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# **Wood-Using Industries of Ohio**

**Dunning Carroll W**

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**Author: Dunning Carroll W**

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**OHIO AGRICULTURAL EXPERIMENT STATION**

**AT  
WOOSTER, OHIO**

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**In Cooperation with the  
FOREST SERVICE  
U. S. DEPARTMENT OF AGRICULTURE  
HENRY S. GRAVES, Forester**

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**WOOD-USING INDUSTRIES  
OF OHIO**



**BY  
CARROLL W. DUNNING,**

**U. S. Forest Service**

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## ANNOUNCEMENT

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The study upon which this report is based was undertaken by the Ohio Agricultural Experiment Station in cooperation with the Forest Service, the work being done under the direction of Edmund Secrest, Forester of the Experiment Station, and O. T. Swan, In charge Office of Industrial Investigations, Forest Service, United States Department of Agriculture. The Statistics were compiled from data collected in the summer of 1912, covering a period of one year from January 1 to December 31, 1911, inclusive. By the terms of this cooperative agreement, the Ohio Agricultural Experiment Station is authorized to publish the findings of the investigation.

# Wood-using Industries of Ohio

## INTRODUCTION

With her many rail and water transportation facilities, and with her vast resources of soil, forests, coal, oil, gas, iron, stone and clay, Ohio stands high as a manufacturing State. In 1910 the value added to the raw material by the varied manufactures of the State amounted to considerably more than \$600,000,000. For the same period the Bureau of the Census report shows that the sale of farm products reached a value of \$216,000,000, and that the minerals produced, exclusive of clay products, an estimated value of \$159,000,000. Manufacturing, therefore, is preeminently Ohio's leading industry. The present report deals with a single class of factories, those manufacturing commodities from wood. They form one of the most important divisions of Ohio's enterprises, and nearly every State in the Union as well as many foreign countries send some portion of their forest material to Ohio for utilization in manufacture. The commodities turned out by these wood-using factories, together with the value of the rough forest products like lumber, shingles, cross-ties, etc., in 1909, amounted to nearly \$156,000,000. Compared with the value of farm products and the mineral resources, the part the forests and their related industries are taking in the commercial development of Ohio is thus clearly indicated.

In the early days of lumbering the eastern States, closer to the markets, were plentifully supplied with hardwoods similar to those growing in Ohio, and in consequence there was little incentive to ship the rough lumber to outside points. At the same time, in comparison with the softwoods needed by the rapidly growing population for building purposes, there was no demand for hardwoods at home. In order that the magnificent hardwood forests could be profitably exploited, the necessity of developing a home market was soon realized, and resulted in the establishment of industries like those concerned in this investigation.

## FOREST CONDITIONS

When the pioneers crossed the Appalachians and began to settle in Ohio, the entire State with the exception of the northwestern corner was covered with a magnificent forest. The

eastern and northeastern part held valuable stands of white pine. Hemlock, too, was scattered on the high hills. The remainder of the State was a forest of deciduous growth. Probably in no section of the United States were there finer hardwoods than in the Ohio valley, particularly in the central and southern portions of this State. Magnificent specimens still to be seen standing here and there confirm this and make one realize the almost inconceivable wealth Ohio had in her timbered lands. For a long time, and even today, manufacturers making high grade products specify woods cut in Ohio and Indiana, considering their quality superior to similar growth in other States. On the uplands forests the principal trees were the oak, hickory, sugar maple, white ash, yellow poplar, black walnut, black cherry, basswood, and beech. In lower areas grew the elm, soft maple, black ash, sycamore, willow, red gum, bur oak, hackberry, cottonwood and red gum.



Fig. 1. A representative of the original forest.

To the early settlers only the rich soil had a potential value. The vast forests were of no worth. In fact, owing to the expense of clearing, tree growth was a factor to decrease land values. Annually many hundreds of acres of the finest hardwoods in the world were cut and burned, and later, when the early lumbermen started their mills, the farmer, anxious to get the trees 'out of his way, voluntarily rendered assistance in felling and logging them without thought of remuneration for his labor or timber.

For many years there was no demand for timber products. The first market, it has been stated, was found at New Orleans, and a few rafts were floated down. Before there was any considerable transportation development, Cincinnati became the center for tanbark. To supply the demand gigantic oaks, valuable at that time only for their bark, were cut down and afterwards rolled together and burned.

With the influx of new settlers came the towns. This necessitated the sawmills, and from 1820 until the present time Ohio has held an important place among the States in the production of rough lumber. There were more than 1,900 sawmills operating in Ohio in 1860. This number was steadily maintained for several decades, when the failing timber supply began to be felt and the larger mills were compelled to move to other regions. In 1910, 1,532 mills were still operating in Ohio. These were mostly portable mills of small capacity. Their combined cut in 1910 was 542,000,000 feet as against 990,000,000 feet sawed in 1900, a decrease of more than 45 percent.

The present forest lands of Ohio are found mainly in farm woodlots except in the southern part where there are rough and sterile lands more valuable for growing timber than crops. The woodlots vary in size and condition and only comparatively recently have the farmers begun to show interest in the proper management of them. The northeastern part of the State, as already noted, is where the pine and hemlock now grow; in the north, hard maple, ash, and oak predominate; in the southern portions the woodlots contain mostly oak, beech, elm, sycamore, chestnut and poplar. Those of the greatest commercial importance are the oaks, ashes, beech, maples, yellow poplar, the hickories, chestnut and elms.

#### PURPOSE OF STUDY

The study of the wood-using industries of Ohio presents data on a subject and along lines not heretofore attempted in the State, although similar studies have been made in other States. Eventually