

The making of hewed ties from young oak trees is, with the exception of lumber, the heaviest drain upon our oak forests. More than 22 per cent of the hewed cross-ties were supplied by the southern pines, about 7 per cent by cedar, and about 5 per cent by chestnut. Spruce, tamarack, western hemlock and redwood are used in lesser quantities.

Pulpwood.

More than 3 million cords of domestic pulpwood were used in 1907, and, in addition, some 925,000 cords were imported from Canada. Of the domestic pulpwood, nearly three-fifths was spruce and almost one-fifth hemlock. Most of the remainder was poplar, with small quantities of several other woods. Nearly as much spruce is used for pulp as for lumber.

Naval Stores.

The production of naval stores in 1908, according to data recently gathered by the Forest Service, exceeded 36 million gallons of turpentine and 4 million barrels of rosin, of which Florida and Georgia supplied two-thirds. About one-half of the product is exported.

While the production of naval stores does not necessarily destroy the forests, the methods so far used in the majority of the turpentine operations, coupled with subsequent fires and windstorms, have resulted in the destruction of a great deal of saw timber.

The Future Supply.

As is shown in the preceding pages, the total yearly drain upon our forests, not counting losses from fire, storms and insects, is some 20 billion cubic feet. Our present forest area of 550 million acres may be roughly estimated to consist of

200 million acres of mature forests, in which the annual growth is balanced by death and decay, of 250 million acres partially cut or burned over, on which, with reasonable care, there is sufficient young growth to produce in the course of time a merchantable, but not a full crop of timber, and 100 million acres of more severely cut and burned over forests, on which there is not sufficient young growth to produce another crop of much value.

Taken as a whole, the annual growth of our forests under these conditions does not exceed 12 cubic feet per acre, a total of less than 7 billion cubic feet. That is, we are cutting our forests three times as fast as they are growing. There is menace in the continuance of such conditions. While we might never reach absolute timber exhaustion, the unrestricted exploitation of our forests in the past has already had serious effects, and it will have much more if it is allowed to continue unchecked.

The necessity for more farm land may eventually reduce our total forest area to 100 million acres less than it is at present. It is entirely possible, however, to produce on 450 million acres as much wood as a population much greater than we have now will really need if all the forest land is brought to its highest producing capacity and if the product is economically and completely utilized. But to reach the necessary condition of equilibrium between timber production and consumption will take many years of vigorous effort by individual forest owners, by the States, and by the National Government.

A FLORIDA STOCK FARM.

Sketch of the Spring Park Farm Near Gainesville, For Stock Improvement.

The National Breeders' Gazette, published at Chicago, contains the following interesting sketch of Spring Park Stock Farm in its issue of July 7, under the caption of A Florida Stock Farm.

"It will surprise many to learn that \$125,000 has been spent in the equipment of a pedigree cattle breeding establishment in Florida. Spring Park Stock Farm at Gainesville is one of the most completely equipped farms in America. It was founded on the enterprise and indomitable energy of N. A. Callison, an Illinois man, who had mined phosphate for some years successfully, and who saw the future of stock improvement in Florida. Gainesville is the seat of Alachua county, which contains some of the richest soil of the state and some of the most enterprising farmers and truck growers. Spring Park is aptly named. Its 3,500 acres, comprising a number of plantations of antebellum fame, are liberally watered with ever-living springs. It is hammock land of strong character, breaking into mixed hammock toward its edges and then into pine land. The topography is most attractive, as the land rolls gently after the fashion of the famous Kentucky and Tennessee blue grass lands, and the picture is truly park-like. Mile on mile of woven wire fencing has been stretched, and the equipment of barns, paddocks, mule lots, feed yards and poultry yards is

very complete. For some years this establishment was conducted by a company, with Mr. Callison a heavy stockholder and manager, but recently he acquired sole ownership. Hereford, Jersey and Berkshire herds of high character are maintained. The 'white-faces' have given a good account of themselves under Florida conditions, demonstrating thoroughly their great grazing ability, and the Jerseys take kindly to their environments. The latter are ready sale, as fair prices will be given for all the good family cows that Mr. Callison can raise. Ranchmen have begun to evince interest in the Herefords, and the bulls are finding a market where they are most needed. Some judgment was exercised in the selection of foundation stock and although the cattle number 100 head, only bulls can now be spared from the herds, except occasionally a fresh Jersey. To supply the demand for family cows, Mr. Callison is developing a number of grade Jersey heifers. The Berkshires are eye-openers. They are of the bluest blood and under their free field life carry that massiveness and flesh which characterize the modern type of the breed. The work of improvement will further be affected by a very superior boar which was recently placed at the head of the herd. Spring Park Stock Farm, in the quality and extent of the land, the permanence of its improvements, and the character of its stock, would be a credit to any state; it is a conspicuous monument to the stock improvement campaign which is gathering effective headway in Florida."

