

Mr. Buckhout after 'five years' experience in planting forest trees' concludes in the Pennsylvania Station Report "that considering the time, expense and work involved, artificial forest planting cannot be recommended, at least in the way pursued in the experiment and that natural methods of re-foresting supplemented by some seed sowing, thinning and planting will suffice for the present." Mr. McCarthy, of the North Carolina Station, has prepared a bulletin upon seed testing and fully describes its uses and methods. Weeds receive attention from Mr. Wooton, of the New Mexico Station, who figures several of the worst in his Territory.

Under diseases of plants some grape troubles in New York are reported upon by Mr. Lodeman of Cornell. Thus the so-called 'shelling' is ascribed to one or more of four causes, namely, parasites, conditions of vine, of soil, or of atmosphere. An English experimenter shows that finely ground lime 700 pounds per acre will check the club root in turnips. Resin is found by Mr. Webber to be effective in preventing the sooty mould of the orange.

Economic entomology receives consideration under many heads as the damage caused by American locusts, chinch bugs, codling moth, etc. A new saw-fly and pear insect are mentioned and many species are named under beneficial insects. Gas treatment for destroying scale insects is reported upon from California and 'Entomology and Quarantine' is considered.

Much space is given to the consideration of foodstuffs, their analyses, digestibility, etc., the Maine Station perhaps taking the lead in these matters in the copy of the Record in hand, while Utah and Minnesota come in for a share in 'dairy herd records' and 'relative value of corn and oats for horses.' Several papers are mentioned by title or at length under dairying.

Surely enough has been here given to

show that the Experiment Stations of the United States are pushing on along many lines, and that through the facts accumulated principles cannot but be laid bare.

#### THE HORTICULTURALISTS' RULE-BOOK.

THE first edition of this 'compendium of useful information for fruit-growers, truck-growers, florists and others' by Professor L. H. Bailey, of Cornell University, was published in 1889 and a second in 1892. The great advances made in methods of combating insect and fungous enemies during the past few years led the author to revise and extend his work. A chapter upon greenhouse heating has been added and another upon the current literature of horticulture.

The following are some of the leading subjects considered: insecticides and injurious insects, plant diseases with preventives and remedies; injuries from mice, rabbits and other animals; weeds, seed-tables, etc. There is a chapter upon *Rules* in which are given rules for naming fruit, codes of various societies, etc. Within the flexible covers of this little book the publishers (Macmillan & Co.) have neatly packed together a surprising amount of valuable information. Here the horticulturist may learn how much seed to sow per acre, how many plants to set in his orchard, how to keep off the enemies to his crop, and when to harvest and market it. Not the least is a list of the leading books that have been published upon horticultural subjects and within easy reach of crop growers.

BYRON D. HALSTED.

#### CORRESPONDENCE.

##### THE ILLUSTRATIONS IN THE STANDARD NATURAL HISTORY.

TO THE EDITOR OF SCIENCE—*Sir*: Referring to the statement in SCIENCE of April 5, 1895, page 387, top of second column, that certain illustrations of Brehm's *Thierleben*

'were pirated by the *Standard Natural History*,' I beg to say that it is incorrect and libelous. The matter concerns me, as one of the authors of the *Standard Natural History*, and also as the author of the *Key to North American Birds*, in several later editions of which many of the same illustrations were used by my publishers, Messrs. Estes & Lauriat, of Boston. As 'piracy,' like plagiarism, implies dishonesty, the allegation thus made by Dr. C. Hart Merriam, who signs the article, is too serious to be overlooked.

Nevertheless, being ready to believe that Dr. Merriam erred through inadvertence, I am prepared to accept an apology, in so far as I am personally concerned; but I am not authorized to state that this will be considered satisfactory by the other parties who have been thus libeled.

Very truly yours,

ELLIOTT COUES.

WASHINGTON, D. C., June 5, 1895.

[The word piracy may be used in two senses—moral and commercial. When I wrote the article in which it was stated incidentally that the Brehm plates in the *Standard Natural History* were pirated, I believed that they were in both senses. Among the reasons for this belief may be mentioned the following:

1. The book itself contains no statement of the fact that the illustrations are taken from Brehm.

2. The anatomist Fürbringer states that he searched in vain for a copy of the *Standard Natural History* in Germany (Journal für Ornithologie, Apr., 1892, 138).

3. It is stated in the *Nature Novitates*, Berlin (Vol XV., No. 1, Jan., 1893, p. 18, nr. 326), that the work 'may not be imported into Europe on account of the reproduction of the Brehm woodcuts.' ['Darf in Europa wegen Nachdruck der Brehmschen Holzschnitte nicht eingeführt werden.']

