





# SAVING THE SHAVINGS

by WILLARD G. BLEYER

OUR FORESTS will last but 25 years longer if we continue to cut them at the present rate, declares Gifford Pinchot, former general forester, and one of the best informed men on the forest problem of the country.

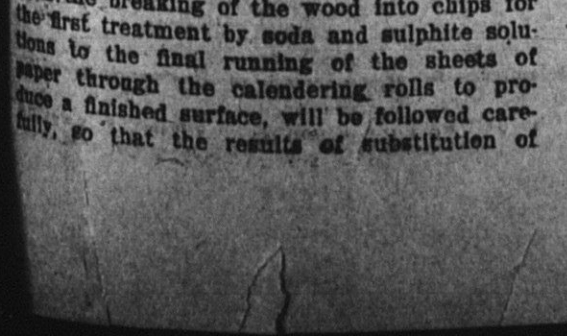
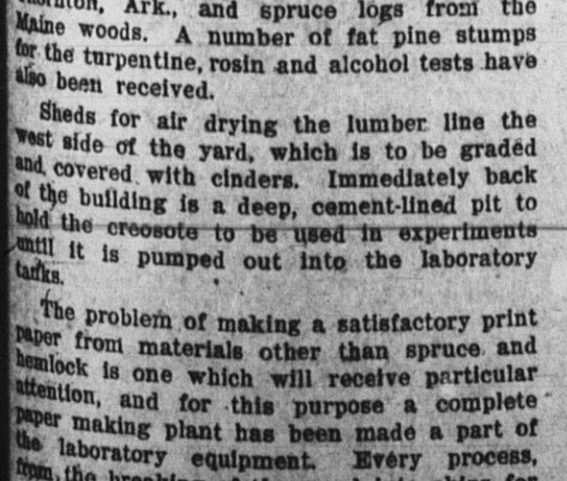
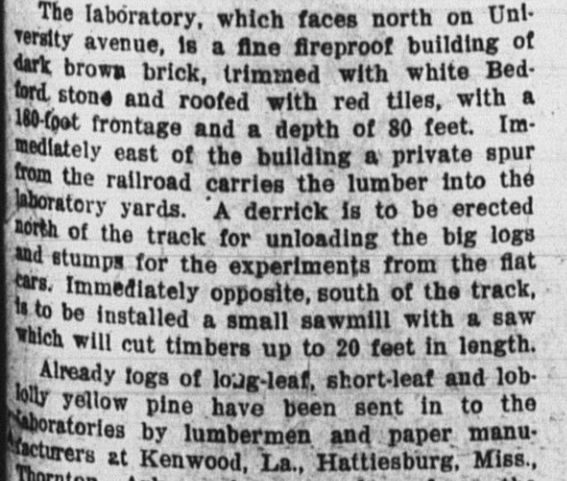
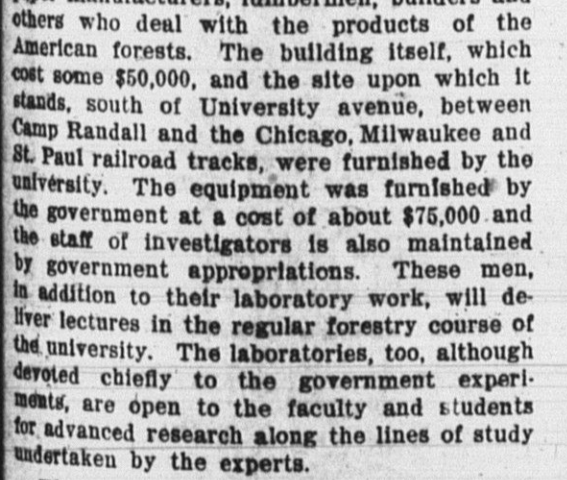
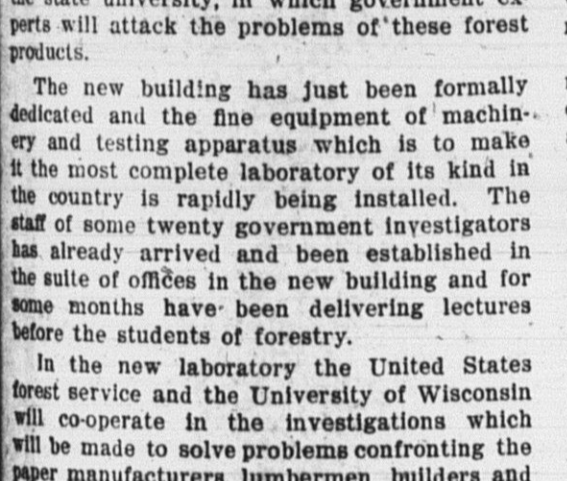
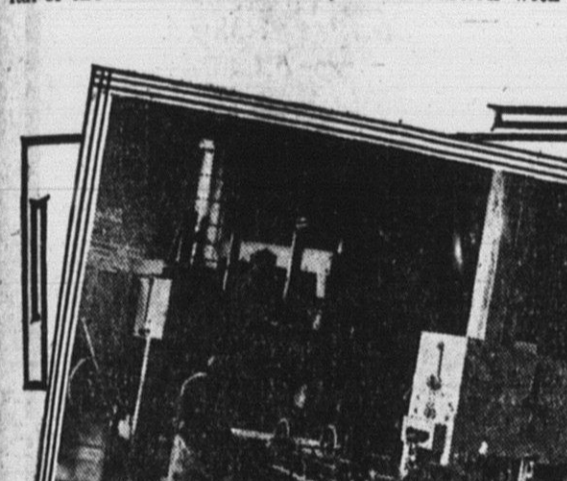
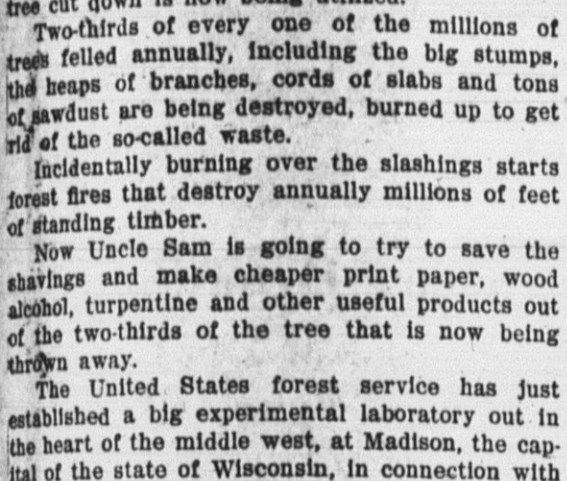
The increased cost of lumber, the scarcity of many kinds of woods, the high price of print paper, already bear witness to the forest famine that faces the United States. And still only one-third of every tree cut down is now being utilized.

