

THE YALE SUMMER SCHOOL OF FORESTRY

The camp street between the rows of students' tents



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BY

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IN the northeastern corner of Pennsylvania, facing the Delaware and the distant mountains of New Jersey, there is a recess in the hills where French emigrants settled in the early years of the last century. The great forests were yet standing almost untouched, although a thriving lumber trade had already begun. Fur-bearing animals were plentiful, and there was all the richness, and much of the roughness, of the frontier. Here came Jean Tounelle, the Loreauxs, the Minots, the Marquis de Trazegnies, the Perozs, and other Frenchmen with their families; and among the earliest of them, my father, Cyril C. D. Pinchot, settled in Milford in 1816.

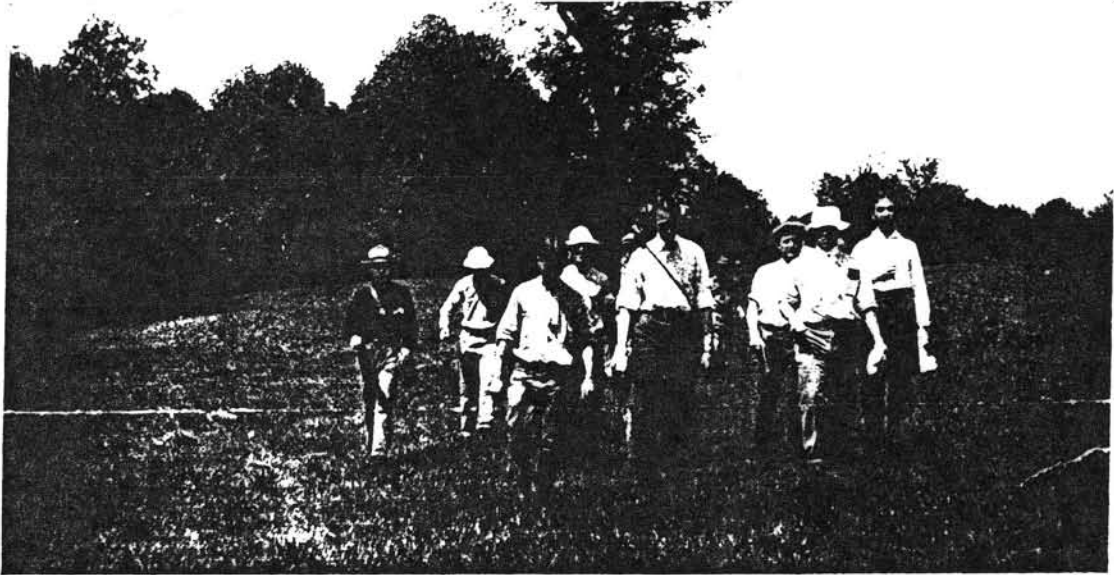
A soldier of Napoleon, my father was forced to leave France soon after the Restoration, and his parents came with him to Milford. Here he married, and here his children were born. In their early lives, his sons were constantly in the lumber woods, and they made occasional voyages to Philadelphia in charge of the great rafts of logs or sawed lumber which descended the Delaware in fleets in those palmy days of the lumber trade. Now the forests are gone. Their disappearance forced us to think of its preservation. We thought, like so many others since, that

"something ought to be done," but what, we did not know.

It was from seeing forestry practised in France that a solution came to my mind, and, accordingly, I advised my son, Mr. Gifford Pinchot, to make forestry his profession, and he has done so. Since he did so, forestry has become a recognized profession in the United States. The first two professional schools



THE BUILDING OF THE YALE SUMMER SCHOOL OF FORESTRY AT GREY TOWERS, PA.



A PARTY OF STUDENTS OFF FOR A FIELD EXCURSION IN FOREST BOTANY AT THE SUMMER SCHOOL OF FORESTRY

were established in 1898, but one has been discontinued. In 1900, the Yale Forest School, in whose establishment my family and I were concerned, began its career. It did, and is still doing, the work for which it was founded. The degree of Master of Forestry was conferred by Yale University upon twenty-three of its graduates in June of this year.

