





SHOOTING"LOGS -

IN THE FORE



DUMPING LOGS AT TIDEWATER.



HE forests of Oregon! Where will you match them for majesty, for grandeur, for extent In robes of living green they clothe the hills; they the rugged cover mountain slopes

with a mantle, and every cleft and glen and canyon is lined, deep and close, with their somber shade. The restful influence of "dim cathedral gisles," is theirs. Swift, snow-fed streams thread, with flashes of silver, the shadowed silences, and laugh at Echo, sleeping in her hidden caves, or wandering, lost, along the distant ridges. Nowhere in the world can be found more magnificent reaches of timber.

From the Cascades' frozen gorges

to its serrated summit, and down to the sea, the fir trees of Oregon stand thick and stately and tall. They have seen the centuries pass, silent and unnamed, in this once lonely land, and the winds that blow out of the western ocean have stirred their topmost branches, for, perhaps, a thousand years. The moccasined feet, whose noiseless imprint, for countless generations of men, wore a winding path in the soft moss carpet, no more pass and repass in the hushed solitudes. The Indian trails are overgrown. The great brown boles of firs rise, like fluted olumns, from a luxuriant tangle of varied green, crowding each other closely as they stand, with here and there a cedar, or a hemlock, emblematic of true humility, mingling its graceful branches with the darker foliage of the taller,

stateller trees. The stillness is intense, but listen! Presently there is a faint murmuring, a long-drawn sigh, that swells and sinks and swells again, gradually gethering in wolume till it is like the rush of stormtossed sens. The winds are awake. The trees find voice.

The Tree.

remote that scarcely the birds had found it, stood the tree-a Douglas fir. Stately and tall in sun and rain,

An emerald tower of mesteries, With murmur of the far-off seas And Nature's countless melodies

Sighing through all its banners green Hundreds of years had slipped into the voiceless past since, bursting the brown walls of its seed-prison, it shot up into the sunlight, a slender shaft, with myriads of its kind, growing swiftly through the long, bright Summers and buried in Winter beneath sheltering snows.

Year by year, crowding ever more closely its immediate neighbors, until the less sturdy of them lost heart and fell away, crumbling to dust that mixed with the mold, the young fir grew to a tree. Three hundred feet above the brown earth its green crest was kissed by the sun and caressed by the winds. The white clouds, drifting in from the sea, across the lower hils and valleys, were to the grain-paved levels of the valley; caught and tangled in its loftler branches. from the eastern base of the Coast Range Lightly rooted in the yielding soil, it yet stood firm and straight, protected from the rage of storms by the serried ranks of its fellows. Sheer two hundred feet from the matted luxuriance of bracken and wild grape at its base, it sprang, without a knot or bough to mar the

symmetry of its splendld bulk. The "cruisers," those men of fell intent, who went up into the great forest to spy out the lay of the fand and estimate the quantity of the timber yield, paid it no particular attention. There were so many thousands of Douglas fir, all so nearly similar, that it seemed hardly worth while to single out one as an object for special admiration. But the two men who followed the timber cruisers to mark the trees for felling, were impressed with its majesty. They lamented, as they rested in the shaded stillness, feasting their eyes upon its symmetry and size the fact that it must fall. Lumber-

men are not without sentiment. The Silence Broken. Later came the logging crew, and the

silence of unnumbered centuries was broken by the stroke of the ax, the sound of the saw and the shouts of men, urg-

ing the patient oxen. Down below, on a convenient level by have been erected for the cattle, and log house, or sometimes a barn-like building, hastily constructed, serves the combined purpose of bedroom, kitchen and dining-room. It is lined with double rows of bunks, built against the walls and filled with fir boughs. The middle floor space is occupied by the dining table, a construction of rough boards. In one end is the fireplace, with its wide-mouthed, wooden chimney, and the iron range, or stove, upon which the cook and his helper prepare the meals. The fare is plain, but substantial, and it seldom varies. The tableware is not, as a rule of a breakable nature, but hungry men are not over-particular. In the matter of towels, the camp is communistic, but blankets are individual property, and each man furnishes his own.

From dawn to dusk of the short Winter days the monotonous sweep of the saw, the ringing ax stroke and sharp report of the oxwhip wake the long-sleeping echoes in the upland woods. Now and again, with a sound that seems to shake the mountain to its center, a conquered giant goes crashing to the earth, where it lies, showered with shattered boughs, swept from its still standing neighbors in the fall, and quivering for a brief space, as if the snapping of those last tough fibers had not quite extinguished life And now the stateliest tree in all the

forest is singled out and marked for destructon. The axmen approach, and, fitting the springboards firmly in place proceed to chop through the thick. spongy bark and into the resinous, rich wood, making way for the saw and, at the same time, directing the course of "fall." This done, the great saw is lifted into position, and the slow process of felling the fir is fairly begun.

