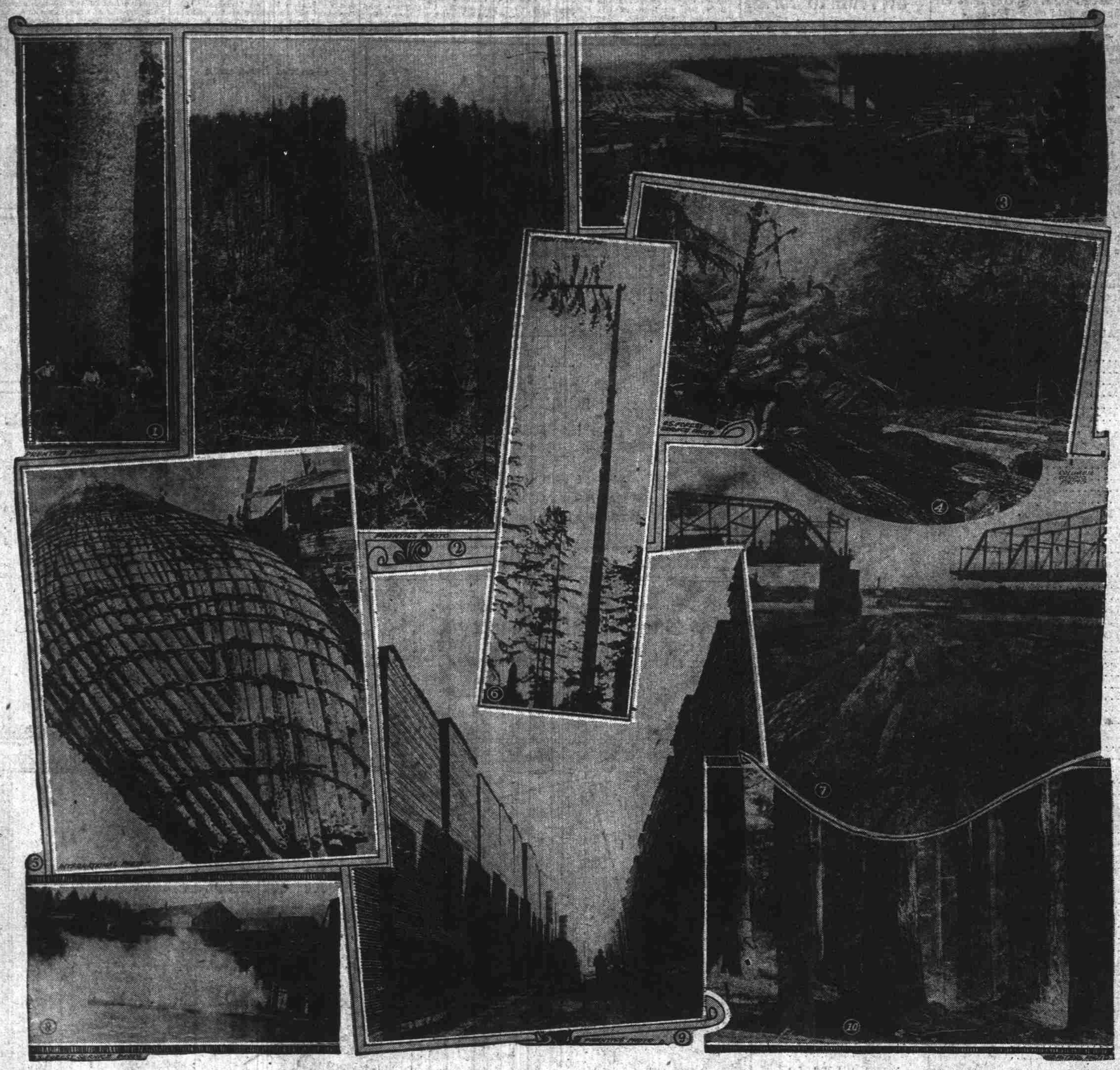
LOGGING AND LUMBERING PRODUCE WEALTH OF $110,000,000 IN OREGON THIS YEAR

HOW Oregon forests are transformed into lumber: 1—Falling a giant spruce. 2—Cable incline of 66½ degrees used in logging operations. 3—Great sawmills at Bend, typical of the mills in the lumber section. 4—From tree to log. 5—Sea-going log raft. 6—Preparing tree for a high line. 7—Log boom in the Willamette at Portland. 8—Into the water. 9—The finished product. 10—In an Oregon forest.



Trade in Hemlock Looms Oregon Is Rich in Timber

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Western hemlock is one of the most abundant and least-appreciated soft-wood trees. While opinions differ as to the true rank of its wood, it can not be denied that the wood of this Pacific coast tree is exceptionally suitable for many important purposes. That Western hemlock has a very promising future is certain.

It is true that Western hemlock has been unpopular, not only with lumber merchants in the east but with lumbermen of the Pacific coast. Although there may be a number of reasons, we are justified in saying that its unpopularity was largely due to a prejudice.

