

YALE STUDENTS OF FORESTRY ARE NOW EXPLORING THE WEST POINT RESERVATION FOR THE WAR DEPARTMENT



ONE OF THE THREE CAMPS OF YALE FORESTRY STUDENTS AT WEST POINT.

mense stars, the national shield, Masonic designs or other emblems composed of flowers, which form a striking contrast to the groundwork. If the latter is not composed of blossoms it may be made of the familiar plant known as hen-and-chickens in the East, mosses, ferns or leaves; the foliage, however, is generally fastened to a fine wire netting attached to the framework. The monuments, fountains and other designs in bronze and marble are often beautifully decorated with designs made especially for them, but the arches are usually the most elaborate form, and some of these extend from one side of the street to the other, reaching to a height of thirty or forty feet, and it is not unusual for a single arch actually to contain twenty thousand or thirty thousand flowers of different kinds.

The processions which form the most important part of the carnivals also give an opportunity for displaying the wealth of natural beauty. Of course, it is considered an honor for the owner of a vehicle to be invited to take part in the parade. There is much rivalry in this respect between the towns as to the one who shall have the most elaborately decorated carriage or automobile. The women of the family study out ideas for weeks in advance, and select the choicest blossoms which can be secured for the purpose. It makes no difference whether the vehicle is a tallyho, an automobile touring car or merely a one-horse phaeton; it is often literally hidden with leaf and blossom, only the tires revealing its character. White is naturally one of the favorite colors, as there is such an abundance of flowers of this tint. Roses, lilies and carnations are used in profusion in some of the designs set in a groundwork of green. Red and yellow are other colors which can be liberally used, as so many species are of these colors. Geraniums, pinks and the many different kinds of roses all contribute to the splendor of the decorations. Honeysuckle, however, is so abundant that sometimes a carriage will be draped with this entirely. Pansies, violets and the ordinary field daisies are other decorations favored. They are used largely for making up initials and designs which are placed upon the panels of the vehicles.

But the parade is by no means confined to pleasure vehicles. The Fire Department takes a hand in the proceedings, and the same rivalry prevails among the engine and hose companies as well as the crews of the ladder trucks. Some of their decorations are among the finest features of the parade. The shape of the fire apparatus assists in executing it, and wherever a bit of green or a bloom can be placed to advantage it is put in. Even the teamsters turn out at times with their big freight vans decorated, while the Chinese contingent forms one of the most interesting features of the celebration. In each of the California towns are large colonies of Celestials, but as a rule they confine their efforts to making great dragons or other mythical beasts, principally out of papier maché and silk. Some of these are mammoth in size, requiring forty or fifty men to carry them in line; but it can be said that the Chinamen take as much interest in the celebrations as the Americans, and their work adds greatly to the unique appearance of the carnivals.

The floral adornment is not confined to the carriages in the procession, however; often the harnesses are covered with leaf and blossom, while the drivers guide the horses with ribbons

of snowy white. These, with the summer costumes of the women, who occupy conspicuous places in the parade, greatly enhance the effect. The body of horsemen likewise forms one of the picturesque features, for the riders are frequently attired in the garb of the cowboy and the Mexican vaquero, and Uncle Sam is generally present.

Fortunately the variety of blooms is so great that an abundance can be secured at almost every season of the year.

FOR TIMBER PROTECTION.

Work of Party of Student Foresters on West Point Reservation.

High up on the crest of Crow's Nest Mountain, overlooking West Point, a party of students from the Yale University Forest School is working out a plan of which much is expected by the War Department.