But it soon became evident that the professional schools could not cover the whole ground. They were available for the men only who intended to devote themselves wholly to forestry. The Yale Forest School's post-graduate course of two years was producing trained foresters of high attainments and practical capacity to deal with forest con-

ditions in America, and other forest schools were at work; but the whole field of forest education was far from being covered.

If, as a people, we plowed and sowed no meadows, but depended wholly on what wild hay was pleased to spring up, then we should be acting toward our domestic animals precisely as in the main we are still acting toward the forests and the consumers of wood. We have treated our forests as we do our mines—on the baseless assumption that they are a source of wealth to be consumed once and for all. Fortunately, that false idea is on the wane. But, if our forests are to be used on and on, and not used up, then we must have not only men professionally interested in forestry, which is indispensable, but also a broad, general interest in forest preservation among the farmers, in our schools, among the sons of lumbermen, among small owners of forest land—in a word, among the rank and file of all those who live and work outdoors, and all those who, working and living indoors away from the forest, yet help to make public sentiment about it.

The Yale Summer School of Forestry was founded chiefly to help spread a knowledge of forestry among the people. It is intended to make young men familiar with the woods, both as to the trees themselves, and as to their habits and the methods of handling them.

The courses, both in the field and in the



DINNER IN THE MESS SHACK

school building, are directly in charge of professors and instructors from the Yale Forest School.

The sessions of the Summer School are held at Grey Towers, which lies on rising ground above the village of Milford. Here, in a stone building provided for their use, the summer students attend lectures and carry on their laboratory exercises. Field work is plentiful. The work begins each day with a lecture or two, and is continued in the field for the remainder of the school hours. By the end of the course, the average student has come to

forestry as his profession a chance to learn, in a single session, something of what forestry is, and something of his adaptability for it.

The camp itself consists of two parts; the tents of the students—one tent to a man—with board floors, cots, and the other things that some of us remember to have gone without, and the permanent buildings constructed for their use. The latter include a mess-house, a lecture hall, and a reading- and club-room, with great stone fireplaces for cold or rainy weather. Here the students eat and work, or read and loaf in such of their spare time as



STUDENTS MAKING AND RECORDING TREE MEASUREMENTS IN THE WOODS

know all the local species of trees and nearly all the other woody plants. He has gathered an idea, also, of the laws which govern the development of forests, how forests reproduce themselves from their own seed, how they are established by planting, and how they should be tended and managed. He has learned how to scale logs, and to measure the volume of standing trees. Nearly everything that he has heard of in the lecture room he has done or seen in the forest; and whenever that was impracticable, lantern slides have done what was possible to replace the thing itself.

Among its other uses, the Summer School gives the young man who is thinking of for-

can be taken from baseball, swimming in the Sawkill, and similar amusements. The vigor, heartiness, and evident satisfaction of the lads in the life they lead has been one of my principal sources of pleasure in the school.

In addition to the Summer School, there are two other uses which attach Grey Towers to the forest work: the yearly sojourn of the seniors of the Yale Forest School for a couple of months each spring, and of the Juniors each summer; and the Forest Experiment Station, at Milford.

