

some time, the colony will once more be in a position to supply the necessary forest produce from its own woodlands. At the same time the financial aspect of the business has not been overlooked, and there are indications that the woodlands will before long prove to be a source of substantial income to the colonial Exchequer.

The forests of the Cape deserve to be carefully preserved, not only for the purpose of their direct utility in providing timber and other produce, but also for their usefulness in other respects. Whether their existence will increase the rainfall to any appreciable extent may be a matter of doubt, but they certainly moderate the temperature and reduce evaporation; in other words, they husband the water which falls on the soil. This effect is all the more important, because Cape Colony is situated, approximately, between the 28th and 35th degrees of south latitude, and the rainfall over about half the area amounts to less than 10 inches a year, while only a comparatively small portion enjoys a rainfall of over 20 inches.

Considering these matters, we trust that the colonial authorities will now persevere in making up for past remissness by maintaining steadily a policy of efficient forest conservancy. It needed many warnings before the proper steps were taken, and in this respect no one deserves more praise than Dr. Brown. By raising his voice loudly during the years 1863-66 he has certainly deserved well of the Cape Colony. While it is a pleasure to record this, it is to be regretted that our author has not succeeded in placing the history of the case before the public in a more readable form than that adopted in the present volume. Sw.

#### OUR BOOK SHELF.

*Thomas A. Edison and Samuel F. B. Morse.* By Van Buren Denslow, LL.D., and Jane Marsh Parker. (London: Cassell and Co., 1887.)

THIS book is an evident compilation, principally of newspaper cuttings from the other side of the Atlantic. The authors are Americans. Edison is posed as the inventor of the duplex and quadruplex systems of telegraphy, though each was invented in Europe when he was seven years old; while Morse is lauded as having sent the first telegram in 1844, when telegraphy was seven years old, and flourishing well in England. Edison's grandfather lived to be 102 years old, his father is now living at 83. It is to be hoped that he will live long enough to tire out these foolish defamers of his true merit, for merit, industry, and inventive skill he certainly has. Personally he is a charming man, and impresses one with his modesty and communicativeness. The phonograph, carbon transmitter, and glow lamp are quite sufficient to establish his fame without dragging in apparatus he simply altered or perhaps improved. We read in this silly book, "The very words 'electric light,' must stand for ever as closely associated with the name of Edison as is gravitation with Newton or the telescope with Galileo."

We read (p. 96):—"There have been four eras in the history of the magnetic telegraph. In each of these eras a citizen of the United States has been conspicuous. . . . The first era was that of Franklin and his kite. . . . The second era was that of invention—the era of Morse, Henry House (*sic*), and Daniell [so the authors reckon Daniell an American!]. Had the Daniell battery been

known in 1827, one Harrison Gray Dyer, of New York, would have given to the world what Prof. Morse did not complete until some seventeen years after.

"The third era was that of the evolution of the telegraph—the multiplication of its effects. Of the many names conspicuous in this era none are more deserving of special mention than Hiram Sibley, and none take precedence of Thomas Alva Edison." [N.B.—Edison was born in 1847.] The fourth era was "an era of chaos in its beginning, when Morse lines, Bain lines, House lines, and O'Reilly lines, with their endless litigations over infringements of patents and broken contracts, local jealousies, disastrous competitions, unequal and capricious tariffs, made investing in telegraph stocks a sure method of throwing away money."

And this is history!

The following story is gravely told:—

"When the boy (Edison) was a little under six years old, he became greatly interested in the fidelity with which an old goose was brooding her nest of eggs. When the young family of golden-green goslings came out and took to the water, he was told that this astounding result was produced simply by the animal heat of the old bird sitting on them. The first lesson in organic chemistry was of a kind too remarkable to be let slip without testing it by experiment. Soon after the boy was missed. Messengers were sent after him everywhere, but he could not be found. 'By and by,' says the sister, 'don't you think father found him curled up in a nest he had made in the barn, sitting on goose eggs and hen eggs and trying to hatch them?'"

*Sound, Light, and Heat.* By Mark R. Wright. (London: Longmans, Green, and Co., 1887.)

WE gladly welcome the appearance of such an admirable text-book as the one before us. It embraces the work required for the various elementary examinations in sound, light, and heat, but it is in no sense a cram-book. The subjects are treated experimentally, and the arrangement is apparently that which practical experience in teaching has led the author to believe to be the best. The experiments described are thoroughly practical, but, at the same time, the apparatus required is comparatively simple. The author is of opinion—and we quite agree with him—that a beginner's time is best spent in making himself acquainted with the facts of science; he has accordingly given little space to theoretical considerations, but he has carefully avoided making statements that might lead the student to form notions at variance with the modern theories.

The drawings, and the descriptions of the apparatus they represent, leave nothing to be desired. The numerical examples, of which there is a great number, combined with the experimental treatment, entitle the book to rank as one of our best text-books of elementary science, and we can confidently recommend it.

*Through the West Indies.* By Mrs. Granville Layard. (London: Sampson Low, 1887.)

THE author of this little book spent several months in the West Indies, and heartily enjoyed her expedition. She has nothing very new to say about the various places she visited, but she writes pleasantly, and succeeds in conveying a vivid impression of many of the scenes by which she herself was strongly impressed. Occasionally she offers shrewd suggestions as to the industry and trade of the West Indian Islands, and she gives as an appendix a useful paper on "The Sugar Question." This paper contains the substance of notes and suggestions furnished by the Hon. W. H. Ioner, Member of the Legislative Council, Barbados.