

IN THE PINE BARRENS.

Natural and Artificial Features of Pinehurst Scenery.

The Landscape Architect's Difficult Work and Its Pleasing Results.

Evergreen Trees and Shrubs and Green Lawns Supplant Scrubby Oaks and Bare Sand.

To provide a healthful, convenient and attractive town in which home-like accommodations and varied means of recreation could be secured at a moderate cost, in a region having a superior climate, but where much of the landscape had been made unattractive by fire, the axe and the poverty of the soil, was the problem presented to the landscape architects of Pinehurst.

The hundred-acre town site is made up of a succession of broad ridges and valleys which merge into each other so gradually that it is hard to realize that there is a variation of over fifty feet in elevation in different parts of the ground.

Not far outside the town limits are springy places from which start streams that increase in volume, alternately broadening into bogs and narrowing between abrupt banks as they descend through valley bottoms that are protected from fire by the constant flow of water. The moisture also provides favorable conditions for the growth of a great variety of trees, shrubs and herbaceous plants, many of which are evergreen, while others are loaded with brilliantly colored fruits, so that the bottoms of all wet valleys are the natural winter and summer garden spots of the region and a constant source of delight to one who appreciates the varied forms of plant life. The dry upland has, on the contrary, a less varied and interesting growth for the greater part of the year, the larger growth being made up of scrubby and stunted oaks, tall spindling pines—many dead and all with woefully scarred trunks. Under these trees is a ground covering of tufty grasses or a surface of nearly bare sand which is densely littered in many places with a ghastly ruin of fallen trunks, blackened stumps and decayed branches, all testifying to the devastating methods of the turpentine distiller and the lumberman. Where there are vigorous young pines the bright fresh green of their foliage contrasts charmingly in the winter landscape with the warm red-brown winter foliage of the oaks; and almost everywhere in early spring and summer many inconspicuous shrubs and ground covering plants are very attractive in flower.

It was on the topography and in the landscape that I have described that the landscape architects were called upon to design an attractive village. The site selected for them to do this was on the dry upland—not in the moist rich green valleys. The wide sweeping slopes and valleys suggested a broad treatment and

required a curvilinear system of roads. It became at once evident that artificial means must be resorted to if an attractive evergreen landscape was to be provided during the winter, and an abundance of flowers during the early spring, the most active season of visiting guests and residents, most of whom being from the colder states would expect very different and more attractive conditions than those prevailing about their homes,—conditions which would not be presented by the original landscape.

Upon a topographical survey of the town site prepared by the engineer the plan of the town was studied. Its central feature was the Village Green, located in a broad, shallow amphitheatrical valley, and designed to be the heart of the village, with the inn, the hall, the store and the casino sites at its head on the main street and along the line of the electric tracks. The homes for the residents were along the sides of the green and on the streets radiating from it. These homes were all placed in lots with ample grounds about them and with no subdividing fences (for it was designed to avoid the exclusiveness that comes in towns in which property is subdivided into many small holdings) thus giving every visitor a common interest in all

various objects of interest, all of which must be marked by signs directing visitors to and from the village.

As I have previously stated, the purpose of the planting was to secure an attractive evergreen winter landscape with an abundance of flowers, especially in early spring. I have referred also to the considerations which determined the location of the Village Green. Another important consideration was the Pine Grove which provided an evergreen back-ground for all views across it and also a pleasant place to ramble in. It was really the only important existing plantation worthy of serious consideration. The new plantations about the edge of the Village Green and in the planting space between walk and road were arranged in such a manner as to give a series of views from each building over a foreground of low evergreen foliage between groups of evergreen trees to a broad stretch of green turf in the center of the green, with groups and scattered trees standing upon it. These plantations are made up of comparatively few wholly reliable varieties that will give the desired landscape effects. About the base of and in the immediate vicinity of the buildings, plantations are made with a view to giving the structures the appearance of

struction of walks and roads, especially where a brick foundation was provided in the latter, that this problem is believed to be solved.

