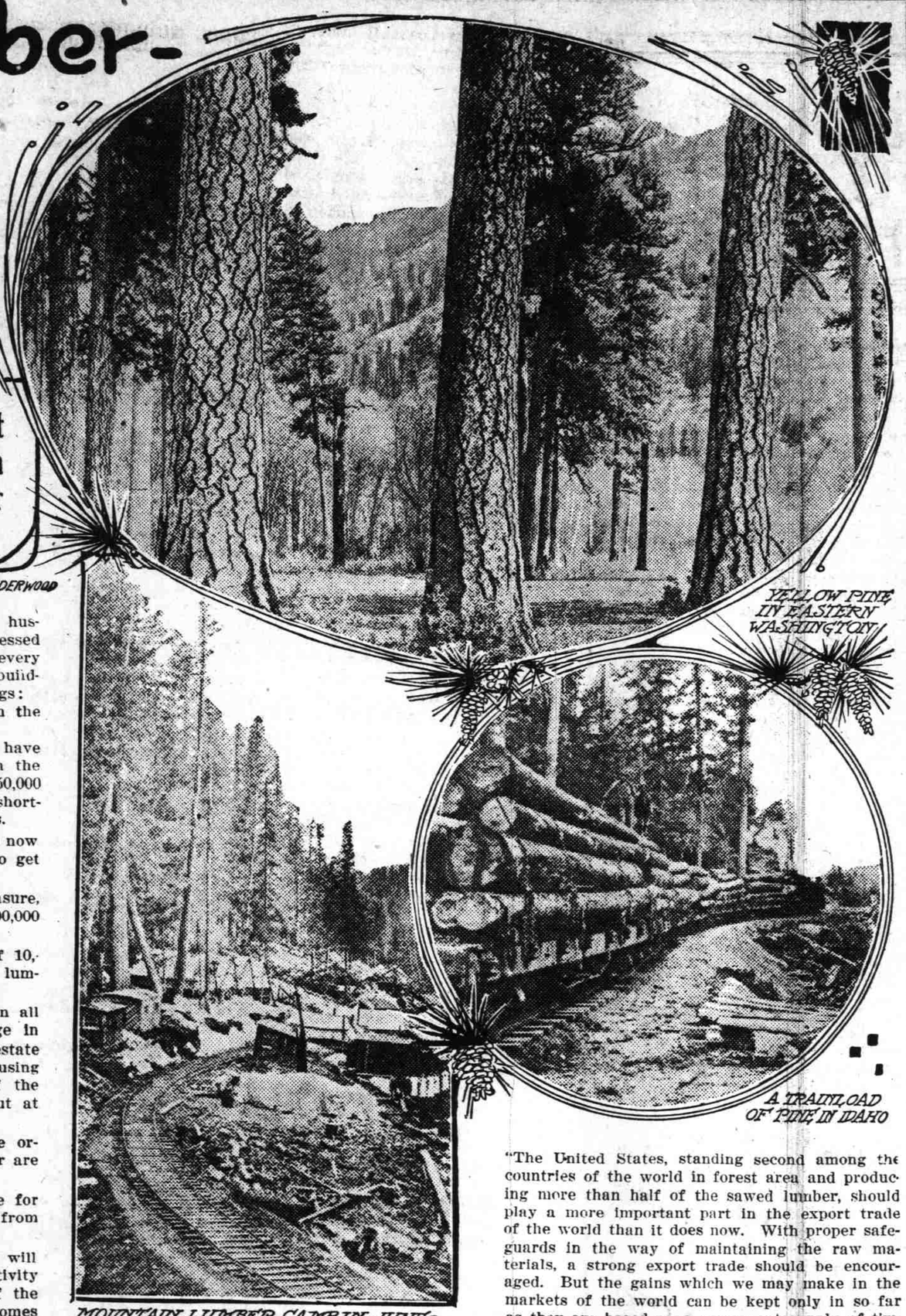
Mr. Lumber-jack Will Have to Hustle

Lumbermen Must Turn Out Ten Billion More Feet a Year to Meet Demand for Home Building

Photos by UNDERWOOD & UNDERWOOD



YELLOW PINE IN EASTERN WASHINGTON

A TRAINLOAD OF PINE IN IDAHO

MOUNTAIN LUMBER CAMP IN JUNE

R. LUMBERJACK will have to hustle! That is the publicly expressed opinion among the experts in every line of business connected with building. They say among other things:

That the demand for homes in the United States is nation-wide.

