

# CATCHING the OULACHAN

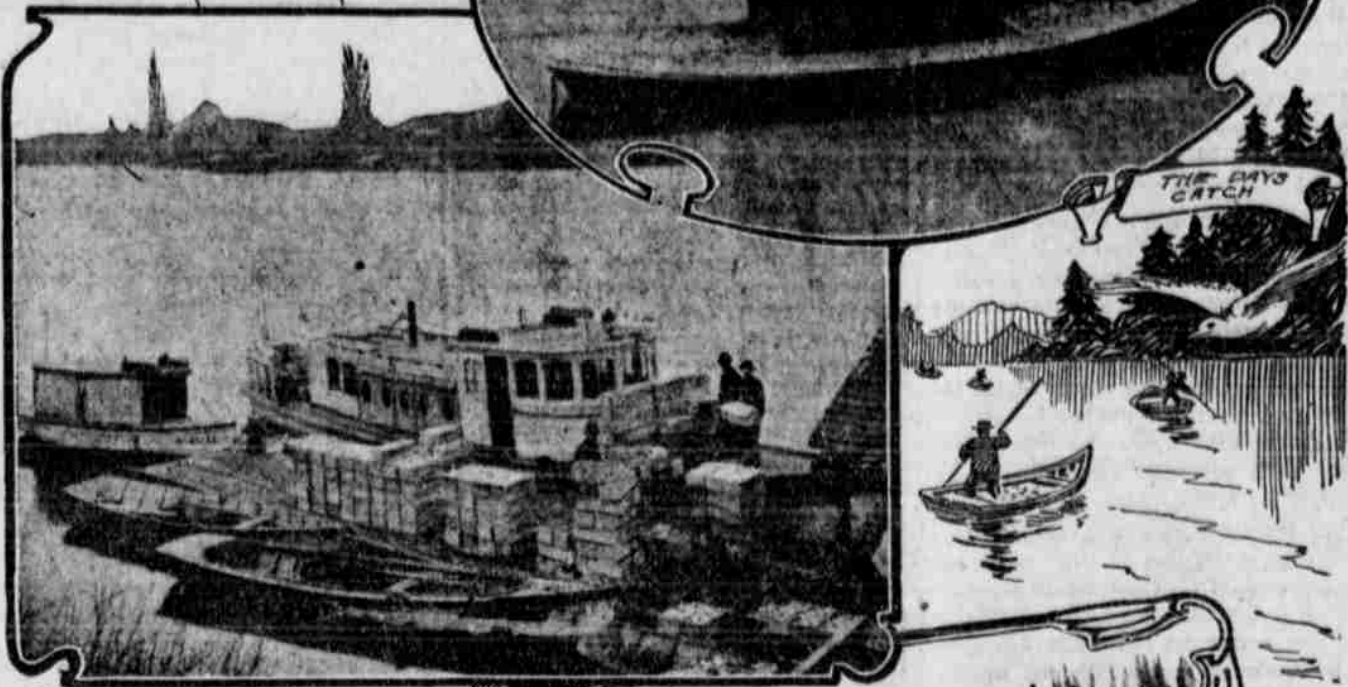
By JOHN BRAND

## ULACHAN?

The old Indian turned his face from the camp fire and fixed his bead-black eyes on mine. "Oulachan," I repeated. "Why do men call you Oulachan?" He turned his wrinkled face to the fire again and we sat a while in silence.

Then, in the deep gutturals and short, broken words of his native tongue, he told me.