Two-thirds of every one of the millions of trees felled annually, including the big stumps, the heaps of branches, cords of slabs and tons of sawdust are being destroyed, burned up to get rid of the so-called waste.

Incidentally burning over the slashings starts forest fires that destroy annually millions of feet of standing timber.

Now Uncle Sam is going to try to save the shavings and make cheaper print paper, wood alcohol, turpentine and other useful products out of the two-thirds of the tree that is now being thrown away.

The United States forest service has just established a big experimental laboratory out in the heart of the middle west, at Madison, the capital of the state of Wisconsin, in connection with



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from the vapor condenser, gives the exact amount absorbed by the timber, which is always weighed before and after treatment as a further means of calculating the oil absorbed.

In a small cylinder the preservative may be applied at a pressure of 600 pounds per square inch for smaller specimens and the resulting protection can be compared with that of the lower pressure preservatives.

Open tanks are provided for tests of preservatives that do not require pressure. These are heated with steam coils and an iron cage hung above lets the railroad ties or other timbers down into the hot oil.

Both soda and sulphate processes of treatment of the chips will be used and the laboratory will make its own sulphite liquor in a vat adjacent to the digesters, in which the wood is cooked by steam until the lignin is all dissolved and only the cellulose left.

A blast of high-pressure steam drives the chips against the side of the digester, further dividing the cellulose fibers, and then the whole mass is pumped out by a centrifugal pump into a tank in which it is stirred until the fiber is still further broken up.

When the liquor has been washed out of it in a washer driven by an electric motor (a contrivance much like the housewife's washing machine) it is put into a press and the water is squeezed out of it.

After going through the beating engines the refined pulp is run on to the screens of the paper machine and taken up by felt rollers, from which it goes to wooden rollers and then between metal rollers to the steam-heated drying drums, where the wet sheet is run back and forth until it is ready for the final smooth finish of the hot steel calendaring rolls.

