

SCIENCE

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THE NEW YORK BOTANIC GARDEN.

OUR country is to be heartily congratulated on the prospect that New York may soon be in possession of a Botanic Garden of the first order. The subscription prerequisite to the issue of municipal bonds has now been completed. It remains for the city to carry out its part of the agreement, by raising \$500,000 for building purposes and by providing 250 acres of land in Bronx Park or other suitable place. This action will probably be taken without unnecessary delay. Hence we may look forward with confidence to the speedy establishment, on a comprehensive and dignified scale, of a Botanic Garden of which the city and State may rightly be proud. But this successful effort has far more than a local interest or significance. It concerns the whole country.

To Columbia College and the other educational institutions of New York and vicinity, this new appliance for instruction will mean indeed a great deal. To all the citizens who are to take advantage of the

opportunities for instruction which the Garden will afford, Bronx Park will be a constant delight. But far beyond these limits, wide as they are, the Garden will exert a profound and beneficial influence. Other cities will surely be stimulated by this noble movement and enrich their park systems with an educational aid of the greatest value.

Formerly Botanic Gardens, attached even in a remote manner to educational institutions, were largely used for the cultivation of medicinal plants and for the reception of species from distant lands. Of course, this use, although its importance is now relatively less than ever before, will still long continue to be a factor in the direction of activities. But here and there new phases of plant relations are being displayed in the greater gardens, and with the most gratifying results. Geographical questions are asked and answered by skilful grouping of species, and in the most attractive way. The bearing of climate on the structure, habit and possibilities of plants is made prominent in an interesting fashion. The capabilities of useful plants and the extension of their range of usefulness comprise another phase of illustration which always sets visitors to thinking. Beyond and, we may say, above these questions, which are pretty strictly utilitarian, there comes nowadays another class of illustrations which are of the highest educational value in a community, namely, the biological features which are invested with such important relations to all departments of intellectual activity. The manifold relations of plants to their surroundings and to other organisms constitute in some of the botanical gardens of the present day the most attractive sections. The special interest in this can be more plainly seen if attention be called to the groups of climbing plants. Think of reading Darwin's work on climbing plants with the living illustrations be-

fore one! This is only one of many stimulating exhibitions in a garden adapted to modern wants.

The Arnold Arboretum, a department of Harvard University and an adjunct of the Boston Park system, has become one of the most charming places for certain studies of a general nature within reach of the public of Boston. And yet it is confined chiefly to woody plants. Without such limitations the New York Garden may, perhaps, offer even a wider field for general study to the public now so eager to learn something about nature at first hand.

With the secure foundation of the New York Garden, three of our cities will be well provided with botanical establishments of the highest class. We venture to hope that many other cities will soon emulate the example of Boston, St. Louis and New York.

GEORGE LINCOLN GOODALE.

HARVARD UNIVERSITY.

*THE SUBMERGENCE OF WESTERN EUROPE
PRIOR TO THE NEOLITHIC PERIOD.*

THE veteran geologist and archæologist, Professor Joseph Prestwich, has recently contributed a suggestive memoir on this subject to the Philosophical Transactions of the Royal Society.* It treats of 'the evidence of a submergence of Western Europe and of the Mediterranean coasts at the close of the glacial or so-called post-glacial period and immediately preceding the neolithic or recent period,' and is accompanied by an original map showing the chief arc submerged.

The memoir deals in turn with the character and distribution of 'rubble, loess, breccia, ossiferous fissures, rai breaches, bone caves, shell beds, and presents the results of many years research over this wide field. In a previous paper communicated to the Geological Society

* Vol. 184, 1893, A., pp., 903-984. Plate Price 5 s. 6 d.