The Prostrate Monarch.

sound like the straining of spars in a heavy gale warns the woodmen to look after their own safety. Then comes a mighty crash, and the forest monarch

lies stretched upon the leafy mold. When the commotion caused by that majestic descent has somewhat subsided, the prostrate tree is measured and sawed up into 16 and 20-foot lengths. The bark is removed, and the ends of the logs are rudely beveled. Men, with "canthooks" Far up in the heart of the Cascades, so the river's brink, is the camp. Sheds roll the logs into convenient position. By



BANKING"LOGS

means of heavy log chains and iron hooks profanity and ice-cold, unwelcome baths. or "dogs," the ox teams, sometimes And there are other drawbacks. numbering a dozen yoke, drag them, one by one, out over the skidroads to the top of the "chute." The chute is made of split timbers, is slightly concave, and goes straight down the mountain side to

the bank of the river. It is no light task to place a log and start it on its downward journey, but, once started, it goes with the swiftness of the wind and the force of a cannon ball, sometimes bounding high in the air as it strikes the level at the foot of the chute, or throwing a cloud of spray as it

plunges into the river's depths. All Winter long the work, begun in the early Autumn, goes on uninterruptedly in the mountain camps where the logs are "banked," to be afterward dumped into the stream, in time to take advantage of the Spring freshets. When this is done and the drive begins, the camp is broken up; the ox teams are turned out to pasture, and the logging crew follows the drive on its slow, downward course. Compared to the work of "driving" logs in the rivers of Maine and Michigan. Minnesota and Northern Wisconsin. where the melting of ice in the early Spring is the signal for the breaking up. as if they were so many cars, along the of the Winter camp, the Oregon drive might almost be called a pastime, al- or the shore of the tide flat where they though it is far enough from probable are to be dumped. In some cases they that the loggers themselves regard it in are delivered, in this fashfon, at the mill that light. The larger logs are prone to stick fast upon frequent gravel bars. from which it requires much muscular ex- tous mountain side, over 1000 feet above September, the valley was veiled in known to possess certain desirable qualiertion to dislodge them. Those of greater the Columbia, whose two logging camps length possess a provoking tendency to are several miles distant, in the very

Varying Methods. The timber lands of Oregon are of such vast extent, and the timber itself so varied in character that the means and methods employed in the various logging camps necessarily differ. Indeed, these things are governed practically by the nature of the trees to be handled and by the locality, although the amount of capital at the command of the operating individual or company figures somewhat in

the matter. For instance, where the magnitude of the enterprise justifies the expense, steam takes the place of cattle or horses, to a certain extent. The logs as lifted, moved and dragged out of the woods by means of strong cables, worked by steam, Where it has been practicable, well-laid iron tracks, floored between with smooth timbers and kept flooded with water, in order to prevent disastrous results from friction, have supeseded the "skid" roads. The motive power is supplied by a staunch but grimy little engine that drags the lengthy train of logs, coupled by short chains or ropes and held by "dogs" concave track to the bank of the stream, which converts them into lumber.

There is one mill, far up on a precipiswing crosswise against every slightest heart of the heavy forest. Each of these ing "jams" that are productive of toil, the logs, and they are as entirely differ- fires were raging. When the pall of streams,

apart. Extending to the first of these from the mill is a railroad, similar to the one just referred to. The heavy planking, strongly spiked to the cross ties, is kept rell watered along however, are few, for the grade is steep and winding for the most part. From the upper terminus of the line "skidroads" radiate in every direction. Over these roads the great, unwieldy logs are drawn by yoked oxen to the track, where they are linked together, end to end, attached to the locomotive and hurrled down to the mill.

## Cables and Steam.

In the second camp all this work of moving the logs and getting them out of the timber is done by means of cables and steam. In fact, it is very much the same system as that which operates the city's street-cars, only modified to meet the exigencles of the case. There is a power-house, of course, and the cables, which are long enough to reach anywhere within a radius of a mile and a haif, do the work that would otherwise require the presence of many men and more cat-

These cables are nearly automatic in their manner of working. Attached to the the standing tree into a marketable comlogs, they, with ease, life and drag them out and into convenient position on the ever-present skid-road. Here they, the logs, are coupled and rapidly drawn to the chute, almost a mile in length, and dispatched down its steep incline to the pond, from which they are taken as needed and hauled by the locomotive to the mill below.