4. The name of the artist, Mützel, was

erased from many of the copied plates. When the attention of the editor was called to this injustice, he replied: "The cutting out of Mützel's name was a business necessity."!

If, in spite of the above facts, the cuts in question were sold to the publishers of the *Standard Natural History* by the publishers of Brehm's *Thierleben*, I withdraw so much of my original charge as may be inferred to imply commercial piracy; but I by no means retract the charge of moral piracy—the greater offense of the two, because it has no legal redress.

Is the deliberate reproduction of another's pictures without credit less censurable than the reproduction of another's words or ideas? And what shall one say when the sin of plagiarism is darkened by the erasure of the artist's name, so that neither artist nor author may be known?

Just why Dr. Coues mentioned his *Key to North American Birds*, and his publishers, Estes & Lauriat, who by the way were not the publishers of the *Standard Natural History*, is hard to understand, inasmuch as neither were mentioned in the review to which he takes exception.

Since the above note was sent to SCIENCE I have received a letter from the publishers of Brehm's *Thierleben* in Leipsic. They state that they sold to Estes & Lauriat certain electrotypes from Brehm, to be used by Estes & Lauriat only, 'under an agreement according to which it was forbidden to Messrs. Estes & Lauriat to resell these electrotypes.' They state further: "As we had been informed that notwithstanding this settlement our electrotypes had been resold, we called Messrs. Estes & Lauriat to account, and they were forced to confess that they had resold the electrotypes" to three different firms!

In reply to my question: "Were the electrotypes sold by you to S. E. Cassino & Co., and published in the *Standard Natural*

*History* with your knowledge and consent," they state: "We answer No! These electro-types had *not* been sold by us to Messrs. S. E. Cassino & Co., and were used without our permission in the said works. Besides, we are still at issue with Messrs. Estes & Lauriat, Boston, on account of this affair."

C. HART MERRIAM.]

#### SCIENTIFIC LITERATURE.

*Report on Water Supply; Geological Survey of New Jersey.* By CORNELIUS CLARKSON VERMEULE, Consulting Engineer. Vol. III. of the Final Report of the State Geologist. 1894.

The Geological Survey of New Jersey has just issued a report bearing the above title, the interest and value of which are not limited by State lines. Its author, under whose direction the topographic map of the State was made, has had the best of opportunities for studying the questions involved, and has not failed to avail himself of them. The results of his study have been put in as simple and available form as possible, considering the complex nature of the problems.

The range of interests touched by the report is great. It will be of inestimable value to cities and communities which draw or may draw their supply of water from the streams of the State, and to manufacturers who use or may use the power afforded by them. Less directly, but not less certainly, the report will be of great value in the same lines outside the State, since many of the principles developed are of general and some of them of universal application. The report also contains discussions and suggestions which have a bearing on agriculture and forestry, the latter of which is just now attracting wide attention in this and other States. The educational value of the report is great, not only to those whose financial and sanitary interest are touched by it, but also to students of hydrography and geology, and to intelligent citizens in general. From this

standpoint, its value lies not only in what it proves and affirms, but also in what it disproves and denies. It is scarcely too much to say that there is not a community or a class in the State which may not be benefited by the intelligent study of the volume before us.

The study of the water resources of the State was begun by Professor Cook long ago. As early as 1868 the subject was discussed by him, and the annual reports of the State Geologist have since made frequent reference to the subject, and have reported the progress of the work, the results of which are now embodied in this volume. Interest in the questions of which it treats has been stimulated by the rapid growth in population, especially in the vicinity of New York and Philadelphia. In 1882, 587,760 people in New Jersey were dependent for water upon systems of public supply. In 1894 this number had nearly doubled, while the amount of daily consumption had increased from about 49,000,000 gallons to about 108,000,000. Of this amount, 100,000,000 gallons were drawn from streams. If the population of the State continues to increase at the present rate for another half century, and if the demand for water keeps pace with the increase in population, as is sure to be the case, it is evident that another half century will make heavy demands upon the available supply of water which the State affords. On the basis of the recent rate of increase in population, it is estimated that by 1950 that part of New Jersey adjacent to New York City will need 547,000,000 gallons of water daily; and the author remarks that "since fifty years cannot be considered a long time in the future for which to make provision, it is evident that the time has come for us to know what our resources are and to provide for their preservation and wise development" (p. 6).

The investigation of the water resources