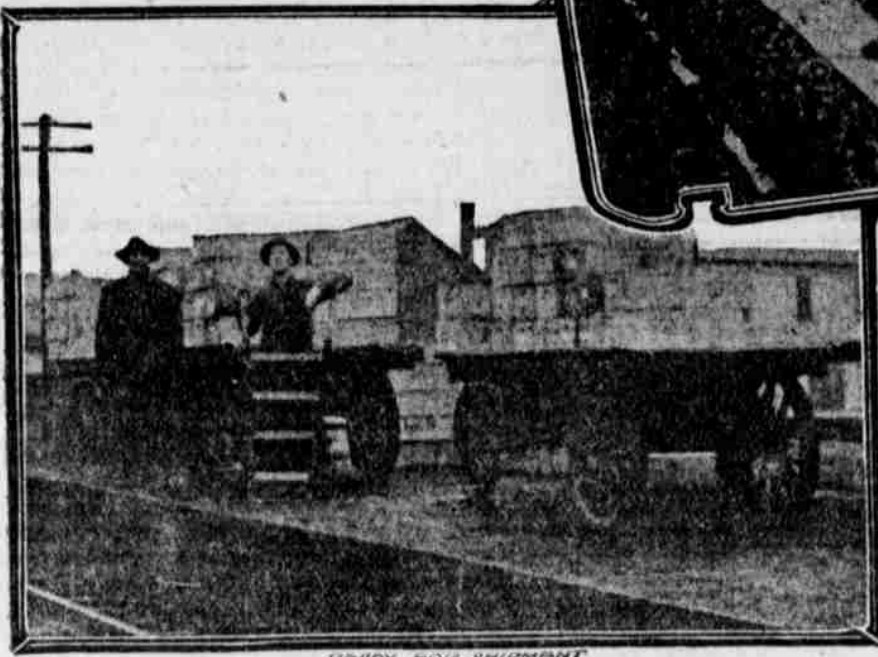
"Many summers ago," he said, "the teepees of my father's tribe stood where we sit tonight. The white man was not here then"—he pointed up the river toward Kelso—"the woods and the open were the Indian's. The Indian hunted and fished and was happy. But white men came up the big river in canoes and they brought with them the black death. Warriors, klootchmen, papposes, all alike sickened. Many died. When the rain and the winter came, no deer meat, no fish hung beside the teepees. For when the frost drove the black death away, the hunters were weak. They could not go to the woods for deer, and the salmon had passed on up the little river. The Indian was very hungry. The klootchmen and the papposes cried for meat. And when the Indian was ready to fold his blanket around him and lie down to the long sleep, the Great Spirit saw and sent food. From the north it came, from under the frozen water. Swimming together. A long rope—big—many suns long. Many little fish swimming at the bottom of the big water—the Pacific—along the bottom of the big river—the Columbia. "They came here to the mouth of the little river"—he pointed to the Cowlitz flowing past us in the darkness to the Columbia—"and here they came to the top of the water. My father saw



PACKING THE FISH



CATCHING THE OULACHAN



READY FOR SHIPMENT

them and shouted, 'Oulachan.' Hunters and klootchmen went into the water and caught the oulachan with their hands. 'Oulachan,' they shouted. They made potlach and were filled. In that hour was I born. My name is Oulachan."

The oulachan still runs in the Cowlitz and every year there is a feast, but it is a feast for white men; the Indian tribes have vanished from the river. During the early months of winter Portland and all the cities and towns within reach of the fishing grounds look forward to the feast. In the old days when Portland was the only market fishermen scrambled for the first of the run. A wild race of the deep-laden boats up the Columbia followed, and the first boatload to reach the market sold, smelt for silver, weight for weight. But since railroads and refrigerator cars have put smelt fishing on the basis of a practical industry, the first run of the oulachan does not bring more than 20 cents the pound in the northwestern retail markets, though the very first to arrive are eagerly sought at prices somewhat higher.

Known commercially as the Columbia river smelt, the king of pan fish has several names. Ichthyologists classify it as thaleichthys pacificus, of the smelt family. The Indians of the Columbia river region knew it as oulachan and the pioneer fishermen called it the Eskimo candle fish. In shape it resembles the smelt of the eastern states and Europe, but its rich yet delicate and sweet flavor places it far above them in the estimation of the epicures. Indeed, enthusiasts insist that as a pan fish it is superior to trout of any kind.

For unnumbered years the oulachan has made the Cowlitz river its spawning ground and of course the Columbia river Indians were the first to use it for food. During the runs they caught the fish in vast quantities, drying and smoking them, and dried, actually used them for light in their teepees. For so much is the oulachan in oil that, with a strip of bark run through it, the dried fish will burn with a clear flame from nose to tail.

In the early months of the northwestern winter the oulachan gather in uncountable millions at some unknown spot in Bering sea and begin their southward swim. Always close to the ocean bed, traveling in the form of a monster rope miles in length, they pass all the river and fiord openings along the coast until the mouth of the Columbia is reached. Then, so closely hugging the river bottom that kill nets are all but useless, to reach them, they make for the Cowlitz. A few miles up from the mouth of that river they strike the shallower water, and come within easy reach of the waiting fishermen.

