

THE PREHENSILE TAILED COENDOU.

The Havre aquarium has just put on exhibition one of the most curious, and especially one of the rarest, of animals—the prehensile tailed coendou (*Syntheres prehensilis*). It was brought from Venezuela by Mr. Equidazu, the commissary of the steamer *Colombie*.

Brehm says that never but two have been seen—one of them at the Hamburg zoological garden, and the other at London. The one under consideration, then, would be the third specimen that has been brought alive to Europe.

This animal, which is allied to the porcupines, is about three and a half feet long. The tail alone is one and a half feet in length. The entire body, save the belly and paws, is covered with quills which absolutely hide the fur. Upon the back, where these quills are longest (about four inches), they are strong, cylindrical, shining, sharp-pointed, white at the tip and base, and blackish-brown in the middle. The animal, in addition, has long and strong mustaches. The paws, anterior and posterior, have four fingers armed with strong nails, which are curved, and nearly cylindrical at the base.

Very little is known about the habits of the animal. All that we do know is that it passes the day in slumber at the top of a tree, and that it prowls about at night, its food consisting chiefly of leaves of all kinds. When it wishes to descend from one branch to another, it suspends itself by the tail, and lets go of the first only when it has a firm hold of the other.

One peculiarity is that the extremity of the dorsal part of the tail is prehensile. This portion is deprived of quills for a length of about six inches.

The coendou does not like to be disturbed. When, it is, it advances toward the intruder and endeavors to frighten him by raising its quills all over its body. The natives of Central America eat its flesh, and employ its quills for various domestic purposes.

The animal is quite extensively distributed throughout South America. It is found in Brazil, Venezuela, Colombia, Guiana, and in some of the Lesser Antilles, such as Trinidad, Barbados, Saint Lucia, etc.—*La Nature*.

Curious Instance of Assimilation.

A Mr. Cloudman, writing recently from Rondout, N. Y., to the *N. Y. Herald*, suggests the establishment of a chain of lightships across the ocean in the track of the transatlantic liners.

The bare outlines of the project were suggested about two years ago by an English engineer, and the plan was elaborated and developed in the columns of the *SCIENTIFIC AMERICAN* some months ago. In our article will be found not only every detail that Mr. Cloudman has described in his letter to the *Herald*, but, curiously enough, even the phraseology is the same.

Anisic Acid.

The already long list of new antipyretic remedies has been increased by the addition of anisic acid, a substance obtained from the oil of anise seed. It exists under the form of colorless prismatic crystals, soluble in alcohol and ether. It possesses antipyretic and antiseptic properties similar to those of salicylic acid. It also increases arterial tension. It has, however, a mild toxic effect in large doses, for when it was injected in large quantities into the veins of animals, epileptiform convulsions were caused. It has been employed with success as an antiseptic in the treatment of wounds, and seems, when employed in this way, to exert no poisonous effect.—*Gazzetta Medica*.

The Range of Vision.

In perfectly clear weather the distance from which an object of small size (a man for example) is visible to the naked eye cannot exceed about three and a half miles, when the object is seen in relief against a white background. It may be said that an object is only visible when its movement is perceptible to the naked eye.

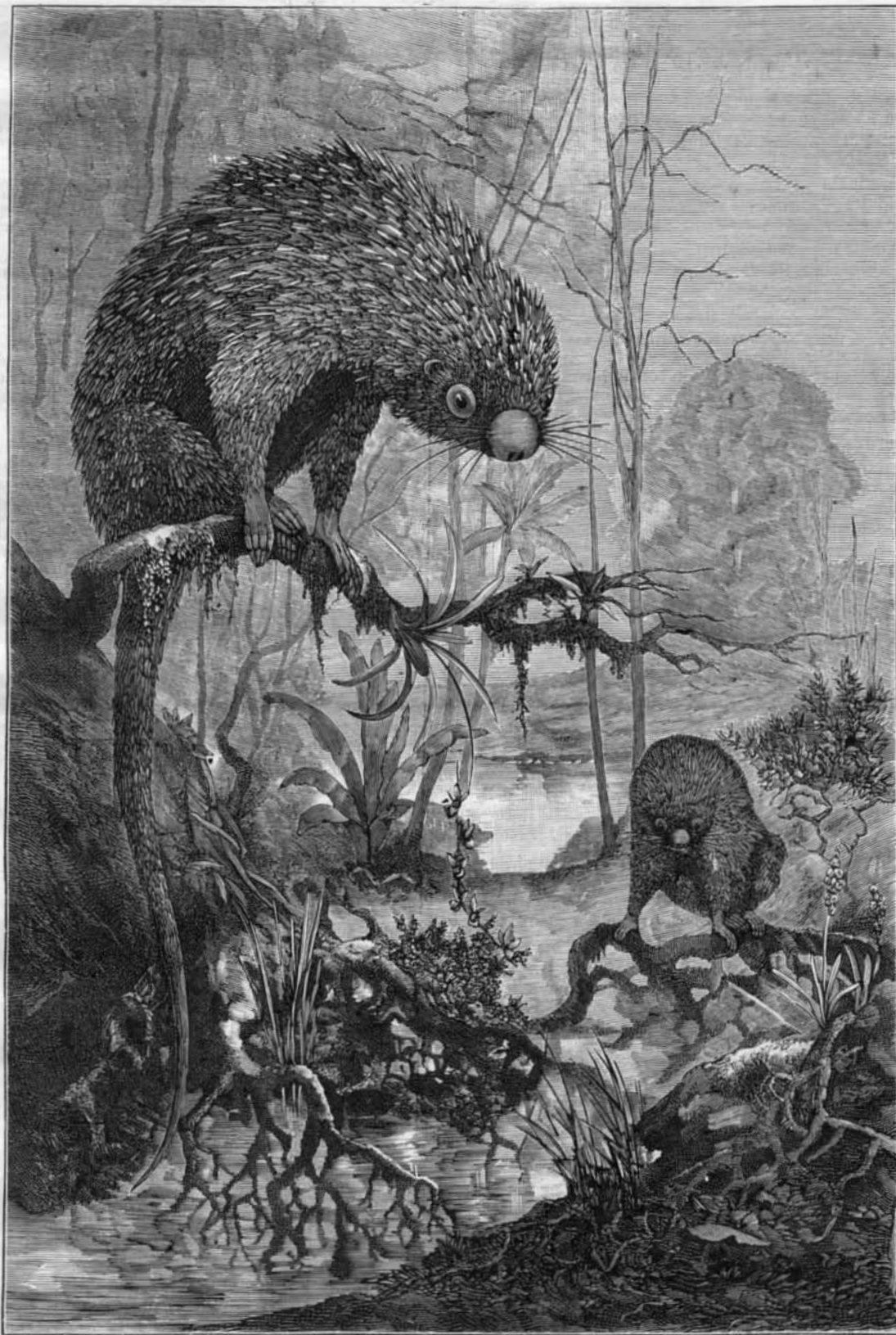
From Cape Hode, situated near Havre, it is possible to perceive a fisherman or hunter walking upon the sand banks of the Seine. From the valley of the Grindelwald, in Switzerland, it is possible to see a tourist upon the Jungfrau or Wetterhorn. This distance can be increased by means of a simple opera glass. From the Havre jetty persons may thus be seen, in very clear weather, upon the beach at Trouville, at a distance of eight and a half miles. I say see,