Another exceedingly important problem was to secure a satisfactory turf that would be fresh and green in winter. The Japanese evergreen honeysuckle, a naturalized plant that sometimes covers large surfaces, was tried and found wanting. Many experimental plots of grasses grown from sets secured in different parts of the country, and from seed, were made, and winter rye was tried. The result of all these experiments up to this time is that the successful lawn mixture of the North and of California, viz: blue grass and red top, has been selected for a permanent lawn, green in winter and summer, and the winter rye to form a green winter surface in large areas. By the use of rye followed by cow peas a satisfactory winter effect is obtained and crops secured at the same time that will pay for all the labor.

From the inception of Pinehurst careful thought and investigation were given to the question of planting—a problem for which there were no precedents to gain experience from. A careful examination of the meagre garden flora of the region was made. With a knowledge thus gained and from earlier experience in the South a nursery was established of exotic and native plants, a large share of which have proved to be successful. It was recognized, however, that native plants must be depended upon chiefly for the results we wished to secure, for they only could be procured in sufficiently large quantities to do, at a reasonable cost, the immense amount of planting that was required in the town.

The purpose and character of the village having been outlined by the proprietor, and plans fixed upon and executed upon the grounds by the landscape architects; buildings suited to their various uses and in keeping with the established character of the village were designed and constructed by the architects; lighting, water, sewer and transportation systems were devised and installed by engineers who were skilled in these various branches. In all this work the representatives of these various professions have co-operated in the preparation of plans and in the execution of work, for occasions were constantly occurring where the work of one merged into that of another. But with all this cordial co-operation the results secured at Pinehurst could not have been secured without the assistance of the town superintendent, upon whom a multitude of details fall, and upon whose efficiency the successful execution of the work upon the grounds depends largely, and the successful conduct of the town administration depends almost wholly—a position that can never be successfully maintained unless a competent man be given absolute authority over all town administrative officers, subject only to the authority of his employer.

WARREN H. MANNING.

B. H. Burroughs, station agent at Southern Pines, and his cousin, E. T. Mahone, made an excursion to our village last Sunday by trolley car. Such excursions from neighboring towns are becoming very popular, as evidenced by the transient visitors daily seen on our streets.



VIEW FROM THE GENERAL STORE TOWARD HOLLY INN, PINEHURST.

that is beautiful and interesting in the town. At the same time protection is given to all by excluding objectionable features and persons.

After providing comfortable accommodations for visitors came the problem of providing pleasant homes for the employes who formerly occupied rough cabins near the power house. A study of this problem involved a decision and study for the future extension of the village in the immediate and the more distant future. These questions having been determined the construction of employes' homes was undertaken in a position where they will be readily accessible to the village of the present and the future, and close to the power house and laundry, wood yard, stables and other working departments.

At the opposite side of the village was established the nursery and farm, and future extensions are determined in positions where the sewerage of the town can be utilized for irrigating farm crops.

The management of the forests of the estate which supply wood for all fires is a matter that has required serious thought, for combined with the practical operation of procuring fire wood is the problem of making the woods more attractive and less subject to fires—considerations which involve the gathering and burning of immense quantities of useless decayed branches, trunks and chips, and the opening of wood roads and paths to

growing out of a mass of foliage and thus being connected more intimately with the landscape. In such places and along the edges of the walks where the plantations would come closely under the eye, greater variety is provided and more attention given to an attractive ground covering.

After fixing upon the design of the town and its surroundings the details of construction and planting were to be worked out. Plans showing cross sections of roads and walks, and grading plans of side slopes were prepared; also, plans showing the position of plantations and the kind of plants to go in them, and at the present time guide maps of the estate and record plans of the village showing the location of all buildings, pipes, wires and plantations are under way.

To find a satisfactory and readily obtainable material that could be made to form over the sand of the village roads a durable surface that would be firm at all seasons and free of mud during rain was one of the most important problems in construction. The first experimental section of walk made with waste resin heated and mixed with sand is still standing in front of the OUTLOOK office, where it has remained in good condition under heavy traffic for about a year. Such satisfactory results have been secured however with a cementing clay gravel, which is found on the estate, both in the con-