From Indian times until the great catch of last season the method of fishing has been the same. A boat or a canoe to fish from, and a dip net with a long handle for fishing tackle, are all

that is necessary. One does not even need the dip net to catch a "mess," for the river is literally alive with oulachan and children often ball them out of the water with tin cans, getting half fish and half water. Where the water is shallow enough they can even be caught with the bare hands, as their skin is not slimy when in the water.

The run is always heralded far down the Columbia by flocks of eagles, gulls and hawks, following in the wake of the living rope of fish and picking up the dead as they come to the surface. Then the fishermen gather by hundreds in their boats along the fishing grounds and feel along the bottom with the pole ends of their dip nets. When the pole strikes the small, wriggling bodies swimming along the river bottom in solid phalanx, it is simply dip and fill, empty the net into the boat, dip and fill again, until the boat can hold no more. There is not much sport about it. It is just about as exciting as clam digging and requires no more skill. Quantity caught, and quickness in dipping one's boat full to the gunwales of flapping little fish are the smelt fisherman's ideals of sport. And during the runs fishermen, fish eaters and even the eternally gobbling seagulls alike become sated. When the gulls are at all hungry the fishermen amuse themselves by tossing up smelt for the gulls to catch in the air. A seagull on the wing will grab a fish by the middle or tail, toss and reverse it in air, and gulp it down head first in the wink of an eye.

Most of the fishing is done at night. Daylight seems to scatter the fish, but even in daytime during the height of the season the fishermen keep at their work with good results. As a rule, there are two men to each boat and the craft are filled in an incredibly short time. One night last season two Kelso men filled a power launch to its capacity of 2,250 pounds in 45 minutes, or at the rate of 50 pounds a minute, and catches of 10,000 pounds in one day and night were frequent.

While the Cowlitz river is the only constant spawning ground, the oulachan has been known to run up the Lewis and the Sandy. At the time of the run up the Lewis, 14 years ago, there was only a small run of male fish in the Cowlitz, and the fishermen made their season's catch in the Lewis. About once in eight years there is a run up the Sandy, apparently independent of the Cowlitz run, as the number in that river is not lessened. At the time of the last run in the Sandy a party of Portland men went out with dip nets. One man lost his dip net but found an old, rusty, discarded bird cage. He tied it to the end of a pole and scored an equal catch with the others. During the same run farmers drove their wagons into the stream, dipped them full of fish and hauled load after load to their orchards to use as fertilizer. Pork sold in the Portland market some months later had a distinctly fishy flavor and revealed the fact that some of the thrifty agriculturists had fed smelt to their hogs.

Last season the Cowlitz river was the spawning ground of the greatest run of smelt ever known by fishermen who have been in the business over twenty years. At the season's close the river had yielded over 10,000,000 pounds, or

5,000 tons of oulachan, and as the fish average about eight to the pound \$0,000,000 of them went the way of the market and the trying pan.

The fishing grounds of the Cowlitz are practically the only ones where the oulachan can be caught in paying quantities. On the Columbia some few are caught by gill netters. But the river is deep and for the most part the fish swim beyond the reach of the widest net. Even when caught they have to be picked one by one out of the meshes, so putting the gill netter out of competition with the Cowlitz man and his greedy, long-handled dipper. The grounds extend but eight or ten miles in the Cowlitz. Before Kelso was on the map the best location is said to have been directly opposite where the Northern Pacific depot now stands, but the growth of the town has driven the fish farther up and the best catches are now made two miles above this point. Between the small floating docks of the town and the fishing grounds boats ply day and night during the runs, going upstream empty and returning laden with fish. Over 500 boats are employed in the industry, about 75 of them power boats.

It seems strange that the oulachan, so far superior to the eastern smelt, has never reached the eastern markets. The fish are packed in 50-pound boxes for shipment and the earlier catches sell in the wholesale market at from \$2.50 to \$5.00 the box; but in the height of the season the ordinary fisherman gets only about \$50 for 200 boxes—10,000 pounds. On the river are several men who buy at these prices from other fishermen, maintain boats of their own and ship direct to retail markets. Portland has wholesale buyers on the ground, and probably the greater part of the retail trade is supplied through them. At Kelso smelt have been shipped as far east as Wisconsin. The fishermen say that with cold storage facilities the output could be greatly increased. Canning in the form of sardines has never been tried, though in the opinion of experts the fish so treated would discount the imported sardine. The market is usually demoralized early in the five months' season by schoolboys, who go out, load up a few boats with fish and become an easy mark for buyers. Often, too, Greeks and Italians come up the river in boats, stay a day or two and sell their fish for whatever they can get, and the men regularly engaged in the trade want to make it a licensed one, on this account.