Western lumbermen tried to get around this prejudice against hemlock by a change of name, with the result that Western hemlock has been marketed under different trade names, such as "silver fir," "gray fir," "Alaska fir," "hemlock spruce," and more recently, "Olympic pine."

Few, if any, were fooled by this practice, and the camouflage undoubtedly tended, through setting up doubt and confusion in the minds of purchasers, to prolong rather than end the prejudice against this perfectly good wood.

Recently Western lumbermen decided to market Western hemlock under the trade name of "West Coast hemlock." This puts the wood under its true name and on the basis of its true worth.

Mature Western hemlock reaches a diameter of from two to five feet, and attains a height of from 125 to 150 feet. Exceptional trees have measured eight feet in diameter and 250 feet in height. The heartwood is almost white in color, the yllwish white sapwood forming a vrey small percentage of the trunk—generally not over one inch in thickness.

The wood is moderately strong and hard, straight-grained, rather light in weight, practically non-resinous, free from odor when dry, and works smoothly.

WOOD DECAYS EASILY

It is considered to be less resistant to decay than that of most cone-bearing trees, and for this reason the wood should not be used in a service where decay is likely to take place. In this respect it is in a class with Sitka spruce. It is not as durable as Douglas fir, and by no means as durable as Western red cedar.

It is not so strong as Douglas fir and somewhat stronger than Western larch. As a beam, in a green condition, Western hemlock is 68 per cent as strong as Douglas fir, and seven per cent stronger than Western larch.

Western hemlock is manufactured into all the principal planing mill products, such as flooring, interior finishing lumber, case, base, ceiling and siding. For interior work it is especially suitable. It is soft enough to take nails and machine easily, yet hard enough to finish smoothly and wear well. It makes as good flooring as any of the softwoods and better than most.

Latest available statistics, or those for 1920, show that one-fourth of the total lumber cut of the entire United States is produced in Oregon and Washington. In that year lumber production in these two states, amounting to 8842 million board feet, was larger than any preceding year. The cut of hemlock amounted to 575 million, an increase over preceding years. In 1915 the cut of Western hemlock in Oregon and Washington was 368 million; in 1910 167 million.

Western hemlock is the most important pulpwood on the Pacific Northwest. In 1920, 313,304 cords of spruce, white fir and Western hemlock were used in the manufacture of paper in Oregon and Washington, of which 203,234 cords were Western hemlock. British Columbia pulp mills also utilize large quantities of this species. That it will be more largely used for pulp on the Pacific coast in the near future, with the exhaustion of Eastern pulpwoods, is most likely.

At present less than five per cent of the newsprint manufacturing industry of the country is on the Pacific coast. Geographically, the industry has remained stationary in the Northeast, while the lumber industry on its hunt for timber moved successively to the lake states, the south, and the west.

The east of necessity ultimately must draw on the west for large amounts of paper. That this paper will have to be transported long distances does not change the situation.

Western hemlock grows in the Pacific coast forests from Alaska to Northern California, and extends eastward in Oregon and Southern Washington as far as the crest of the Cascade mountains. In Northern Washington and Southern British Columbia its range extends from the coast to the Western spurs of the Rocky mountains in Northern Idaho and Northwestern Montana. The best stands are found in the coast region and on the west slope of the Cascade mountains up to an elevation of 3500 feet.

The present stand of timber in Washington, Oregon and California is about 1141 billion feet, or practically half of the remaining saw timber in the United States. Oregon leads with a total stand of 494 billion feet; that of Washington is 334 billion, and that of California 313 billion. Six hundred and eighty billion feet, or one-half of the total, occurs in Western Washington and Oregon.

94 BILLION FEET

Of the above, Western hemlock, largely in Western Washington and Oregon, comprises 94 billion feet. There are about 50 billion feet of Western hemlock in Alaska, and large stands in British Columbia. The existing stand of Western hemlock in California, Oregon, Washington and Alaska is large enough to supply the United States with lumber for nearly five years; it would supply one of the largest sawmills with saw logs for 1400 years. Cut with regard to forestry principles, or in such manner as to keep the land reasonably productive, there is enough Western hemlock in the Pacific coast states and Alaska to supply the country's present newspaper requirements in perpetuity.

Suggestions Made For New Tree Crop

A few simple provisions in the way of slash disposal and fire protection are the most important steps in securing a new crop of trees on cut-over Douglas fir areas of Western Oregon, according to federal forest officers. They point out that the public interest should require the lumbermen to make these provisions for a future crop as one of the conditions under which he is permitted to operate in one of the state's basic resources.

REFORESTATION MOVEMENT

The reforestation movement in the United States needs exactly the same kind of industrial leadership as that which has built our railroads, developed our waterpower, and established our new industries, according to a recent statement of Colonel W. B. Greeley, in charge of the forest service, United States department of agriculture.