

ore belonging to the Portland company, and is showing a good yield. A twenty-stamp mill will be erected about the first of November, by the Oregon Gold Mining Co. This company has an incline down its ledge two hundred and seventy-five feet, and has thirteen hundred tons of ore in sight. Gold predominates, but it carries some silver. The Alta No. 1 has an incline of two hundred feet and shows high grade ore. Alta No. 2 is down one hundred feet, all in good ore. Red Jacket is down fifty feet, and the richest ore yet found in the camp. The Forest Queen has incline fifty feet, tunnel forty feet, and six foot vein. One ton of ore worked at Omaha last fall yielded \$612.00. The Allen & Cox was the first discovered in the camp, Mr. Allen pounding out, with a mortar, \$190.00 from twenty-five pounds of ore. It has a one hundred and thirty-five-foot tunnel, tapping a four-foot ledge. The Bonanza group has four claims opened from fifty to seventy-five feet, all showing high grade ore, and some of remarkable richness. The Simmons group are the best developed. The Whitman has one hundred and ten men at work. Work is plenty; wages \$2.50 outside and \$3.50 underground. Mechanics get from \$4.00 to \$5.00 per day."

KOOTENAY MINES.—Returning prospectors from Kootenay lake, B. C., report the mining outlook in that region as very good. There are about fifty quartz locations, all showing galena croppings, while a dozen have been opened up to a depth of from twenty to seventy feet, exhibiting ore continuously from the surface down. One vein carries about twelve feet of solid galena of a low grade ore, eight to ten ounces silver, others showing from eight inches to two feet of ore, running from thirty to one hundred and thirty ounces, while the "Krao" has two veins, one twelve and the other eight feet wide, the ore being both galena and carbonate, the latter class, in some instances, running as high as sixteen hundred ounces, while the galena occurs scattered throughout the vein and is of low grade. A new district, about thirty miles south of this camp, has been discovered this spring, by Colville parties, one vein being about three feet across and carrying a copper sulphide ore assaying about eighty-five ounces silver, while another has about eight feet of ore running from sixteen to forty-five ounces silver, and pretty heavy in copper. Two shipments of carbonate ore were made from this claim, one lot going to Butte, and assaying two hundred and eighty-seven ounces silver and forty-three per cent. lead; the other to Portland, carrying two hun-

dred and forty-four ounces silver and fifty-two per cent lead. Water has put a stop to opening this claim until machinery can be put up for pumping purposes. The mines are about eighty miles north of Idaho Territory and ninety miles south of the Canadian Pacific railroad, a branch of which is now being surveyed to Kootenay lake, and will be the means of opening up a vast and totally unprospected section. Still south of this place, and on the American side of the line, is the new camp of Metaline, where more galena ore is in sight on top of the ground than any person who has visited there has ever seen before, the ore, however, carrying only about eight ounces silver. All these camps are reached from Sand Point, on the Northern Pacific railroad, by water courses and a few miles of mountain trail.

GOLD SAVING MACHINES.—Much interest is felt all over the Pacific coast in the question of mining the flour gold found on the ocean beach and along the bars of the Snake, Fraser and other rivers, where the gold is so fine, and the sand so heavy, that it has been hitherto impossible to mine to advantage. The *Range & Valley*, of Mountain Home, I. T., thus describes the new machine in use there, which appears to be the "long-felt want" of the sand miners: "These machines are as simple of construction as they are durable. At the head of the machine is an ample hopper, and from this the gravel passes into a large cylinder, about four feet long and twenty inches in diameter, and into a coarse, strong screen. The screen is made fast to the cylinder, which makes from forty to fifty revolutions per minute, the flanges on the outside carrying the bowlders and coarse gravel out through a spout at the opposite end, and to one side of the plate, while all the smaller particles are forced through into the cylinder, or machine proper. The inside of this cylinder is copper-lined, and constructed like an auger, three-inch copper flanges working from the head of the machine, making a distance of one hundred and forty feet to be traveled by the sand, from its entrance into the machine until it is discharged onto the table. The inside of this screw cylinder, like a battery, is charged with quicksilver, so that every particle of gold is caught as it comes in contact with the plate, while tumbling and rolling through by the revolutions of the machine. Through the center of the machine, also, runs a perforated iron pipe, through which about an inch and a half of water can be forced with good pressure, the strong jets aiding the "digestion" of the machine by