The growing output of the oulachan would seem, on the face of it, to demand a Gifford Pinchot on the fish commission. But the supply increases year after year with the demand and apparently knows no limit. Last year's run broke all records and the Cowlitz smelt fisher is looking forward in happy confidence to the coming winter, when the deeps and shallows of the streams will again be filled with oulachan.

### Sad Blow.

"Was she overcome by her husband's sudden death?"

"Oh, yes. She had just bought half a dozen new ball gowns."—Birmingham Age-Herald.

### Soaring.

"She married an old man who is very rich." "I went one better on that. I married a young aviator who is a millionaire."—Pele Mele.

### Hard to Convince.

Little Tommy (eldest of the family, at dinner)—Mamma, why don't you help me before Ethel? Mamma—Ladies must always come first. Tommy (triumphantly)—Then why was I born before Ethel?—Tit-Bits.

## SAN JOSE SCALE MOST INJURIOUS ORCHARD PEST

In Addition to Extraction of Sap as Food Insects Puncture Bark by Slender Sucking Mouth Parts Causing Disease.

(By A. L. QUAINANCE, Bureau of Entomology, U. S. Department of Agriculture.)

The San Jose or Chinese scale (Aspidiotus perniciosus Comstock) infests practically all portions of its host plants that are above ground—the trunk, limbs, and branches—and when abundant it may occur on the leaves and fruit. Injury results from the extraction, by the scale insects, of the juices of the plant. At first this merely checks growth, but as the insects increase in number the speedy killing of the branches and twigs follows, resulting finally in the death of the plants. In addition to the extraction, by the scales, of sap as food, the puncturing of the bark by the slender sucking mouth-parts results in a diseased and often pitted condition; the inner bark, or cambium, showing a reddish discoloration, as exposed in cutting with a knife, and the bark itself may crack, in stone fruits exuding drops or masses of gum. A reddening effect is also much in evidence as red rings around the scales on the bark, especially of the apple and pear, and on the fruits of these plants, though not characteristic of any one scale species.

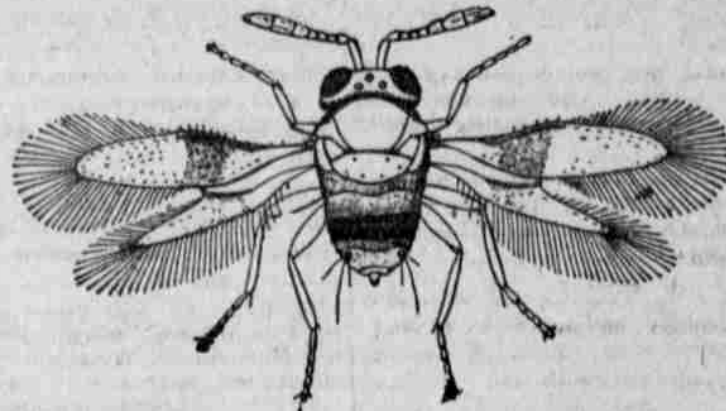
On peach the scales have a tendency to infest to a greater extent the older limbs and branches than the newer growth, as the wood 1 year old. On apple and pear, the terminal twigs are quite generally infested, and many of the young may find their way

which it may actually maintain its existence.

The San Jose scale, in the absence of proper treatment, will quickly bring about the death of most plants of economic importance. Its discovery, therefore, whether in orchards or on prized fruit trees and other plants in the yard, should call for prompt steps to effect its control. It has been amply demonstrated that the scale may be very successfully controlled, and practically its presence merely requires one thorough treatment during the dormant period each year. On account of the general distribution of the pest, extermination is in most cases out of the question.

Where plants are thoroughly infested, with consequent death of branches and stunting of growth, it will generally be advisable to dig out the trees at once and replace with new ones. Previous to spraying infested trees, the dead and weakened wood should be pruned out, which will simplify the work of spraying and will hasten the formation of new sound wood.

