

SCIENCE.

A WEEKLY NEWSPAPER OF ALL THE ARTS AND SCIENCES

PUBLISHED BY

N. D. C. HODGES,

47 LAFAYETTE PLACE, NEW YORK.

SUBSCRIPTIONS.—United States and Canada.....\$3.50 a year.
Great Britain and Europe..... 4.50 a year.

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Attention is called to the "Wants" column. All are invited to use it in soliciting information or seeking new positions. The name and address of applicants should be given in full, so that answers will go direct to them. The "Exchange" column is likewise open.

A BOSTON "ZOO."

It is a little strange that a zoölogical garden should be so rare a sight in our country, or, if found, should be so poorly equipped, when there is hardly a European city of any size without one, which is invariably a centre of attraction for all American visitors. We often hear the inquiry, "Why cannot we, too, have a 'zoo'?" and we all know that such a garden in Boston has long been talked of. Indeed, it has been seriously studied for a number of years by our naturalists; but a brief consideration will show that to found and sustain an establishment of the first class, modelled on the best in Europe, would involve an expense very much greater than there, simply from the fact that in no place in Europe where a flourishing and extensive garden exists, are the winters nearly so long or so severe, nor are they accompanied by such abrupt terminations, as here: our winters, in short, would entail a vastly increased expense to keep tropical creatures in health, and presentable to the visitor.

But this is by no means the only difficulty we labor under in Boston: for two things are absolutely essential to an undertaking of this sort,—first, sufficient space; and, second, its accessibility to the public. Now, where are we to look for an unencumbered spot of ground sufficiently extensive for these purposes reasonably near the heart of our city?

The acreage of the gardens in Europe ranges from about half a dozen to half a hundred acres, but hardly one of them has room enough for its animals. The Zoölogical Garden of London, the best and most successful of all, is very crowded, and does not appear to cover more than thirty-five acres, so far as can be told by measurement from a map. Forty acres—somewhat less than Boston Common—is the least we ought to count on here; but we have barely saved for ourselves on the outskirts of the city room for public parks.

The "scientific" and the "practical" man are often set in antithesis. Will you kindly give your attention for a few minutes while I endeavor to show that they may also be named synthetically, by pointing out how the scientific men

try to answer a practical question and resolve practical difficulties?

We who have had this matter before us have been on the watch for opportunities long enough to see an immense growth in our city and a rapid occupation of our suburbs. We have seen one spot after another which we had looked upon with envious eyes fall into the hands of the land speculator, until the chances seemed to grow less as the needs appeared greater. But our opportunity at last came with the establishment of the Park Commission, without whose hearty support we should be silent to-night.

The only piece of ground under the control of the park commissioners large enough to have a portion of it set apart for a general zoölogical garden is Franklin Park in the Jamaica Plain district; but there are two insuperable objections to the use of this site,—first, that it contains no sufficient body of running water for the needs of aquatic animals; and, second, that the segregation of a sufficient territory would absolutely prevent the use of this large section as a country park, one of the most important of the designs of the commissioners, and not elsewhere attainable. The only possible escape from this dilemma is one which, while it certainly involves an additional expense, brings with it compensating advantages. It is the division of the proposed Natural History Gardens into separated sections. The disadvantages of this plan are the extra expense of fencing, and of gate-keepers and superintendence, and that we should have to go to widely distant points to see all that there is to be seen. The advantages are the better selection of sites for special groups of animals, and the important fact that some one of the exhibits would be easily accessible to every inhabitant of the city.

For the purposes of a natural-history garden,—we use this word as more correct than the more limited but more usual one of zoölogical garden,—animals and plants may be divided into those inhabiting the salt water or dependent upon it for means of sustenance, those inhabiting the fresh water or so dependent, and land animals properly speaking. All air animals would find food and shelter within or upon one or other of these media, and therefore we need not consider them as a group apart. One grand factor in life here presents itself, by taking advantage of which we may impress it upon every visitor to our gardens by compelling him, if he would learn all we offer, to pass at some expense of time and labor from one of our exhibits to another. It is our first essay in teaching one of the fundamental facts of nature.

The sympathetic concurrence of the park commissioners enables us to carry out, it has indeed originated, this idea, since they offer us three separate tracts,—one upon the sea-shore, one which includes a pond of moderate extent and the valley of a small stream, and the third a very attractive bit of rocky woodland and glade. Not one of these spots is all that could be desired for the purposes in view, but they are the very best the park commissioners have to offer; they are the best unoccupied grounds left about Boston; and they cover the two requisites mentioned at the start,—suitable room and sufficient for all reasonable purposes, within easy reach of the people.

Observe for a moment their position on this map of Boston. The Marine Garden, or Marine Aquarium, as we call it, will be situated at that point where Boston stretches its farthest hand to the sea, in the so-called Marine Park, already in its half-finished state thronged by thousands, especially in the summer, and which is more easily reached than

¹ Remarks made at a meeting of the Thursday Club, Boston, Jan. 15, by Samuel H. Scudder.