That 800,000 homes should have been built at the normal rate in the last two years and that only 50,000 were actually built, leaving a short-nt is estimated at fully 750,000 homes.

from 500,000 to 550,000 homes must be now yearly to make up the shortage and to get o the normal rate.

50,000,000 feet of lumber, board measure, ave to be cut yearly, instead of 40,000,000 which is the normal rate.

an increase in the lumber output of 10,0 feet a year will certainly make the lumk hustle.

experts do not agree as to figures in all But it is evident that the shortage in is very large. At the recent real estate tion in Atlantic City inadequate housing es were reported from all parts of the y and the shortage in homes was put at 00.

n, it should be remembered that the or-demands of manufacturers for lumber are be met.

hat the demand of devastated Europe for will undoubtedly stimulate export from untry.

e all the lumberjacks of the country will o hustle, it looks as if the biggest activity e demanded from the lumberjacks of the coast, where most of the lumber comes owadays.

pictures show scenes in Idaho and Wash-The mountain lumber camp is 4,000 feet northern Idaho and there is still snow on ound in June. The trainload of logs is on row-gauge road in the Idaho pine forests Fernwood. The three magnificent yellow are in a logging region near Spokane. Yelpine is the principal source of lumber in n Washington. The normal production of pine is about 16,000,000,000 feet (board re) a year. It is figured that this output ave to be increased to about 20,000,000,000 Some of the white pine trees near Spokane e feet in diameter and 175 feet high. The t white pine belt left in the United States northern Idaho. Some of the largest and quipped sawmills in the country are in this ington-Idaho district.

s housing problem is a big one—so big that y lead to action by the federal government. department of labor, in announcing in Janthat 500,000 new dwelling houses were needd this to say:

o billion dollars, available for loans to builders, would go far in providing the sary capital for the building of these dwell-Securities of a value approximating $2,000,0 are held by the constitutent organizations United States League of Building and Loan ations. Labor conditions, manufacturing, ocial needs clearly indicate the desirability immediate acceleration of building activiroughout the country.

making available capital necessary to ng, a tentative plan may materialize in a al system of 'home loan banks.' The plan mplates the creation of a bank in each fedeserve district, similar to the land banks d under the federal farm loan act, with a local building and loan association could r collateral, receiving in exchange home onds."

announcement has been made in Washing-Louis K. Sherman, president of the United Housing corporation, that the land in varities which was to have been utilized by the ment in its war emergency building prois to be sold to home seekers for the erecf private houses. The conditions governing le of such property are that there is a real d for houses in the community and that the uction of homes will be started immediately ing the sale. The lots are to be sold pub-Complete sets of plans, prepared by archfor the housing corporation, will be furd with the various lots.

svenor Atterbury has some interesting s to say on this problem. He is known as rchitect of international reputation. He is mber of the board of directors of the Na-Housing association, chairman of the warhousing committee, member of the National Planning institute, member of the French ell of Architects and Engineers on the probof reconstruction in the devastated regions member of the New York tenement house mission. For 15 years, under various approions, beginning with the Henry Phipps enses and then with the Russell Sage foundahe has spent a large part of his time in reh work and experiments in the possibilities uantity production of the small house suitfor workingmen. These practical studies demonstrations have involved the expendiof two or three hundred thousand dollars. ys among other things:

e will make no substantial progress toward solution of the industrial housing problem we apply to the production of the small house the same principles of standardization, machine, factory and quantity production that are employed by all other great industries.

"Most experts agree that the real crux of the industrial housing problem lies not in land cost, taxes or interest rates, but in the house itself—the cost of construction. The investment in building is anywhere from three to ten times the cost of the land, and is therefore the dominant item and the most potent factor in the entire problem. It is all very well to eliminate the waste in the other factors—waste of time, labor or material—but if the productivity of human labor and capital in construction can be increased the result would be a real step toward the solution of the difficulty and the benefits of such an economy would accrue to all parties involved.

"That the 'ready-made' house will come eventually is evident from the progress made. The first experimental building designed to demonstrate the principle of standardization and factory production was successfully erected in 1909. Since then the work of demonstration and development has proceeded, with the general result always pointing, in my judgment, to the soundness of the principles and their ultimate success.

