

PROCESS OF MAKING ICE IN THE EAST INDIES.

Natural ice is never seen in the warmest parts of that country. To procure ice by artificial means, they dig, on a large open plain, not far from Calcutta, three or four pits about thirty feet square, and two feet deep each, the bottom of which they cover about eight inches or a foot thick with sugar cane or the stems of the large Indian corn, dried. On this bed are placed, in rows, a number of small, shallow, unglazed earthen pans, formed of a very porous earth, a quarter of an inch thick, and about an inch and a quarter deep, which, at the dusk of evening, they fill with soft water that has been boiled. In the morning before sunrise the ice makers attend the pits, and collect what is frozen in baskets, which they convey to the place of preservation. This is generally prepared on some high, dry situation by sinking a pit fourteen or fifteen feet deep, lining it first with straw, and then with a coarse kind of blanketing. The ice is deposited in this pit, and beat down with rammers, till its own accumulated cold again freezes it, and forms one solid mass. The mouth of the pit is well secured from the exterior air with straw and blankets, and a thatched roof is thrown over the whole. The quantity of ice formed by the method above described depends on a light atmosphere, and clear serene weather. Three hundred persons are employed in this operation in one place.

At first sight this curious process may appear to be an effect of evaporation: but this is not the case; for it is remarkable that it is essential to its success that the straw in which the vessels are placed should be dry, whereas if evaporation were concerned in the congelation, wetting the straw would promote it. When the straw becomes wet by accident, it is obliged to be replaced by dry straw.

The earth is continually losing heat by radiation, and it loses most on clear, starlight nights, when there are no clouds to intercept and send back the rays of heat. The straw like all filamentous substances, is a good radiator of caloric, and it is in consequence of the heat that is thus given out by it into space on clear nights that the ice is formed. When the weather is windy and cloudy the effect does not take place.—*American Druggists' Circular.*

THE IRON TRADE.—As to the growth of American iron manufactures, the *Pennsylvanian* says:—

“Since 1848, the consumption of that article in the United States has augmented in an unprecedented manner. The consumption of foreign iron, and manufactures of iron, which previous to 1848 never reached, in any one year, the value of \$9,000,000, amounted in 1850 to \$15,600,000; in 1856 to nearly \$20,000,000. On the other hand, the domestic production of pig iron made very considerable progress. From 1852, when it amounted to 500,000 tons, it rose to 1,000,000 tons in 1856. The domestic manufacture of rail-road iron has as yet only reached about one-half of our annual requirements. But, considering that eleven years ago we made no rails at all, this result must be regarded as exceedingly encouraging. The value of domestic manufactures of wrought iron of every description amounted in 1840 to \$12,800,000; in 1850 to \$22,600,000; in 1855 to \$28,300,000.”

STEAM WAGON.—In the course of the present week it is expected that the steam wagon in course of construction at Sacramento City will be ready for the trial trip. As we have already stated, a joint stock company has been organized for the construction of several of these wagons, to be placed on different routes in various parts of the State. Every one who has seen the operation of the model steam wagon must have been convinced of its utility.—*San Francisco Globe, July 10.*

A NOVEL COMBAT.—We witnessed an interesting combat between a fox and a snow-goose, and concluded the latter was the victor from the advantage which flight gave it over his enemy, who sought the hills, the other darting with great impetuosity and making furious onslaughts on him from time to time to complete his victory.—*Dr. Armstrong's Personal Narrative of the Discovery of the North West Passage.*

ANOTHER ATTEMPT AT TEA CULTURE.—Mr. Fortune, who has been employed for a number of years in China, by the East India Company, has been requested by the Patent Office to make selections of the tea plant and other seeds for introducing into the United States. He will probably accompany his selections to this country, for the purpose of selecting the proper localities in which to commence these experiments.

More than 60,000 of the Indian population of Bolivia have died of the yellow fever.