How to make timber last longer by protecting it with preservatives from the various borers and fungus growths which attack wood will be another important problem to which considerable time and laboratory space are to be given.

## HUTCHINS IS NEW PREXY

Board of Regents Appoints Him For a Five-Year Term.

Harry B. Hutchins, dean of the law department and acting president of the University of Michigan since the retirement of Dr. James B. Angell, was appointed permanent president of the university by the board of regents.

Harry Burns Hutchins is a native of New Hampshire, and received his early education and college preparatory work in eastern schools. He was graduated from the University of Michigan with the class of 1871, with the degree of Ph. B. After spending a year as superintendent of schools at Owosso, he returned to the university, and was instructor in history and English for one year and assistant professor of history and English for three years. During this time he continued his legal studies, and was admitted to the bar in 1876.

## Good Roads For Wexford.

Cadillac and Wexford county are interested in state reward road building this year. The Cadillac Good Roads association reports that in addition to the \$500 a mile offered by the state, private citizens and lumber companies of this city have pledged \$800 a mile for every mile of state reward road built in this county, regardless of location, in the next three years. In addition there are several townships in the county that are building one, two and three miles of reward road out of township moneys. It is estimated that in the next three years there will have been built at least 40 miles of these roads in Wexford county.

In Osceola township, Osceola county, the town board is asking for \$25,000 for the building of the state reward roads during the present year.

## MICHIGAN ITEMS.

Out of work and despondent, Thomas O'Malley, 50, of Bay City, swallowed a quantity of lemonade and Paris green. He said he took the lemonade to destroy the taste of the poison. A stomach pump saved his life.

Accordingly to the monthly statement, issued, there is a balance of \$1,708,562.86 in the state's general fund. So far this year \$6,320,706.70 has been taken from that fund. Deputy John Haarer, of the treasurer's office, stated that Michigan will not be compelled to borrow here December, and perhaps not then.

While it is rare, indeed, that the representatives of five generations of one family in a direct line are heard of, such a family resides in Berrien county. Mrs. William Shnelly, aged 75 years, represents the first generation of the family, and is the great-grandmother of the baby who represents the fifth generation, and is six months old. Mrs. Shnelly was born in Michigan.

An opinion is current in Flint that W. Fred Richardson, the missing bookkeeper of the savings department of the First National bank, is insane. This opinion is based on peculiar transactions made by him for the Maccabee lodge, of which he was finance keeper. Officers of the order believe he kept members, whose dues were delinquent, in good standing by taking money from the general fund.

## THE MARKETS.

DETROIT—Cattle—Market slow at last week's prices on all grades. Extra dry-fed steers and heifers, \$8.25; steers and heifers, 1,000 to 1,200, \$5.50 to \$5.75; steers and heifers, 800 to \$4.50 to \$4.75; grass steers and heifers that are fat, \$4.00 to 1,000, \$4.50 to \$5.25; grass steers and heifers that are fat, \$4.50; good fat cows, \$3.50 to \$4.25; common cows, \$2.25 to \$3.50; canners, \$2.25 to \$3; choice heavy bulls, \$4.25 to \$4.75; fair to good bolognas, bulls, \$4 to \$4.25; stock bulls, \$3.50 to \$4; choice feed steers, 800 to 1,000, \$4.50 to \$4.75; fair feeding steers, 800 to 1,000, \$4.25 to \$4.50; choice stockers, 600 to 700, \$4.25 to \$4.50; fair stockers, 600 to 700, \$4 to \$4.25; stock heifers, \$3.50 to \$4; milkers, large, young, medium age, \$4 to \$5; common milkers, \$2.50 to \$3.50.

Yield calves—Market 50c higher than last Friday. Best \$7.50 to \$8; others, \$4 to \$7.

Milch cows and springers—Steady. Sheep and lambs—Market, 50c to 75c higher on lambs; sheep, steady. Best lambs, \$7; fair to good lambs, \$6 to \$7; light to common lambs, \$5 to \$6.75; yearlings, \$4.50 to \$5.50; fair to good sheep, \$4 to \$5.50; culs and common, \$2.50 to \$2.75.

Hogs—Market, 15c lower than last week's close. Range of prices: Light to good butchers, \$9.25; pigs, \$9.35; light Yorkers, \$9.30; heavies, \$9.30; stage, 1-3 off.