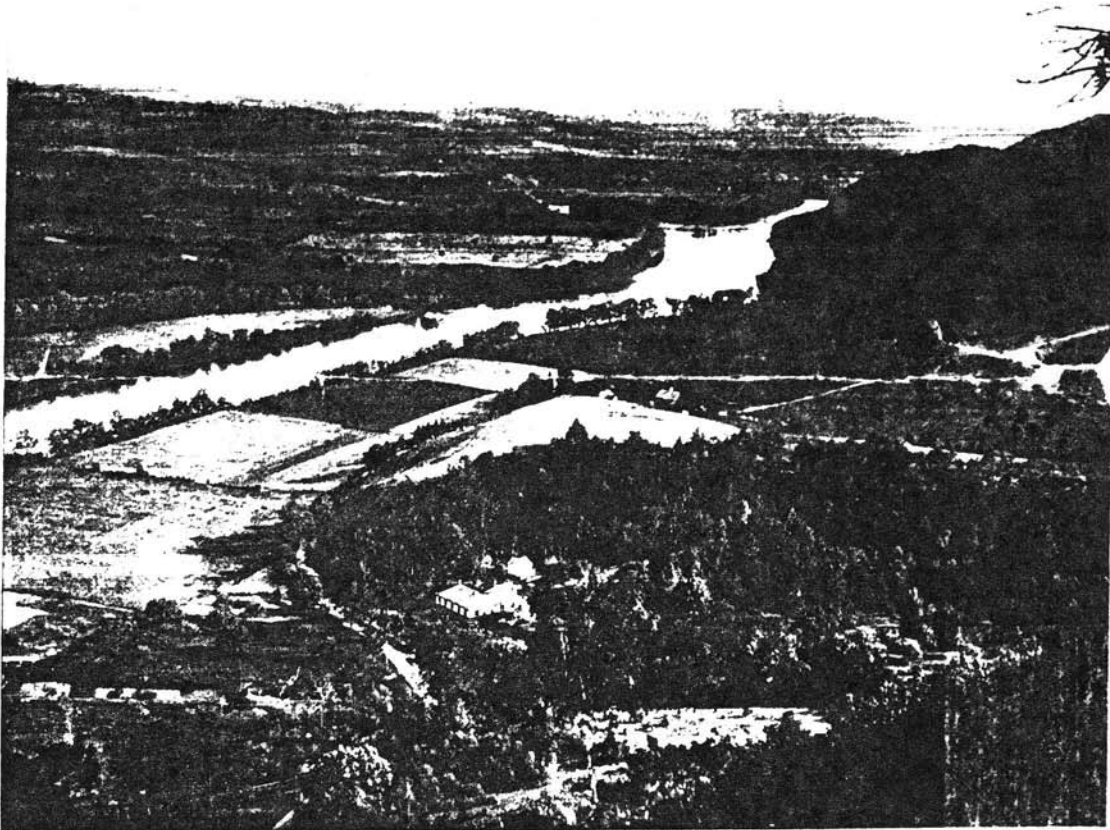
The Milford Forest Experiment Station is the first of its kind in the United States. It was established for research in forestry, and

especially to make continuous observations for a long series of years. Much can be learned about the forest from studying it as it exists at the moment, but there are numbers of most important facts that can be learned only by observing the same tract of forest for many successive years. Forest experiment stations have long been established in Germany, France, Switzerland, and Austria, to make such observations; and the need for similar work has come to be felt more and more strongly with the progress of forestry in the United States. Only continued observations can answer such questions as these: What is the best distance apart to plant trees of a particular species in a particular kind of soil and exposure? How severely should a given kind of forest be thinned at a given age in order to produce the largest amount of board feet? How thickly together should certain kinds of trees stand at maturity in order to yield the most and best seed for natural reproduction, and how much light or shade is best for the young trees? Do the

offspring of trees inherit the peculiarities of their parents as the human children do? Questions of this nature are among the most important in forestry. The solution of them will require many years of consecutive study of a single forest.

The Experiment Station has for its uses about two hundred acres of forest and open land. It is managed by the director of the Yale Forest School, with whose students it has much to do, as well as with those of the Summer School, and it is in close touch with the Bureau of Forestry.

In the forest work at Grey Towers, the Experiment Station represents advanced study and research, while the students of the Summer School and of the Yale Forest School stand for the beginning and the middle of a forester's training. It is to be hoped that Grey Towers may have in the future, through instruction and original investigation in the lines I have attempted to describe, a wide and continuing influence in all matters relating to forestry.



THE VALLEY OF THE DELAWARE, AT MILFORD, PA., WHERE THE WORK OF THE YALE SUMMER SCHOOL OF FORESTRY IS CARRIED ON