These are but a few of the many ways in which the labor of logging is conducted. Every company, it is scarcely too much to say, has some device or method that is peculiarly its own, made necessary by the situation and the character of the timber to be gotten out. All along the Columbia River one sees flumes. One of these is eight miles long, and down its watered incline the timber, roughly sawed into ties and beams, is sent to the planers, on the river bank below.

## A Warning.

Already the ery goes up that our hills and mountains are being denuded, ruthlessly stripped of their valuable robes, and a strong protest has not been wanting against the reckless destruction

of timber. It is well that this cry is heard; that this protest has been raised, for, in spite of the 20,000,000 acres of timber lands that go to swell the resources of this emerald state, and 10,000,000 of which, it has been estimated, are yet untouched, there is sufficient truth in the charge of "reckless destruction" to give us pause. Neither the protest nor the cry has been barren of effect. Even now there are measures enforced looking to the protection and preservation of the splendid forestreaches that clothe our mountain ranges and their outlying spurs and foothills. from base to summit.

There are the Government reserves, patrolled throughout the long, dry Summer by those watchful guardians, the forest rangers, ever on the lookout for fire. The time is not so far distant as to have been forgotten when, from late July to early where up there among the crags and

smoke was lifted, blown about and dissolved by the wind and rain of early Autumn, the burnt district, once as beautiful as a dream and filled with the mystery of wild life, presented a scene of the most utter desolation. Charred and blackened stumps, prostrate trunks and standing trees stripped of the glory of groom boughs, the sap of life seared out of them by the flerce heat of the ravaging flames; the very soil scorched to crisping einder-ah! there could be no more dreary spectacle. There is none on earth, and many years must clapse before the damage can, in any appreciable wise, be re

It is due to the forest rangers and the Government reserves that recent "burns' are few and of limited extent. the last two years, no very destructive fires have occurred in the Cascades, and even the Const Range has escaped, some almost miraculous fashion

The state is at last awakening to the importance of preserving the magnificent forests. Individual interests, too, subserve the public good. Trees represent a monetary value not properly recognized until of late, and it is highly improbable that the settler who tikes up a homestead in the heavy timner will rashly destroy his most valuable possession, as was his former habit. The time is happily past when splendid trees, from 300 to 300 feet in height, and perfect from root to topmost tassle, were cut down, bored full of auger holes and set with fires that consumed them utterly, because, forsooth, they were considered in the way and

Lumbermen are turning from the recklessly devustated timber lands of Maine and Michigan, New York and Wisconsin, to the matchless forests of Oregon and and Washington. And with modern facilities, with improved appliances of steam and electricity in the work of converting modity, the disappearance of the glory that clothes the hills and protects the

valleys is merely a question of time, The fir is not, by far, the only valuable wood known to commerce and grown on Oregon soil. The northern slopes of the Siskiyous, the outlying spurs of the Cascades, overlooking Klamath Marsh, and the gold-rimmed hills of the southern part of the state are rich in forests of pinethe beautiful sugar pine, that for size and symmetry, very nearly approaches the fir itself. It attains an average height of 175 feet, is singularly free from knots and decay, and is comparatively easy to handie.

## Other Woods.

Along the eastern slope of the Cascade Range, extending southward from The Dalles, and well into Lake County, is a wealth of yellow pine which, when converted into lumber, finds a ready market. Then there is the Menzies spruce (ables Menziesii), the spruce of the tidelands, a tree that loves the sait sea air; that revels in the fury of storms, and flourishes best within sound of the sure, or where the wild waves fling their rainbow spray in the face of beetling cliffs. Its wood is coarser-grained, and heavier than that of either the pine or the fir; but it

has its uses, and is valued accordingly. The cedars are widely scattered. The white or smooth-barked cedar grows freely throughout the northwestern part of the state. The incense cedar dibrocedrus decurrens), is found no farther north than the northern limits of Lane County, and the Port Orford cedar, or cypress, stops at the Umpqua. It is at its best along the northern slopes of the Siskiyous, although it is found in abundance in the region of Coos Bay and the

Coquille River. Then there are the oaks, of which we have two, the black and the white, and the maples, the ash and the alder. Last of all comes the cottonwood, until lately considered utterly without value, but now smoke, and when we knew that, some- ties that make it worth the consideration of the paper manufacturers. It is of canyons of the Cascades, or on the swell- rapid growth, and partial to the gravel obstruction in midstream, thereby form- camps has its own system of handling ing slopes of the Coast Range, the forest bars that line the banks of many of our LISCHEN M. MILLER