There are several scale washes which may be employed in the control of the insect, and the one should be selected which can be most conveniently used and which is economical under the circumstances. Thus, for spraying on a large scale the orchardist could properly afford expenditures for the construction of cooking



Parasite of San Jose Scale.—(Greatly Enlarged.)

to the fruit, settling principally in the calyx and stem cavities. Most varieties of fruit trees and plants infested from the nursery, in the absence of treatment, perhaps never reach fruiting condition. Peach trees will usually be killed in two or three seasons, while pear or apple trees will maintain a feeble existence much longer. This insect, on account of its great similarity to certain other species of scale insects, may not be positively determined except by specialists. The occurrence of diseased and dying branches showing severe scale infestation furnishes strong presumptive evidence of the presence of this pest, but specimens of infested twigs should be promptly submitted to a qualified person for examination.

The San Jose scale infests practically all deciduous fruit trees, such as apple, pear, peach, plum, etc., and also many ornamental and shade trees. It is, however, seriously destructive to a much smaller number than that upon

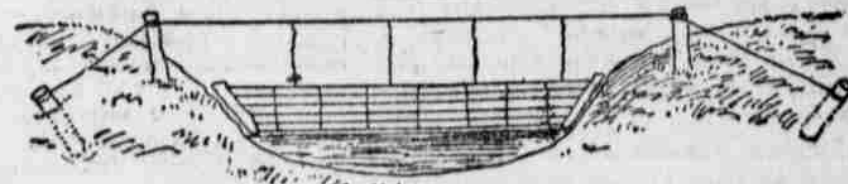
outlets for lime-sulphur wash which would not be justified where but a few plants were involved. For a few plants it would be better to use some one of the prepared washes put up by manufacturers. In fact, many large orchardists prefer to use sprays of this class in preference to making the washes at home. The possibility of injury to the trees from the sprays must also be borne in mind. All treatments, if possible, should be made during the dormant period (this is to say, in late fall or early spring, or even during the winter in mild climates).

Some apple growers rely principally upon the oil sprays, or use them at least every other year, alternating with the lime-sulphur wash and in this way keep the scale well in check.

### Clean Out Weeds.

Clean the weeds out of the fence corners before they go to seed.

## WIRE FENCE ACROSS LAKE



An excellent method of stretching a wire across a lake, or any other body of water, to prevent cattle from getting beneath, is to set a post with an anchor on either side of the water and stretch a wire cable across. Fasten the cable firmly to the posts

and anchors. Hang the fence just above the water on the cable with wires fastened to the cable and to top wire of the fence. These wires should be about one rod apart. By weighting down the bottom of the fence a fairly good job would be done.

## CULTIVATE THE SUMMER GARDEN

Gardeners Who Furnish Large Cities With Vegetables Keep at It All Through Growing Season.

(By W. J. THOMPSON.)

The chances are that you will answer the question, "How does your garden grow?" by saying your garden grows as well as those of your neighbors. The chances are equally good that neither you nor your neighbors make your gardens grow as well as they might.

The truth is that the average farm garden is only given about one-fourth as much fertilizer as the crops would put to good use.

This may seem like strong talk, but it is true. The city market gardener uses fertilizer in a way that would make a farmer anticipate bankruptcy in the immediate future, yet city market gardeners are not the kind of people who waste money.

The quantity of fertilizer which would be enough and to spare on an average farm crop is just a good beginning for a truck patch.

Gardeners often put 100 tons of stable manure on an acre of land in New Jersey and around Chicago and

the gardener puts no more than he thinks can be used to advantage. This feed of fertilizers is repeated year after year, too, on these city gardens, and often commercial fertilizers are used during the growing season, beside the stable manure.

Peter Henderson once said that his rule in using stable manure was to put on enough and then some more and garden crops will flourish under such feeding, too.

Plant a tomato vine on top of a pile of rotted stable manure and watch it grow, if you do not believe this. For many generations our garden crops have been grown on soil which has been largely made up of manure and other fertilizers and they have acquired appetites such as ordinary farm crops never have. They are every one gross feeders and the more we feed them the more tender and the larger the plants grow.

It is now too late to talk about plowing into the soil but it is not too late to use well rotted manure or commercial fertilizers on the garden crops. If manure which has been rotted, is scattered over the surface of the garden between the plants and hoed in as the crops are cultivated it will become immediately available, as the rootlets of the plants will begin to feel on it as soon as it becomes damp and they will make wonderful progress in growth if they have plenty of this kind of feed.