the general conceptions which the calculus of probabilities supplies. The latter qualification is the only one to which the present writer can make any pretension.

The essential condition of the typical law being fulfilled is that each observation or statistical return should be made up of a great number of independent variable items. A good example is afforded by taking a great number, *e.g.* 100, digits at random from mathematical tables. The sums of that number