

THE CHARITY INSTITUTIONS OF PARIS.

In recent years, in France, conscientious efforts have been made to ascertain the principal causes of the loss of population, and it has been demonstrated by numerous facts that one of these causes consists in the physical degeneration induced by deficiency of alimentation in infancy; and the most eminent physicians of Paris, and the Director of Public Assistance, have endeavored to modify and improve the system of nutrition in the public charitable institutions, providing for recently born children lactation adequate to the necessities of the temperament and constitution.

In the Hospital for Infants' Diseases, situated in Sabres Street, there exists a section for rickety boys and girls, whose miserable aspect produces an impression of pain upon the mind—unfortunate beings who have inherited the organic vices of their parents, and who suffer from anæmia's cruel tortures.

The administration of the hospital is arranged in two separated pavilions, where there is much ventilation, with large windows that look out upon a garden, and whose walls have double rows of willow cradles perfectly equipped. The newly born receive here the personal care of the establishment, beginning with being weighed in the balance the same day they make their appearance, the operation being frequently repeated

qualities and its nutritious principles, assimilates in a great degree the milk of the nurse, and these disinherited and sick children, enjoying its beneficial effects by its permanent and methodical use, are restored little by little to health and vigor.—*La Ilustracion Espanola*.

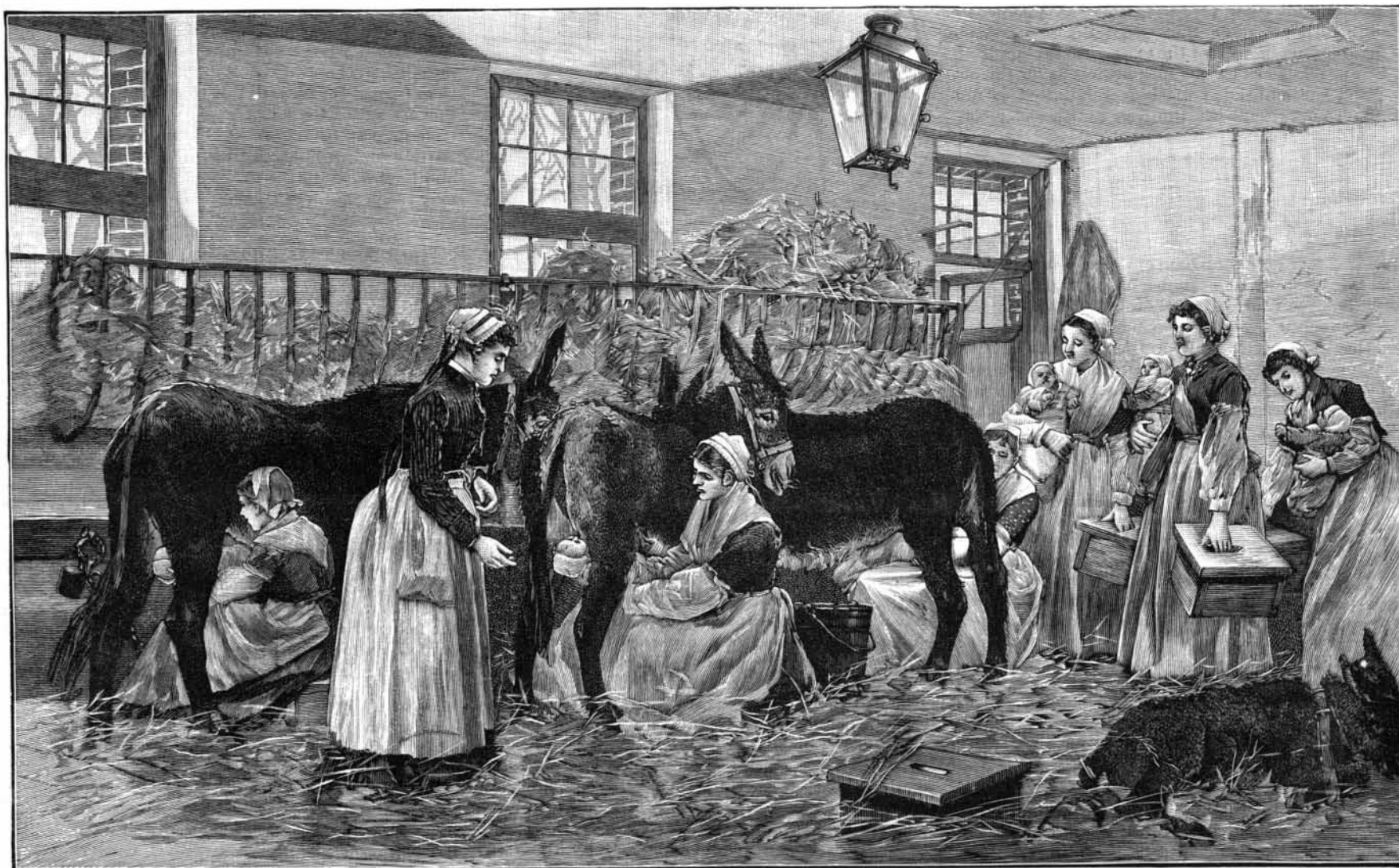
American Steamships.

