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ALASKAN IA — II



Beach Puzzle Picture. How many machine elements can you find ending their days on the beach near Juneau? Can you spot the lathe bed, the Pelton-wheel casing, the mine-car pedestal plate...? While on the right, scattered down a hillside below the Silver Queen Mine SE of Juneau is one truck of a Risdon Iron Works geared mine locomotive.



This second and concluding segment of Robert L. Johnson's account of his trip to Alaska in the summer of 1977 continues to describe the IA in the vicinity of Juneau, astonishing for both its abundance and rarity. All photos by author.

If not surfeited after visiting 5 beautifully-maintained, intact early-20thC impulse-wheel-driven power plants [see previous installment], one has only to poke around a bit in the countryside surrounding Juneau. Miles of hiking trails are available, from the "easy-stroll" to the rugged-overnight-hike variety, and Juneau's stores supply USGS and tourist maps to the gold mines and mills that abound in the area. I devoted several days to visiting such sites and can suggest that a study of impulse wheels (Pelton-type hydraulic turbines) can be done in the Juneau area alone. Behind Bullion Creek power plant on Douglas Island can be seen a delightful 8-ft. pair of early rectangular-bucket Pelton wheels from the island's original 1880 development.

At the Wagner mine site at Salmon Creek falls (behind Lower Salmon Creek powerhouse) stands a pair of air compressors direct-connected to two impulse wheels: one an Oakland Iron Works Pelton-Doble type; the other the earlier and quite rare staggered-bucket wheel built by Tutthill in Oakland, Calif. Both are 9 ft. in diameter. The remains of an early 5-ft. Pelton can be seen in the debris of the collapsed mine adit, and as I walked away I literally tripped over a small 5-nozzle impulse wheel of unknown make buried in the underbrush covering the shaft of another prospect.

Out Glacier Highway at Yankee Cove are the remains of a small prospect mill with parts of stamps and the inevitable impulse wheel lying on the beach. On Douglas Island, a long hike to Nevada Creek will reveal a small stamp mill *in situ*; for the less ambitious a day spent among the acres of ruins of the Treadwell mines reveals such wonders as the foundry — burned but with most machinery, patterns, castings, &c still in place; the remains of a huge Allis-Chalmers 1st-motion hoisting engine (drum directly on crankshaft); a small Mexican-type cyaniding plant with ball mill and two pachuka tanks; and mile after mile of industrial railway.

Behind Juneau, in the Silver Bow Basin, a strenuous hike across Gold Creek will bring one to a line of prospect mills with stamps and small impulse wheels. The best of these are at the Ebner mine adit across Ebner Falls. Up the Sheep Creek trail are the remains of the Silver Queen and Glacier mines. Ore cars are scattered down the hillside and one of that rare breed, the geared steam mine locomotive by Risdon Iron & Locomotive Works, San Francisco, lies bottom up beside the trail, boiler missing but frame and drive intact. Peterson Lake trail, 26 miles N. of Juneau, follows the route of a tramroad past remains of mining machinery, as does the old pole (corduroy) road up Yankee Cove to the Aurora Borealis mine.

SE Alaska abounds in abandoned machinery and, fortunately, the distance to Seattle's scrapyards and the high cost of transport plus the rugged terrain around Juneau may continue to keep the IA intact for some time yet.



The partially dismantled remains of an Allis-Chalmers steam mine hoist from the Treadwell group of mines, Douglas Island.



Rare alternating-bucket impulse turbine direct-connected to a cross-compound air compressor, c1890. Salmon Creek Falls.