For years the War Department has keenly realized the great need of better protecting the standing timber and water supplies on its military reservations throughout the country. After an exhaustive investigation of the problem it was decided to test the merits of a proposed plan, and, selecting West Point as the reservation for the test, Secretary Root through the Bureau of Forestry placed the actual work in the hands of the management of the Yale Forest School, to be worked out. The school au-

thorities turned the work over to the senior class, and there they are, up in the heart of the woods, eating, sleeping, cooking their own meals, measuring and marking trees by day and matching yarns by night. It is a great work the little party of sixteen has undertaken—the examination of practically every tree in the reservation of nearly two thousand acres, the marking of those to be taken out, the indication of those parts of the great tract to be seeded for trees, those to be planted with young trees and the kind of trees to be planted. Then, after all this has been done, to set the whole forth clearly in the form of a map that shall be a safe guide for the care and use of the reservation for a period of ten years.

But, if the work is hard, it is in good hands. All of the sixteen young men in the party will graduate in June with the degree of Master of Forestry, entering the Bureau of Forestry for assignment to various points throughout the country. All were graduates of leading colleges and universities before entering the Forest School, that being one of the entering conditions.

R. L. Marston, who has charge of the party, is a member of the Forestry School faculty, and is also connected with the Bureau of Forestry. Mr. Marston, who is recognized as one of the leaders in the practical work of the school, was chosen as one of the committee to prepare plans for the improvement of West Point when Congress recently made the appropriation for that work. This committee is to consist of an army engineer, a landscape gardener and a forester,

and it is the forestry work of which Mr. Marston has charge.

"It is a systematic attempt to give nature a chance," said Mr. Marston in explanation of the work of his party.

"This reservation has been closely cut, and it has suffered from fire. Indiscriminate cutting would practically denude it of timber in a few years. When our work is done the forester in charge will have in the map we shall prepare a guide, the following of which will not only enable the post to get what timber it needs, but by intelligent cutting will greatly improve the stand of timber. If the plan we outline is followed closely, at the end of ten years there will be a fine stand of timber on this reservation."

Still another object of the work is the preservation of West Point's water supply. The indiscriminate cutting of trees, concentrated as it usually is in a few easily accessible spots, denudes the earth of the trees, and the soil, robbed of the protecting shade, is soon left hot and dry, all the moisture being drawn from it by the fierce rays of the summer sun, while water in brooks evaporates rapidly. This seems a small item to the casual observer, but it has been repeatedly demonstrated that shade trees and a good water supply go hand in hand, especially in the summer months.

The forestry students began work on the West Point reservation on April 1, and the work has advanced so well that they now expect to be able to finish it by June 15. At that time Mr. Marston expects to be able to tell the War Department just how many feet of available timber it has in the stand, where cuts should be made, and just how many feet may be safely cut for telegraph poles, building purposes and other uses each year in course of the ten year period covered in the proposed development of the forest.

Side by side with this "negative growth" of the forest, as the careful selection of timber to be cut may be called, will advance the positive growth. In some places this growth will be attempted from the seed or nut of the tree, and in others small trees will be "underplanted" and everything possible done to advance them.

While the West Point reservation is counted a small one in area, this fact makes the stand of timber upon it all the more valuable. The present stand is nearly all hard wood, oaks and chestnuts.

The plan now being worked out is called a "silvi-culture working plan," and when completed will be turned over to a forester, yet to be appointed, who will be stationed at West Point and devote his attention to the care of the timber stand on the reservation. The tract will be divided into small areas, and each of these will be cared for separately. Most of the hardwood new growth will be from nuts, and this work will probably be confined to red oaks and chestnuts, since these trees each have a large nut. In the high, exposed places, where the soil is not particularly good, small spruce and hemlock trees will be planted.

The work will be expensive, but just how expensive cannot now be determined. Mr. Marston is, however, authority for the statement that within twenty years the War Department will be more than reimbursed for whatever is paid out in the timber used and available for use.

The methods pursued by the workers to determine the amount of timber in the stand are interesting. The tract is divided into ranges, and these are subdivided into compartments. The workers get a "line" around a small compartment. A few trees selected as samples are



YALE FORESTRY STUDENTS MEASURING TREES AT WEST POINT.