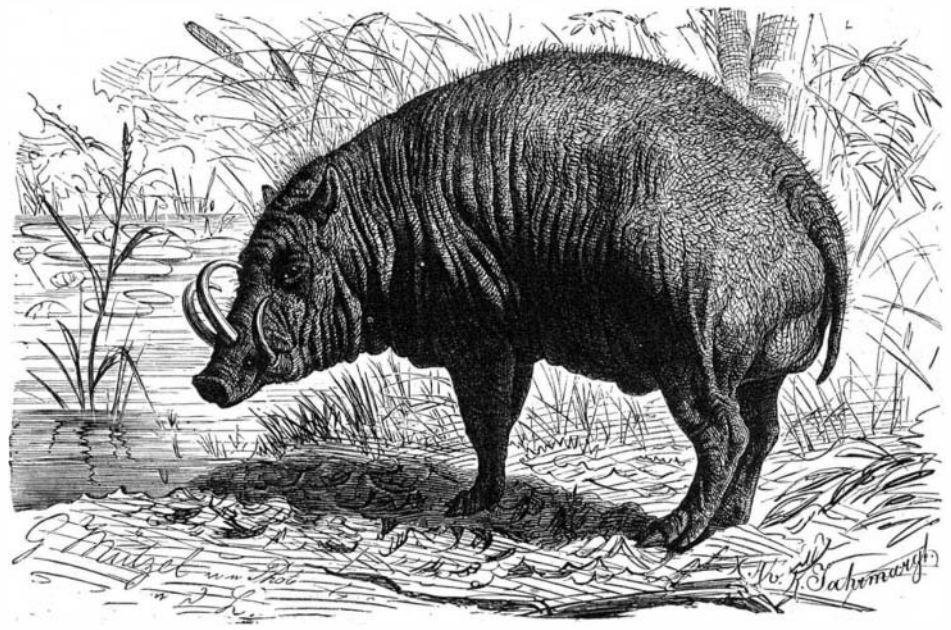
THE BABYROUSSA OF MALACCA.

This strange creature is notable for the curious manner in which the tusks are arranged, four of these weapons being seen to project above the snout. The tusks of the lower jaw project upward on each side of the upper, as is the case with the ordinary boar of Europe, but those of the upper jaw are directed in a very strange manner. Their sockets, instead of pointing downwards, are curved upwards, so that the tooth, in filling the curvatures of the socket, passes through a hole in the upper lip, and curls boldly over the face. The curve, as well as the comparative size of these weapons, is extremely variable, and is seldom precisely the same in any two individuals. The upper tusks do not seem to be employed as offensive weapons; indeed, in many instances they would be quite useless for such a purpose, as they are so strongly curved that their points nearly reach the skin of the forehead. The female is devoid of these curious appendages.

From all accounts, the babyroussa seems to be a very fierce and dangerous animal, being possessed of great strength, and able to inflict terrible wounds with the tusks of the lower jaw. A naval officer who had experienced several encounters with this creature, spoke of it with great respect, and seemed to hold its warlike abilities in some awe. The adult male babyroussa is considerably larger than the boar of England, and the officer above mentioned told me that he had seen them as large as donkeys. It is a very good swimmer, and will take to the water for its own gratification, swimming considerable distances without any apparent effort.

The skin of the babyroussa is rather smooth, being sparsely covered with short, bristly hairs. The object of the upper tusks is at present unknown, although certain old writers asserted that the animal was accustomed to suspend himself to branches by means of the appendage. The babyroussa lives in herds of considerable size, and is found inhabiting the marshy parts of its native land.



THE BABYROUSSA.—(*Babirussa Alfurus.*)

THE BARBASTELLE.

The barbastelle does not seem to be very plentiful in this country, nor in England. One of these animals, which was for some weeks in possession of Mr. Bell, was taken in Kent, says Wood's *Natural History*, at the bottom of a mine seventy feet in depth. It did not seem to be so active as some long-eared and other bats which were taken in the same locality, and preferred lying on the hearth rug to using its wings. It fed readily on meat and would drink water, but never became so tame as its companions. Its captive life lasted only a few weeks, its death being apparently hastened by the attacks of the other bats, one of which was detected in the very act of inflicting a bite on the barbastelle's neck.

The color of the barbastelle is extremely dark, so much so, indeed, that by depth of tint alone it can be distinguished from any other British bat. On the hinder quarters, a rusty brown takes the place of the brownish-black hue which characterizes the fore part of the body. Underneath the hair is nearly gray, being, however, much darker towards the neck.