EAST BUFFALO, N. Y.—Cattle—dull. Hogs—Firm; heavy, \$9.60; Yorkers, \$9.50 to \$9.70; pigs, \$9.50.

Sheep—Steady; spring lambs, \$8.25; yearlings, \$5.50 to \$6; wethers, \$4.60 to \$4.85; ewes, \$3.75 to \$4.

Calves—\$5 to \$8.50.

Grain, Etc. DETROIT—Wheat—Cash No. 2 red, \$1.04; July opened at \$1.02 1/2, declined to \$1.00 1/2, and closed at \$1.01 1/2. September opened at \$1.03 1/2, declined to \$1.02 and closed at \$1.02 1/2. December opened at \$1.08, declined to \$1.04 1/2, and closed at \$1.04 1/2.

## Don't throw kisses, my boy; deliver them in person.

Mrs. Winslow's Soothing Syrup. For children teething, softens the gums, reduces inflammation, allays pain, cures wind colic, 25c a bottle.

Ennui is the price we pay for knowledge.

Dr. Pierce's pleasant Peppets cure constipation. Constipation is the cause of many diseases. Cure the cause and you cure the disease. Easy to take.

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Important to Mothers. Examine carefully every bottle of CASTORIA, a safe and sure remedy for infants and children, and see that it bears the Signature of *Dr. J. C. Watson*.

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In New York. Up-to-Date Gladys—Is it really such an improper play? Up-to-Date Dorris—Oh, it isn't just to see, but it's all right for us girls.—Puck.

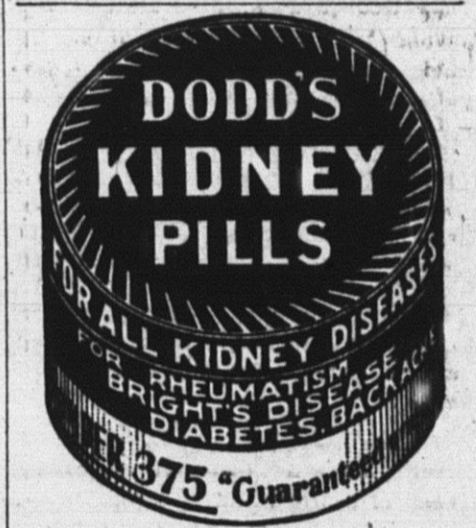
## BOY TORTURED BY ECZEMA

"When my boy was six years old, he suffered terribly with eczema. He could neither sit still nor lie quietly in bed, for the itching was dreadful. He would irritate spots by scratching with his nails and that only made them worse. A doctor treated him and we tried almost everything, but the eczema seemed to spread. It started in a small place on the lower extremities and spread for two years until it very nearly covered the back part of his leg to the knee.

"Finally I got Cuticura Soap, Cuticura Ointment and Cuticura Pills and gave them according to directions. I used them in the morning and that evening, before I put my boy to bed, I used them again and the improvement even in those few hours was surprising. The inflammation seemed to be so much less. I used two boxes of Cuticura Ointment, the same of the Pills and the Soap, and my boy was cured. My son is now in his seventeenth year and he has never had a return of the eczema.

"I took care of a friend's child that had eczema on his face and limbs and I used the Cuticura Soap and Ointment. They acted on the child just as they did on my son and it has never returned. I would recommend the Cuticura Remedies to anyone. Mrs. A. J. Cochran, 1823 Columbia Ave., Philadelphia, Pa., Oct. 20, 1909."

A rich man's children seem to think it is up to them to make a noise in the world.



## WESTERN CANADA

What Prof. Shaw, the Well-Known Agriculturist, Says About It:

"I would sooner raise cattle in Western Canada than in any other part of the world. Feed is cheaper and climate better for the purpose. Your market will improve. In addition to which, the farmers will produce the surplus of their crops grown up to the 90th parallel. The surplus of the International Board will be taken at a rate beyond present conception. We have a vast people in the United States who want to take up this land."

70,000 Americans will enter and make their home in Western Canada this year. 1,000 produce another large crop of wheat, oats and barley, in addition to which, the surplus of their crops grown up to the 90th parallel. The surplus of the International Board will be taken at a rate beyond present conception. We have a vast people in the United States who want to take up this land.

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St. Vitus Dance, Epilepsy and all Nervous Diseases. Send to cents for 4 ounce bottle.

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