

1,000 cans in a day. The filled cans are then taken to the washing machine, where they are rapidly revolved under a spray of warm water, being rubbed with a sponge at the same time, and are afterwards dried with pieces of old netting.

They then pass through the hands of boys who set the tops on, and are taken to the crimper and soldering furnace. In this machine the edge of the cover is crimped, and the cans then roll across a brick furnace, the ends passing through a trough of melted solder, and continue down a wire tramway to the hands of the testers. The capacity of this machine and furnace is from 20,000 to 22,000 per day. The cans are then tested for imperfections by examination and by immersion in hot water, and all not air-tight are taken to the solderers. They are then immersed for an hour and twenty minutes in a cauldron of boiling water, after which they are again tested by being tapped on top with a small wooden mallet, imperfection being indicated by the sound. The good ones are then punctured to let the hot air escape and are immediately sealed up again. Being now placed on little iron cars they are rolled on a track into an iron retort, and are cooked by steam for an hour and fifteen minutes. From the retort they are plunged into a vat of hot lye to remove every particle of grease, and are then immersed in a tank of cold water until perfectly cool. They again pass through the hands of two testers, who tap them on the cover with a large steel nail, their trained ears catching the least inequality of sound. When passed by these experts as good, they are put upon frames and lowered into a bath of lacquer, composed generally of varnish and turpentine, and are then raised and left suspended over the vat to drip. Any excess of the lacquer that collects on the lower edge in dripping is removed with a brush, and the cans, having now a saffron tint, are taken to a group of little girls, who speedily and neatly place upon them the proper labels, handling from 2,000 to 4,000 each, per day. Nothing now remains to be done but to pack them in cases for shipment. This establishment puts up three sizes of cans, one pound tall, one pound flat, (for the English market), and two pounds nominal. Two labels are used, "Kinney's Salmon" and "Astoria Packing Co." The systematic thoroughness that marks every detail of the work renders it all most impossible for an imperfect can to leave the house, a fact that has given Kinney's product an enviable reputation among dealers.

SUMMER RESORTS.

Astoria itself and the beach on the neighboring coasts, are visited annually by thousands who come to enjoy the health-giving air of the sea and bathe in the surf. The Seaside House, on Clatsop beach, fifteen miles south of the city, has been erected and fitted up at a cost of \$75,000, including grounds, hotel, cottages, bathing facilities, etc. The Cloutrie House that formerly stood a mile below, has been moved up to this spot and is run in connection with the other. Hunting and fishing abounds in the vicinity, and the pleasure of boating on a fine fresh water stream is open to visitors. The Grimes House stands near by and is well patronized. This beach is the favorite resort, and is reached by steamer from Astoria to Skipanon Landing and conveyance to the hotel. Captain Flavel is now building a hotel and other accommodations for visitors at a point on the

beach near Skipanon. Ilwaco, on Baker's bay, is a favorite resort, where are a number of cottages that are occupied every summer, as well as camping grounds where many tents are erected during the season. At Stout's, above Cape Disappointment, are a hotel, cottages and camping grounds. Many go to Oysterville and other points on Shoalwater bay. For all these places Astoria is the general rendezvous. Young's river falls attract many visitors every year. They lie a few miles up Young's, river and in their graceful plunge of seventy feet present a picture that will amply repay the beholder for the trouble of seeking it.

Steamers run to all these places and ply on the river, so that passengers find ample transportation facilities. Every three days the O. R. & N. Co.'s large ocean steamers arrive from Portland and San Francisco. The company runs a regular mail and passenger boat daily, except Sunday, between Astoria and Portland, and the elegant steamer *Wide West* makes the round trip every day, except Wednesday. The *Fleetwood* makes three trips a week, and independent freight boats are passing up and down the river continually. The *Ona* runs to Tillamook and Yaquina bay from Portland, stopping at this city. From Astoria steamers run to all the surrounding points. The *Daisy* makes three trips a week to Lewis and Clarke river and Young's river. The *General Custer* goes to Deer river and Gray's river once a week, and the *Coyote* to the same points irregularly. The *Lillian* makes daily trips to Knappaon and goes frequently to John Day and Deer rivers. The *Sam* makes a daily trip to Skipanon and return. Either the *General Miles* or *General Canby* makes a daily round trip to Fort Stevens, Fort Canby and Ilwaco. The *General Miles* goes to Gray's harbor or Tillamook about once in two weeks, and the *A. B. Fidd* makes occasional visits to Tillamook. The steam schooner *Kate and Anna* makes irregular trips to Gray's harbor, Tillamook and Yaquina bay. The steamer *Clara Parker* runs independently to any and all points on the river. With these vessels, the ocean ships, and the 1,500 fishing boats, one-half of which can always be seen on the water, the harbor presents a busy appearance at all times of day.