Iron ship builders on the Delaware are at present well off for orders for large ocean steamers. The Pacific Mail Steamship Company is in the market for two iron steamers of about 5,000 tons each, to cost 400,000*l.*, for the San Francisco and Central American trade. The Ward Steamship Line, to Cuban ports, has contracted with the Delaware River Ship Building Works for two iron steamships, 310 feet long, to register 3,000 tons each. Contracts have also been made for two iron steamships for the Ocean Steamship Line, to ply between New York, Philadelphia, and Savannah. Mr. C. Mallory has contracted with the Delaware River Ship Building Company for a 3,000 ton coasting steamer, to cost \$350,000, for the Galveston Line. The Morgan Steamship Line, plying between New York and New Orleans, and the Pacific Improvement Company, of California, running to the North Pacific ports, and the Oregon Railway Company are also in the market for two steamers each. Colonel E. Hogg, of the

have, at present, no means of determining the species of *Echeneis* common in the Straits. I believe it to be *E. naucrata*, as the species here attains a greater length than *E. remora*.

When going out turtle fishing, a gapu is caught, and the more experienced natives have no great difficulty in procuring one when it is required. A hole is made at the base of the caudal fin by means of a turtle bone, and the end of a very long piece of string is inserted in the hole and made fast. The end of a second, quite short, piece of string is passed through the mouth and out by the gills. By means of these two strings the fish is retained, while slung over the sides of the canoe, in the water. When a turtle is sighted deep down in the water, the front piece of string is withdrawn, plenty of slack being allowed for the hind string.

The gapu, on perceiving the turtle, immediately swims toward it, and attaches itself to the reptile's carapace. A man, with a long rope attached to an upper arm, dives into the water and is guided to the turtle by the line fastened to the gapu's tail. On reaching the turtle, the man gets on its back, and passes his arms behind and below the fore flappers, and his legs in front and below the hind flappers. The man is then rapidly drawn up to the surface of the water, bearing the turtle with him. On the arrival of



THE CHARITY INSTITUTIONS OF PARIS—NURSING INFANTS WITH ASSES' MILK.

almost every month in order to determine with exactness the development of the child. The little one is subjected to an especially nutritious diet of the most tonic kind, if it had been previously fed from a refractory goat liable to convey contagious germs, it having been found by experiment that the milk of this animal, although possessing nutritive principles of the most salutary kind, presents the inconvenience of communicating by absorption the effects of those nervous accidents to which the goat is subject.

The public charities of Paris, advised by the wise doctors of medicine, have substituted for the milk of goats that of the ass, and have installed an ample yard near the pavilion of the rickety and scrofulous children, which is only separated by a short covered passageway. Nothing is more picturesque than the spectacle of the lactation of the babes in this inclosure every morning, as graphically represented in our engraving, from a drawing by M. De Haenen.

The nurses, dressed in dark gowns with white caps and aprons, each carrying a child on the right arm and a little seat in the left hand, present themselves in exact turn to the women who have charge of the animals, and they hold the child, applying its lips to the teats of the docile animal. The children suck with avidity the liquid nutriment, which is fresh and of agreeable taste.

The Administration of Public Assistance of Paris has calculated that one young ass is able to lactate abundantly for a space of nine or ten months, and when this period has passed they are sold and replaced by others. It is well known that the milk of asses, by its vivifying

Oregon Pacific Railroad Company, also needs two iron steamships to trade between San Francisco and Yaquina Bay, Oregon.

[NATURE.]

The Employment of the Sucker Fish (*Echeneis*) in Turtle Fishing.

The only two references to the employment of the sucker fish in turtle fishing which I have by me are those in Dr. Gunther's "Introduction to the Study of Fishes," and the "Narrative of the Voyage of H. M. S. Rattlesnake," by J. Macgillivray. The latter (vol. ii, p. 21) states that he was informed that the natives of Morulug (Prince of Wales Island), Torres Straits, catch a small species of turtle in the following manner:

"A live sucker fish (*Echeneis remora*), having previously been secured by a line passed round the tail, is thrown into the water in certain places known to be suitable for the purpose. The fish while swimming about makes fast by its sucker to any turtle of this small kind which it may chance to encounter, and both are hauled in together!" Dr. Gunther (*l. c.*, p. 461) throws doubt upon the habitual utilization of the *Echeneis* for this purpose.

In the Straits there are two periods for turtle fishing, the one during October and November, which is the pairing season, and when turtles are easily speared, owing to their floating on the surface of the water, the other during the remaining months of the year, when the turtle frequent the deeper water and the channels between the reefs. It is then that the sucker fish—or, as the natives term it, "gapu"—is utilized. I

the diver the gapu usually shifts its position from the carapace to the plastron of the turtle. At the end of the day's fishing the gapu is eaten. The natives have a great respect for the gapu, and firmly believe the fish possesses supernatural powers. For example, when there is something the matter with the bow of the canoe, the gapu is said to attach itself to the neck or the nuchal plate of the turtle; when the lashings of the outrigger to the thwart poles are insecure, the gapu is believed not to stick fast to the turtle, but to continually shift its position; if the strengthening ties in the center of the hold of the canoe are faulty, the gapu is stated to attach itself to the turtle and then immediately to swim away. More than once I was told, "Gapu savvy all the same as man. I think him half devil." The sucker fish is not used to haul in the large green turtle. I was repeatedly told that it would be pulled off, as the turtle was too heavy. The above information was gathered from several sources, and checked by means of much questioning.

Ergosterine.

The substance in question is named ergosterine, and has the composition $C_{55}H_{102}O_2$. It is slowly oxidized on exposure to the air, becoming colored and odoriferous. It is not attacked by strong boiling alkaline solutions. Like cholesteroline it is a monoatomic alcohol. With nitric acid or hydrochloric acid and ferric chloride it gives the same reactions as cholesteroline. But it dissolves completely in sulphuric acid, and chloroform, if shaken up with the mixture, remains colorless.—*C. Tanret*.