"The help we need ought to come from a government research department established for that purpose. This department would have to bear the same relation to housing, which is commodity, that the department of agriculture bears to wheat or the bureau of mines to minerals. In other words, the housing of the industrial army is as important in peace as that of the munition workers in war times or the fighting units themselves. And for these purposes the government spent hundreds of millions of dollars—and established a special department. It is a fair question whether the importance of the problem today does not justify the establishment of a permanent bureau of housing."

"What effect will this increased activity of the lumberjack have on our lumber supply?" is an important question.

The exportation of American lumber on the scale likely to result from the European demand for material will, unless accompanied by provision for regrowth, seriously deplete the supplies needed by home industries and impose hardships on the consuming public here, is the view of Henry S. Graves, chief of the United States forest service.

The department of agriculture has issued a pamphlet by Colonel Graves warning the wood-using industries, the lumbermen and all interested in home supplies of forest products or foreign trade in them, that the question of lumber exports cannot safely be left to the care of itself. The situation is especially critical, he points out, with certain of our highest grade woods, such as ash, oak, hickory, yellow poplar and black walnut, which are the support of important industries, and with southern yellow pine, of which the main bulk of supply is approaching exhaustion and which is likely to be exported in large quantities to meet after-the-war demands.

The situation, Colonel Graves holds, is one of ominous possibilities. "Most of the leading industrial nations of the world," he says, "whether lightly wooded and dependent upon imports or heavily wooded and exporters, are taking steps to safeguard and develop their timber resources. The United States alone appears to be content to build up a great export trade without considering the ultimate effect upon domestic timber resources and their capacity in the future to supply the home market."

Sound public policy does not, however, necessarily demand the discouragement of exports. "The United States, standing second among the countries of the world in forest area and producing more than half of the sawed lumber, should play a more important part in the export trade of the world than it does now. With proper safeguards in the way of maintaining the raw materials, a strong export trade should be encouraged. But the gains which we may make in the markets of the world can be kept only in so far as they are based on a permanent supply of timber. If they are to be based merely on a cut which, as in the case of old-growth southern pine, will not supply even our domestic needs for more than the next ten or fifteen years, we shall soon be crowded out of the foreign markets by countries which base their export trade on a continuous self-perpetuating resource."

Europe's emergency need for lumber, above its consumption in normal times, is put at about 7,000,000,000 feet of lumber a year for the near future, a conservative estimate; and her own forests have been depleted by the war.

Europe, however, needs cheap lumber above all, and our product will not be attractive for the principal needs of reconstruction, according to Colonel Graves. Nevertheless, the world situation in lumber, he says, offers "an undoubted opportunity for a permanent export trade from this country of proportions that would seem to be limited only by our own powers to sustain the production of saw material."

Senator Sherman presented to the senate the other day a memorial from the Illinois legislature, which was in part as follows:

"Whereas the wood-using industries not depending upon uncertain local forest supplies have become centered to a very large extent in the thickly populated districts east of the Mississippi river and are drawing their supplies from the remaining forests in the eastern states, the gulf states and the states adjacent to the Great Lakes. A large number of such industries are located in the state of Illinois, with the city of Chicago the center of a very large and important group. Chicago has for many years been the chief lumber distribution point of the United States and the greatest point of lumber distribution in the world. These important industries, including the manufacture of railway cars, boxes, sashes and doors, farm machinery, furniture, pianos, vehicles, and many other articles, are now threatened by the exhaustion of the forests from which their supplies have been drawn. They now face the necessity of bringing timber from the Pacific coast with heavy freight charges added to the cost. To the same Pacific coast supply the country must look for lumber for general construction purposes. The transportation system of the country must add to its present burdens the transcontinental shipment of very large quantities of lumber, a bulky product upon which a high freight rate greatly increases the cost to the consumer.

"Resolved, That the Fifty-first general assembly of the state of Illinois urges the attention of the president and the congress of the United States to the present timber situation and recommends that, without delay, there be formulated such a national program of forestry as will insure the future timber supplies required by the industries of the country. As an example of what should be done, this general assembly points to the wise course of the republic of France in so managing its forests for more than a century that they contributed substantially to the winning of the great war.

