SOME STATE AGRICULTURAL EXPERIMENT-STATIONS.

A COMPARISON of the successive reports of the New-Jersey experiment-station shows that it has rapidly passed beyond that initial stage of nearly every American station, in which its chief duty is the 'control' of the trade in commercial fertilizers. It is still a fertilizer control station, and, as its report shows, has been active in this field; some two hundred analyses being reported, and much thought having evidently been bestowed upon the various problems arising in connection with the equitable sampling and valuation of these goods.

At the same time, this work occupies but fifty-four pages out of a total of a hundred and seventy-six, the larger portion of the remainder being taken up with reports of experiments bearing upon the broader questions of agricultural practice.

These latter furnish an admirable illustration of the class of experiments which, in a previous number of *Science*, we ventured to designate as empirical, as distinguished from rational — using these words, of course, in their technical sense. They are what are often called practical, as opposed to scientific experiments; but the word 'practical' has been so wrested, in popular use, from its proper meaning of 'pertaining to practice,' that its use in this connection is to be avoided.

Besides various minor matters, the most noteworthy experiments of this sort are the field experiments upon the growth of sorghum, and the comparison between field-corn and ensilaged fodder-corn.

In the last-named investigation, the questions proposed were, the comparative yield of digestible food per acre, the comparative cost of gathering it and preparing it for use, its relative feeding-value, and the relative exhaustion of the soil in the two cases. The results were throughout decidedly in favor of the field-corn; the grain and stalks yielding more and cheaper food per acre than the ensilaged fodder-corn, and food of equal milk-producing value, pound for pound.

The report of the Ohio station, while dealing with different subjects, resembles that of the New-Jersey station in the general character of the experiments reported. A great deal of attention has been given to testing varieties of wheat and corn, and the tables of results contain a vast amount of valuable information. The tests of methods of seeding or planting, of cultivation, mulching, use of fertilizers, etc., are extensive, and apparently carefully conducted, though we regret to observe the somewhat common lack of an adequate discussion of the results reached. Other interesting matter is to be found in the sections devoted to small-fruits and vegetables, insects, weeds, grasses, and various other subjects.

In brief, both these stations have done most excellent work of the kind attempted; and that this kind of work meets with popular approval, is evident in New Jersey, at least, from the fact that the station's original appropriation of five thousand dollars per year has been successively raised to eight thousand and eleven thousand dollars. Under the circumstances, it is not to be wondered at that the station has turned its attention chiefly or entirely to experiments relating to the practice of agriculture. At the same time, we cannot but regret that the American stations, as a rule, many of them with reasonably ample incomes, are doing so little, comparatively, to advance the science of agriculture, believing, as we do, that 'a sound theory is the surest guide to a successful practice.'

Fifth annual report of the New-Jersey state agricultural experiment-station for the year 1884. Princeton, N.J., *Robinson pr.* 1884. 176 p. 8°.

Third annual report of the Ohio agricultural experiment-station for 1884. Printed by order of the state legislature. Columbus, *Myers brothers, state printers,* 1885. 240 p. 8°.

NOTES AND NEWS.

A STATUE of Darwin, by Mr. Boehm, R.A., has just been placed in the great hall of the British museum on Cromwell Row, and arrangements for its unveiling will be made shortly. It is the gift to the nation of the Darwin memorial fund. It is found, that, after the payment of all expenses, over two thousand pounds will remain, which will form a Darwin fund, to be transferred to the Royal society, the income of which is to be appropriated in such a way as may be "best calculated to promote biological study and research."

— The Society for the prevention of cruelty to animals in the Netherlands has petitioned the government to introduce into Holland the rules with regard to vivisection drawn up by the Prussian authorities.

— In the Spanish congress on May 18, according to *Nature*, Señor Castelar called attention to Dr. Ferran's experiments in inoculation against cholera, and asked the minister of the interior to give a subvention to enable Dr. Ferran to continue his experiments on a larger scale. The minister, in reply, said he was unable to do so at present, but, as soon as it lay in his power, he would grant a sufficient sum, although, in his opinion, Dr. Ferran's experiments had not yet reached a sufficient degree of certainty to prove a complete success. He added, that a commission of medical men would be appointed to visit Valencia