

SCIENCE

FRIDAY, FEBRUARY 24, 1888.

WE CALLED ATTENTION a few weeks ago to the beginnings of a zoölogical garden at Washington. It now appears that plans for a similar undertaking have been in progress for some time in Boston, and are now made public in a correspondence between the park commissioners of that city and the Society of Natural History. Although only preliminary steps have yet been taken, the outcome appears to be that the park commissioners have agreed to place in reserve, and lease the society on a nominal rental for a long term of years, several pieces of land under their control, to be developed, under the auspices of the society, as natural-history gardens and aquaria, if the friends of the society will raise a fund of two hundred thousand dollars as a foundation for the enterprise. The society proposes to interest the general public in the matter by creating a new body of members, to be called 'garden members,' paying a certain annual sum for the support of the enterprise, and in return presumably receiving certain entrance privileges. In their reply to the proposal made by the Natural History Society, the park commissioners call attention to the peculiar situation of Boston, in that its territory is greatly divided by bodies of water and marsh, and its dry land by rocky ridges, causing the city to extend itself in a very irregular manner. This prevents the possibility of finding any one piece of land large enough for the proposed natural-history park, and leads the commissioners to suggest to the society the advisability of occupying several distinct pieces of land; so that the plan as developed includes a diversified but unwatered portion of Franklin Park, next the future pleasuring-ground of Boston, a section of the park below Jamaica Pond, and a salt-water basin, perhaps a quarter of a mile long, at City Point, South Boston. Such a division has never before, we believe, been attempted in a zoölogical garden, but, though obviously requiring a larger staff to operate it, has some advantages which should not be overlooked. It is thus possible to obtain for aquatic animals places specially suited to them, and to select ground of a very varied character for other parts of the garden without feeling dependent upon a great water-supply; while the establishment of the large marine aquaria at the very edge of the harbor has obvious advantages. Moreover, it brings all the citizens into near proximity to some part of the ground occupied. Another distinct feature in the plan is a most commendable one, though its advantages are not so apparent on financial as on educational grounds. The committee points out that the society has long developed its museum with the distinct purpose of making it auxiliary to the general scheme of education in the State, and within a recent time has given special attention to exhibiting the animals, plants, and minerals of New England, believing that its position as the leading natural-history society of this group of States imposes such a duty upon it. This same idea it would carry out in the proposed garden by making it in an especial way a reproduction of the true indigenous fauna of New England. For it is to be borne in mind, say the memorialists, "that with the increase of population, and the concomitant decrease of the indigenous wild animals; above all, with the modern excessive growth of city life, — the percentage of city children (and hence of all) who may ever hope to see, and still less to observe at their leisure, the living objects of their native State or country, is rapidly growing less. At the same time the importance of such observation and study, instead of decreasing in like proportion, is greatly enhanced. To the country boy it is of comparatively little moment whether he observes this bird or plant, or that, since he has usually definite

ideas of all, drawn from frequent observation of many. But to the city lad it is of the utmost consequence that he shall be able to correct his less definite ideas — formed for the most part by hearsay, by books, or by pictures — by observation of the object itself." The enterprise now plainly depends on the public spirit of the citizens of Boston. It is the natural and proper outcome of the admirable park system of that city. The Natural History Society has had the plan in view for twenty years, and believes the time is now ripe for developing it. Surely no such scheme has ever been proposed in this country under more favorable circumstances, or with the promise of so powerful and substantial support. That the park commissioners perceive this, is evident from the readiness of their response to the application of the society's committee, and we shall look with confidence to a generous response from a city that has already done so much for science and education.

THE MOST IMPORTANT QUESTION discussed by the Department of Superintendence of the National Educational Association at its meeting at Washington last week was, 'How and to what extent can manual training be ingrafted in the public-school system?' It occupied the entire morning of the first day's session; and after the reading, by Mr. Charles H. Ham of Chicago, of a very thoughtful and eloquent paper, the discussion was taken up by a number of gentlemen, some of them the most prominent and influential educators of the country. Of all who participated in the discussion, only one, Mr. Marble of Worcester, — a gentleman whose idiosyncrasies on this subject we have lately criticised (*Science*, No. 257), — opposed manual training, he even going entirely beyond the limits of the question at issue in order to ventilate his views. The reports of the meeting which reach us go to prove that our previous judgment, that Mr. Marble knows nothing about manual training or the argument for it, was correct. We regret to understand, however, that at Washington he surpassed his previous efforts, and considerably exceeded the bounds of courtesy in his treatment of those who favor manual training. The consciousness that one stands alone in the wrong of so great a question as this, must be irritating, but it can hardly be offered as an excuse for the conduct in question. Argument by invective is becoming far too common in this country, and it is our duty to protest most emphatically against its introduction into educational discussions. The advance of a great educational movement is not to be checked by abusing either it or those who regard it with favor, and it was this abuse, without a line of argument, which made up Mr. Marble's fifty-minute harangue. President Butler, Dr. Belfield, and Mr. Newell very easily and briefly showed how entirely aside from the question it all was. The result of the discussion was the appointment of a committee of seven to draw up a course of study in manual training, and to report at the next meeting.

THE MISSISSIPPI PROBLEM.

THE improvement of the Mississippi River, on a large scale and systematic plan, enjoyed, from its inception to the last session of the Forty-eighth Congress, a most enthusiastic support. From the outset, the theories proposed as the basis of the work undertaken have been criticised and contested, but for a considerable time no opposition was directed to the constructions actually undertaken.

Happily all who had addressed themselves to the problem had been, so far as concerns the works in the bed of the river, substantially in accord as to the projects for the immediate application of the appropriations, while differing somewhat as to the reasons for