"It is further urged that the federal government, acting independently or in co-operation with the states, inaugurate action looking toward such measure of public control of the remaining bodies of original timber as will make sure that their supplies will be available as needed by the industries.

"It is furthermore urged that comprehensive plans be put into effect for restoring the forest on cut-over lands which are nonagricultural in character in the eastern states, in the states bordering the Great Lakes, and in the South, in order that timber supplies from these regions may be available to the established industries of the central and eastern states."

GRASSHOPPER IS GOOD FOR FEED

When Dried They Can Be Fed to Poultry Flock With Other Feeds During Winter.

INSECTS HIGH IN PROTEIN

Poisoned Bait Recommended Consists of Bran or Sawdust Made Tasty and Attractive by Addition of Molasses and Fruit.

(Prepared by the United States Department of Agriculture.)

When grasshoppers make their appearance they can be destroyed by the common poisoned bait method. But there is another way of getting rid of grasshoppers that makes the pests pay for the trouble of killing or catching them. This method consists of driving a grasshopper catcher through an infested field, catching all the grasshoppers that hop, and then feeding the insects to chickens. They can be dumped into sacks and hung up to dry and fed as dry grasshoppers, or if it is preferred to feed the grasshoppers alive, the machine can be hauled to the poultry yard and placed so that the front will face the light. The insects will find their way out but not too fast for an ordinary flock of chickens. Thus the grasshopper catcher becomes a poultry self-feeder.

An analysis of grasshoppers shows them to be high in protein and therefore good chicken feed. It is known that chickens are more productive when insects are a part of their ration, and grasshoppers when dried can be used with other feeds during the winter.

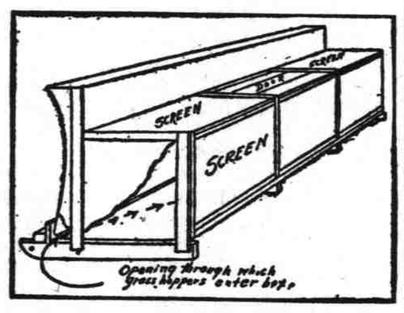
Make-Up of Poisoned Bait.

The poisoned bait recommended consists of bran or sawdust made tasty and attractive by the addition of molasses and fruit and treated with an arsenical poison. The following formula is recommended:

Bran (half and half bran and hardwood sawdust, or sawdust alone), 25 pounds; paris green or crude arsenious oxide, 1 pound, or white arsenic, 1½ pounds; molasses (cheap feeding grade), 2 quarts; lemons, bananas or oranges, 6 fruits, or 1 ounce of cheap lemon extract; water, about 2 to 4 gallons.

The poison should be thoroughly mixed with the bran. The water, molasses and finely chopped fruit or extract are then mixed and added. The mixture should be wet so that it molds in the hands but is not "soppy." The bait should be scattered broadcast at the rate of seven to ten pounds to the acre, applications being made in the early morning.

In clover or alfalfa much material and labor can be saved by first cutting around the field until there remains a small central uncut area where the grasshoppers will have gathered and may be quickly and cheaply destroyed by the poisoned bait. If the grasshoppers are feeding in corn or young trees more water, or better, more molasses and water, should be added, and the mixture thrown forcefully so that the particles will adhere to the crops to be protected.



Grasshoppers Can Be Captured in This Portable Cage.

How to Make Grasshopper Catcher.

The grasshopper catcher, which has an advantage over the old-style hopperdozer, in that the insects can be utilized for chicken feed, is about 16 feet long with an upright but curved piece of tin in front and so arranged that the grasshoppers will strike it as they hop up, falling to the bottom and back through a narrow trap opening into a box behind. The tin front does not extend quite to the bottom, where, just in front of the tin shield, is a strip of tin so placed that there is an opening about 1½ or 2 inches wide. This front strip or lip may be made by using a 16-foot length of gutter, one side of which is flattened outward. The back and top of the box in the rear is covered with wire screen and the top should be so hinged that it can easily be opened and the accumulated grasshoppers shoveled out as needed.

A horse is hitched to an extended beam at each end and the catcher dragged through the infested area, beginning at the sides and working toward the center of the field.

ENSILAGE IS VALUABLE FEED

It Is Excellent Feed for Cows, Sheep, and Beef Cattle—Silo Is Good Investment.