Industrial Record Buyers' Directory.

ACCOUNTANTS.

T. G. Hutchinson, Jacksonville, Fla.

AXES.

J. D. Weed & Co., Savannah, Ga.

BANKS.

Commercial Bank, Jacksonville, Fla.

BEER—WHOLESALE.

Chas. Blum & Co., Jacksonville, Fla.

BARREL STAVES.

East Coast Lumber Co., Watertown, Florida.

BOXES AND CRATES.

Cummer Lumber Co., Jacksonville, Fla.

CLOTHING.

Standard Clothing Co., Jacksonville, Fla.

COPPER SMITHS.

McMillan Brothers, Jacksonville, Savannah and Mobile.

Baker, M. A., Brunswick, Ga., and Pensacola, Fla.

COOPERAGE.

Atlantic Cooperage Co., Jacksonville, Fla.

DRUGS.

Wm. D. Jones, Jacksonville, Fla.

ENGINES.

Schofield's Sons Co., J. S., Macon, Ga.
Lombard Iron Works and Supply Co., Augusta, Ga.

FOUNDRIES.

Schofield's Sons Co., J. S., Macon, Ga.
Lombard Iron Works and Supply Co., Augusta, Ga.

GENTS' FURNISHERS.

Standard Clothing Co., Jacksonville, Fla.

GROCERS—WHOLESALE.

Williams, J. P., Co., Savannah, Ga.

Young Co., John R., Savannah, Ga.

HARDWARE.

Weed & Co., J. D., Savannah, Ga.

Standard Clothing Co., Jacksonville, Fla.

HOOP IRON.

J. D. Weed & Co., Savannah, Ga.

IRON WORKS.

Schofield's Sons Co., J. S., Macon, Ga.

JEWELERS.

R. J. Riles Co., Jacksonville, Fla.

Hess & Slager, Jacksonville, Fla.

LUMBER.

East Coast Lumber Co., Watertown, Florida.

LIQUORS.

Blum & Co., Chas., Jacksonville, Fla.

MEDICINES.

Spencer Medicine Co., Chattanooga, Tenn.

MACHINE WORKS.

Schofield's Sons Co., J. S., Macon, Ga.
Lombard Iron Works, Augusta, Ga.

MATERIALS FOR TURPENTINE PROCESS.

Schofield's Sons Co., J. S., Macon, Ga.

METAL WORKERS.

McMillan Brothers, Jacksonville, Savannah and Mobile.

Baker, M. A., Brunswick, Ga., and Pensacola, Fla.

MILL SUPPLIES.

Schofield's Sons Co., J. S., Macon, Ga.

Weed & Co., J. D., Savannah, Ga.

Lombard Iron Works & Supply Co., Augusta, Ga.

NAVAL STORES.

Peninsular Naval Stores Co., Jacksonville and Tampa, Fla.

Barnes & Jessup Co., Jacksonville, Fla.

Consolidated Naval Stores Co., Jacksonville, Fla.

West-Flynn-Harris Co., Jacksonville, Fla.

Williams Co., J. P., Savannah, Ga.

Southern States Naval Stores Co., Savannah, Ga.

PHOSPHATE MACHINERY.

Lombard Iron Works & Supply Co., Augusta, Ga.

PUMPS.

Schofield's Sons Co., J. S., Macon, Ga.

RAILROADS.

Atlantic Coast Line.

NURSERIES.

The Barber-Friak Co., Macclenny, Fla.

SAWMILLS.

Lombard Iron Works and Supply Co., Augusta, Ga.

SHIP YARDS.

Cummer Lumber Co., Jacksonville, Fla.

SHOES—WHOLESALE.

Jos. Rosenheim Shoe Co., Savannah, Ga.

TANKS.

G. M. Davis & Sons, Palatka, Fla.

Schofield's Sons Co., J. S., Macon, Ga.

TURPENTINE BARRELS.

Atlantic Cooperage Co., Jacksonville, Fla.

TURPENTINE STILLS.

Baker, M. A., Brunswick, Ga., and Pensacola, Fla.

McMillan Brothers, Jacksonville, Savannah and Mobile.

TURPENTINE TOOLS.

Council Tool Co., Jacksonville, Fla.

J. D. Weed & Co., Savannah, Ga.

WATCHES.

Hess & Slager, Jacksonville, Fla.

R. J. Riles Co., Jacksonville, Fla.

YELLOW PINE LUMBER.

Cummer Lumber Co., Jacksonville, Fla.
East Coast Lumber Co., Watertown, Fla.