thousand feet of the parks or boulevards. The Lincoln, West Side, and South Park Commissions joined in recommending this ordinance, which was passed, the distance being cut down, however, to four hundred feet, and the territory to be covered by the bill limited to Lincoln Park between the boulevard and the lake. Vetoed by the Mayor, the ordinance was sent on to the Judiciary Committee, where it slept for two years. The Mayor was again urged to wake it up, but some of the advertising people said: "We have the money and we will fight you." So the whole matter is in abeyance.

Speaking of the Park Board's attitude towards the boulevard, Dr. Woodworth said: When parties come to the Park Board, asking us to accept their street as a boulevard, we consent only when such are self-sustaining. We claim, too, that it is perfectly ridiculous to accept boulevards with barnyards and hideous signboards disfiguring them. In one case where such a street was presented for acceptance we utterly refused, and were finally asked if we would accept the boulevard without the signboards. When we replied affirmatively the boards came down and we will never again have any trouble of like nature, for there was so much ridicule made of that particular case.

## (36) OUTDOOR ART IN SCHOOL AND COLLEGE GROUNDS.

By W. J. Beal, Professor of Botany and Forestry, Mich. Agricultural College, Agricultural College P.O., Mich.

During the first fifteen years of the existence of the State Agricultural College of Michigan there were four professors of horticulture, who also had charge of such landscape work as was supposed to be needed in those primitive days, — besides the first president, who served in that capacity, — making one person for each three years. Although the place was just hewed out of the woods, it is said to be astonishing how much dirt each of these five men found it advisable to move. Each man had a plan entirely his own, and at the end of fifteen years there was little to show for a good deal of hard work.

Before the writer, the sixth man, was to take charge of the college campus, the State Board of Agriculture said, — and wisely too, — "Let us employ a man of much experience and skill, and have a plan made, and if we are suited it shall be adopted with so much firmness that no one in the future shall ever be permitted to change it. The gardener shall also mark the spots for all buildings to be erected in the future, and indicate which buildings shall some day be moved, if they now stand in unsuitable places."

The writer carried out that design to the letter, as well as means would permit, and looked after the place for nine years, with meagre allowance for improvements, and then the college work was subdivided and the care of grounds passed into other hands, three of them, one after the other in somewhat rapid succession.

Nine different men have undertaken this work during fortytwo years. With this example fresh in mind, I am firmly impressed with the idea that with lack of stability in management and in money very much cannot be expected of a college campus as a model. It would be well in most cases, after adopting a good plan, if two or more members of some firm of experience could at least be employed to advise the man in charge, in case changes of much importance were contemplated.

In these days colleges and universities grow so rapidly that, with few exceptions, no one tan be relied on to predict what changes will be imperative during the next decade, to say nothing of later periods. More land will be added buildings are to be enlarged and many new ones erected, involving numerous changes in drives and paths, removal of choice trees, and planting of others.

In too many cases a college president or some member of the trustees, who delights to be called "a practical man," has some plans to be carried out. Many a Yankee thinks he can do well anything he undertakes, because he has been successful in securing some high position and in accumulating some money.

At a large and well-known university in a distant State there never was any attention given to graceful curves for beauty, but everything went in straight lines and straight rows and by In time the trees became much crowded and in places began to tower up forest-like. What was to be done. remove a portion of them and let the rest spread themselves, instead of growing tall and slim? Oh, no! One of the practical men among the trustees knew a thing or two on this subject, and finally he was permitted and encouraged by the others to have the ends of the branches of many trees all cut severely back, remarking that "they will look bad for a while, but in time they will be delightful to behold." The stubs called forth the animadversions of saint and sinner, scholar and daylaborer alike for a few years, till they became accustomed to the change and nature had enabled the trees to make some amends.

The results you can all see in your mind's eye. The graceful elm, the stately ash, the ovoid maple, the open-topped birch, the sturdy oak, the conical evergreen were all reduced, as in a vice, to the same rounded form.

At the Agricultural College, near the capital of Michigan, the authority for superintending the outdoor planting is divided, the professor of horticulture having general charge of the grounds, including greenhouses, while the professor of botany is permitted to occupy three acres in two isolated places for a small botanic garden, consisting mainly of about two thousand hardy species of herbaceous plants and shrubs, with a very few trees.

Among other things, the department of botany teaches classes to know trees and shrubs as botanists and foresters do. The professor of horticulture teaches landscape gardening. The teacher of botany believes it would be very well and convenient for all concerned if portions of the campus here and there were gradually transformed in such manner that one or two good samples of each species should be arranged in families as far as practicable, as pupils study these plants mainly a family at a time.

Trees in good variety are already found on the campus, but they are not planted with the view of getting maples together in one place, oaks in another, elms in still another, and so on, with all sorts of woody plants. A committee consisting of a member of the Board of Agriculture, the professor of horticulture, and the professor of botany agreed to undertake the transformation, but very little has yet come of it. Considerable shrubbery has been placed in families, and the advantages for teaching are already apparent. For over twenty-five years one or more specimens of each kind of tree on the campus has been labelled, usually selecting those accessible to paths, drives, and buildings.

While mastering forestry and a botanical knowledge of trees and shrubs, for a time each student was supplied with a popular description of each sort, designating where a good specimen could be seen.

The college campus consists of about sixty acres of gently rolling land, where portions of the virgin forest are preserved, and numerous other sorts planted. Trees are now thick enough and large enough for illustrations.

Besides the students, great numbers of visitors see this campus each year. With all its imperfections, this natural and artificial mixture of trees and other plants is exerting an influence for good and becoming a useful object lesson, for professors from other colleges, directors of normal schools, superintendents of public schools, and others have come to study the collections and make notes, and have asked for and acted upon our advice in regard to their own grounds.

Some years ago the State Horticultural Society made a start toward trying to induce teachers and children to plant flower gardens near the school-house. In certain instances some measure of success was attained, but I think the main reason for the lack of interest was the fact that the long vacation often came in summer, and that in many places there was a change of teachers between winter and summer. Again, most teachers didn't know how nor care to undertake the work.

At college or university it is probably best to give considerable attention to putting in woody plants on steep slopes, low and broken grounds—places not likely to be sought for new buildings. By this means a greater degree of permanence is likely to be secured. Nearer buildings, shrubbery and quickgrowing trees can be used, till it is finally decided where neighboring buildings are to be erected.

We must remember that most of our country is still young, and few persons have given any serious thought to outdoor art. I look with considerable confidence to the land-grant colleges to educate young men in this line of work. And since attending this meeting I see that this organization, The American Park and Outdoor Art Association, is likely to do much in this line of education. Our people travel considerably and are ready to pick up ideas regarding home ornamentation, provided there are a good number of well-kept grounds scattered about the country: a few in each State will exert a wonderful influence.

## Discussion.

President LORING, in his remarks upon this paper, said: Who of us is not acquainted with the man who knows everything? In a little near-by park, planted with tall silver maples, an expert "tree-trainer," so called, cut the tops off level and so ruined the trees as to make it desirable, if not necessary, to cut out every one and replant. In the grounds of an orphan asylum the same kind of an expert cut off all the tree-tops there, with the same sad result. The college campus and public-school grounds should be a model for the people in all that makes for truly artistic planting and proper care of trees and shrubs. Professor Beal's paper should go to every college in the land.