

A REMARKABLE SALT DEPOSIT*

BY CHARLES F. HOLDER

THE deposit of salt at Salton is one of the sights of California. It lies in a depression almost 300 feet below the sea-level, and was at some time in the past the bed of the sea or extension of the Gulf of California.† From the train, which passes near by, the tract looks like a vast snow field, and in the early morning is frequently the scene of beautiful mirage effects. The salt deposit, which is essentially rock-salt, covers about 1,000 acres, and is at present the center of interest on account of the dispute of rival companies over the possession of the property. The company in possession has shipped from this place annually about 2,000 tons of salt, valued at from \$6 to \$34 per ton. The outfit of the salt mine consists mainly of a crusher, a drying building, and a dummy line from the salt beds to the Southern Pacific Railroad, not far distant.

The work is carried on chiefly by Indians, who can withstand the intense heat of the desert—150° in June—and the glare better than white men. The work is interesting and novel. The drying house is a building 600 feet in length, about which hundreds of thousands of tons of salt are heaped, having all the appearance of snow. Here the salt is dried and milled.

The salt is collected at first with a plow—a singular machine with four wheels, in the center of which sits an Indian guiding it; the motive power is a dummy engine some distance away,

which hauls the plow along by cables. As it passes, the steel breaker is seen to cut a broad but shallow furrow, eight feet wide and three feet long, throwing up the ridges on either side. Indians now follow along, and with hoes pile up the salt in pyramidal forms, which later is transported to the mill. Each plow harvests 700 tons of salt per day. A singular feature of this bed is that the salt is being deposited daily by springs which run into the basin, and as the water evaporates it leaves a crust of almost pure chloride of sodium, which ranges from 10 to 20 inches in thickness, over the lake. It will be seen that there is no danger of exhausting the supply, which is forming all the time; and, in point of fact, the plows have in the past years worked almost continuously over the same area, only about 10 acres having been plowed.

The salt, when delivered at the plant, is hoisted to the upper floor and placed in a bulkhead breaker, where it is reduced to particles of the same size. It then passes through a burr mill and is well ground. After this it is sifted and is finally passed through an aspirator, which cleanses it of all foreign material, when it is ready for packing in bags. The salt is used for a variety of purposes, and is of several different grades, the lowest being unrefined—a product called hide salt, used in manufactories. Large quantities are sold for sea-bathing purposes, a certain amount producing a very similar chemical equivalent to sea water. Other grades are prepared for the table, dairy, and for the use of druggists.

† See the NATIONAL GEOGRAPHIC MAGAZINE, vol. xi, no. 9, p. 340 *et seq.*

* From the *Scientific American*.



Plowing up the Salt in the Sea of Salton

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