saw houses that were situated in the environs of Boulogne-sur-Mer, France.

In fine weather we cannot see Lion or Luc-sur-Mer from the Havre jetty, and yet there are days when both of these localities become visible. I have found while on a steamer in ordinary weather that the said localities become visible at the middle of the route. On returning, the electric lights of the Havre jetty become visible at the same point. There are, then, days on which, in certain weather, and despite the curvature of the earth, the distance of visibility is doubled or more than doubled.

This phenomenon is explained to us by a well known law of physics. If we throw a coin into an empty vessel, it will be hidden by the edge of the latter, at a certain distance; but if we fill the vessel with water, the coin will become visible. We have here a case of refraction, such as is explained in elementary works on physics.

Every one also knows the theory of the mirage emitted by the celebrated Monge, who explains the phenomenon as due to a diminution of the air's density in contact with the superheated earth. A contrary theory will explain the mirage at sea. While the sun is making the atmosphere intensely hot, the sea and the strata of air in contact therewith remain relatively cold, and these strata become superposed in the order of their density. A luminous ray emanating from the sea will pass from one stratum into another of less density, there will be a refraction, and an object beneath the horizon will be seen above it. This theory supposes two conditions, to wit: A heating of the atmosphere, while the sea and earth remain relatively cold, and a calmness of it to permit its strata to become superposed in the order of their density. It is precisely when these two conditions are fulfilled that the phenomenon of the mirage occurs. On such days, ships rise instead of descending in measure as they recede. As the horizon is perceived by direct visibility, a ship is finally seen above the horizon, as if it were suspended in the air. It is the famous "phantom ship," familiar to sailors—a visible ship in its natural, upright position. If atmospheric conditions were favorable, a second ship would be seen above the first, etc. Certain mariners worthy of credence have assured me that they have seen as many as seven superposed ships.—*Emile Sorel, in La Nature*.



THE COENDOU (SYNETHERES PREHENSILIS).

The Ancient and the Modern Ark.

The following figures concerning the Great Eastern and the Ark are of interest. Somebody is comparing the size and cost of the Great Eastern and Noah's Ark. The cost of building and launching the Great Eastern was \$3,650,000, and this broke the original company. A new company was formed, which spent \$600,000 in fitting and furnishing her. Then this company failed, and a new company was organized, with a capital of \$500,000. At the close of 1880 this company sank £86,715 upon the vessel, thus making her total cost \$4,703,575. Nothing ever built can stand comparison with the Great Eastern, excepting Noah's Ark, and even this vessel could not match her. The length of the Ark was 300 cubits, her breadth 50 cubits, and her height 30 cubits. The cubit of the Scriptures, according to Bishop Wilkins, was 21.65 in., and, computed into English measurement, the Ark was 547 ft. long, 91 ft. beam, 54.7 ft. depth, and 21,762 tons. The Great Eastern is 680 ft. long, 83 ft. beam, 56 ft. depth, and 28,093 tons measurement. So Noah's Ark is quite overshadowed by the Great Eastern.

and not recognize; and yet certain fisherwomen of Villerville have found it possible to recognize their husbands' boat starting from Havre, at six miles distance. At the last shooting match at Havre, Messrs. Bigot and Pelot each made a series of bull's eyes at nine hundred yards distance—a fact that, besides great skill, supposes a very strong sight.

In tropical seas, captains agree in saying that from the deck of their ships the distance that is visible around them is six leagues. In temperate zones the distance is less. In many cases, the earth's curvature presents an obstacle to the range of vision; and yet this does not always appear to be so. Captain Duclos, of Havre, tells me that once, while becalmed off Madeira, he could not perceive the island during the day, but in the morning and evening observed it at a distance of 22 leagues. Professor Morel, of Paris, informs me that while at Nice, he perceived the profile of the mountains of Corsica, and even made a sketch of it. I myself, while near Dungeness, England,