CLATSOP COUNTY.

The county of Clatsop, in which Astoria is situated, occupies the extreme northwest corner of Oregon and has an area of 1,400 square miles. Its leading resources are the fisheries, agriculture, timber, coal, and probably iron. The surface of the country is chiefly mountainous, but many streams flow through, along which are large areas of fine agricultural land. Even back from the streams, almost everywhere, the soil is excellent and well adapted for cultivation when the ground has been cleared of its dense growth of timber. Clatsop plains, a strip of fine land lying along the sea shore which has been settled for thirty-five years, is the largest body of agricultural land in the county. The soil is light and sandy and produces vegetables, grain, and small fruits in abundance. But little wheat is raised, oats and barley being the principal cereals. Hay is the chief crop, and dairying the leading feature of the farming business. Two cheese factories on the plains make an article that is celebrated in the market for its excellent quality. Butter is produced in great quantity and of fine quality. The

soil is well adapted to hop culture, though that industry is not yet carried on here. The same is generally true of the ranches on Nehalem, Lewis and Clarke, Young's, Walluski and other rivers in the county. The Nehalem valley is especially a fine grain region. On these streams and in the mountains are large areas of vacant land, covered with timber, still open to settlement. It requires persistent effort and hard work to clear them and reduce the land to cultivation, but when this is accomplished the settler has a fine and productive home. Work can always be found by an industrious man to aid in the support of himself and family while he is clearing his land and securing title to a homestead. For vegetables, hay and small fruits there is a sure market at high prices.

From end to end the county is covered with a dense growth of magnificent timber, and hundreds of men make money by logging into the streams from the claims of settlers and selling the logs to mill men at Astoria. Much charcoal and cord wood are also taken from the claims. The timber of which there is the greatest abundance is the Douglas fir, generally known as Oregon pine, some varieties of it making finer ship building material than eastern oak. The other valuable woods are tide land spruce, used for boxes, ship lining, boat building and house finishing, hemlock, cedar, larch, alder and maple. In the Nehalem valley is the largest body of the most desirable timber, and here are offered great inducements for settlers to locate and enjoy the benefits of the railroad soon to be built through that section of the county.

Coal of a superior quality has been discovered in the southern portion of the county, and it is probable that this whole region is underlaid with seams of that valuable material. In case no desirable coal is discovered near the line of the road, a branch line will undoubtedly be constructed to tap the beds in this locality. Iron ore has been found in several places to the east and it probably exists in Clatsop county as well.

North of the river, in Pacific county, the agricultural and timber resources are similar to those of Clatsop, while the fish and oyster interests of Shoalwater bay are extremely valuable.

In conclusion, we will say to him who has capital to invest, or who is possessed of sufficient industry, pluck and energy, Astoria and the surrounding country offer splendid inducements. The industrious mechanic, the energetic farmer, the enterprising business man or manufacturer will find here a field for labor; but the drone who is too lazy to work or the man who expects money to make itself, will find little here to attract him, and for that matter any where else.

A machine has been patented for working the fine gold on the sand bars of Snake river. It is built something like a cabinet, with a wide hopper on top, into which the gravel and sand are shoveled. The coarse sand works off while the finer material keeps going down a succession of planes, underlaid with silver sheeting covered with quicksilver. By the time it reaches the bottom nothing is left but black sand and gold, and as there is no force to carry the gold from the machine it is certain to be caught by the quicksilver. If the machine will do what is claimed for it, there is a wide field open for its use.