While you are canning fruits and vegetables for your home, as you surely will, why not can (ensile) feed for your live stock? Ensilage may be called canned feed, and it is a very valuable feed for cows, sheep and beef cattle. The silo will be an investment if you have many animals to feed next winter.

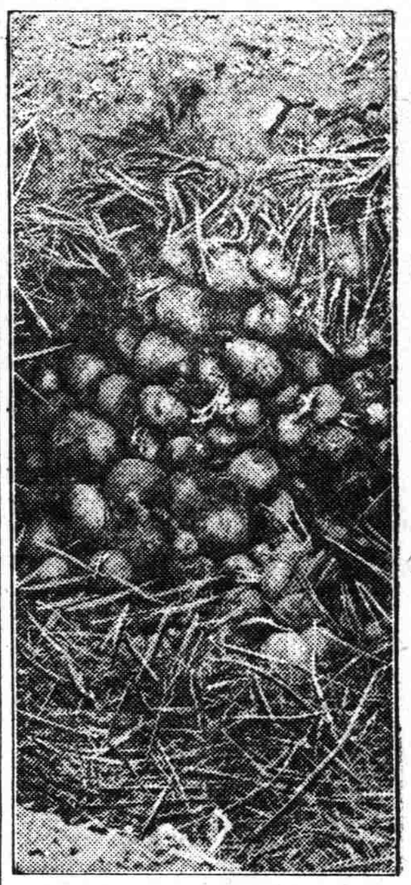
OUTDOOR BANKS FOR VEGETABLE STORAGE

Safe Place for Potatoes, Carrots, Beets, Turnips, Etc.

Well Drained Location Should Be Selected—Straw, Leaves or Similar Material May Be Used for Lining—Cover With Dirt.

(Prepared by the United States Department of Agriculture.)

Outdoor banks or pits are used very generally for keeping vegetables. The conical pit is used commonly for such vegetables as potatoes, carrots, beets, turnips, salsify, parsnips and heads of cabbage and is constructed as follows: A well-drained location should be chosen and the product piled on the surface of the ground; or a shallow excavation may be made of suitable size and six or eight inches deep, which may be lined with straw, leaves or similar material and the vegetables placed on the litter in a conical pile.



Safe Way to Keep Potatoes, Carrots, Etc.

The vegetables should then be covered with straw or similar material and finally with earth to a depth of two or three inches. As winter approaches, the dirt covering should be increased until it is several inches thick. The depth of the earth covering is determined by the severity of the winters in the particular locality. It is well to cover the pits with straw, corn fodder or manure during severely cold weather.

The amount of ventilation necessary will depend upon the size of the pit. Small pits containing but a few bushels of vegetables will receive sufficient ventilation if the straw between the vegetables and dirt is allowed to extend through the dirt at the apex of the pile. This should be covered with a board or piece of tin held in place by a stone to protect it from rain. In larger pits ventilation may be secured by placing two or three pieces of board nailed together at right angles.

Vegetables keep very well in such pits, but it is difficult to get them out in cold weather, so that when a pit is opened it is desirable to remove the entire contents at once. For this reason it is advisable to construct several small pits rather than one large one, and instead of storing each crop in a pit by itself it is better to place a small quantity of several kinds of vegetables in the same pit, so that it will be necessary to open only one bank to get a supply of all of them. In storing several crops in the same bank it is a good plan to separate them with straw, leaves or other material. The vegetables from the small pit may be placed temporarily in the storage room in the basement.

DEAD VEGETATION IS USEFUL

Grass, Straw, Stalks and Leaves Should Be Plowed Under for Humus-Making Material.

According to the Ohio experiment station, vegetable matter, such as grass, straw, stalks and leaves, loses in six months fully 50 per cent of its carbon or humus-making material. In other words, these materials plowed under in the fall are twice as valuable for humus as when plowed under in the spring. Here is an excellent reason why every day, when the ground is dry enough, should be utilized in plowing under the dead vegetation on our fields.

IMPROVE FERTILITY OF SOIL

To Make It Possible to Raise Good Crops Next Year Land Must Have Good Culture.

Every farmer is interested in getting large crops and ample profits this year. This is laudable and highly desirable. But good crops will be needed next year and the years that follow. To make this possible the soil must have such culture as will prove its fertility.