The length of its head and body is just two inches, that of the ears half an inch, and the expanse of wing measures between ten and eleven inches. The ears are tolerably large, and slightly wrinkled. The tragus is sharply pointed at its tip, and widened at its base. A full view of the face shows a rather deep notch in the outer margin and near the base of the ear.

BARBASTELLE.—(*Synotus Barbastelle.*)

Successful Importation of Soles.

The first English soles ever brought alive to this country arrived by the Black Ball packet ship Hamilton Fish, May 21. Captain Mortimer started with twenty-five fish placed in a tank specially constructed so that the lurching of the vessel would not be felt by the fish, the sole, owing to its extreme delicacy, being killed by the least shock. During the voyage the tank was aerated every four hours, and deep sea water was given to the fish. Notwithstanding these precautions nineteen died. The rest came safe and in fine condition. Two were females with spawn. They were planted on the government reservation, just inside Sandy Hook. The sole is a flat fish, of delicious flavor, peculiar to British waters. Many attempts have been made before to introduce it into American waters, but without success.

Novel Mode of Killing Gophers.

In this paper some six months ago there appeared an illustration and description of a novel mode of destroying gophers, moles, etc., by injecting poisoned fumes into their holes and runs. It seems, from the San Francisco *Chronicle*, that the apparatus has been recently tried in that city, and the writer gives the following account of it.

At the Laurel Hill Cemetery, yesterday morning, the agent for a new squirrel, ant, and mole exterminator, gave a test of his apparatus. The machine consists of a furnace constructed of galvanized iron, lined with fire clay, about 12 x 24 inches in size. On the inside of this furnace is a discharge pipe, passing from near the top down through the bottom. To this furnace is attached an air pump by means of sectional tubes and elastic hose, which can be instantly adjusted for operation. A fire having been made in the furnace, and a poisonous compound dropped in, the top is securely closed, the chamber placed over the gopher or squirrel hole, and the air forcing machine started, when all the smoke and poisonous vapors are forced down into the hole, killing, it is claimed, everything animate with which it comes in contact. During the experiments at the cemetery yesterday sulphur was used, being dropped in the furnace in half-pound packages. When the apparatus was put in operation over one of these gopher holes, the ground for a radius of several yards seemed animated by a series of miniature volcanoes, the sulphuric vapors belching forth from numerous undiscovered holes. About ten minutes' pumping serves to thoroughly impregnate the burrow and its connecting drifts with the poisonous fumes, and, it is presumed, to totally annihilate its inhabitants.

Rose Slugs.

The rose slug, like most other insects, has a large number of natural enemies, but these are not yet adequate to the task of keeping it in check. The attention of florists has, therefore, been largely directed to the discovery of some reliable artificial remedy.

Various applications have been tried with more or less success, among which the most certain in its effects is whale oil soap suds, made in the proportions of one pound of the soap to eight gallons of water. The objections to this remedy are that it has a disagreeable odor, and is liable to discolor the opening buds. Dusting freely with powdered white hellebore has also been tried with very good success, and it may be used in water by dissolving a tablespoonful of the powder in two gallons of boiling water. The pyrethrum powders have as yet been used only to a limited extent, but with the prospect that thoroughly applied they would prove effectual. Lime has long been used with satisfactory results, especially if applied when the dew is on the plants.

Capt. E. H. Beebe, of Galena, Ill., wrote some time since to the *Gardeners' Monthly* that he had found powdered sulphur, applied when the leaves were wet, certain destruction, and Miss E. A. Smith corroborates his experience (*Prairie Farmer*, May 4, 1878). Wood ashes were strongly recommended in the *Country Gentleman* for June 13, 1871. The Paris green mixture has been used with excellent results on bushes where it was not desired to cut or pluck the flowers, but in view of the other available means of destruction is not to be recommended. All applications should be made just at night, as they are then more certain of coming in contact with the insects. Something can also be done to prevent the flies from maturing. As the cocoon in which the larva hibernates is very frail, and as the latter does not survive the rupture of the same, it follows that many of the insects may be killed by thoroughly stirring and pulverizing the soil of rose beds. Roses that are transplanted from one locality to another should, before setting, be immersed in a tub of water and have every particle of soil washed from their roots. By observing this precaution newly made gardens may be secured for a long time against this worst enemy of the fairest flower.—*American Entomologist.*

The Grapevine Flea Beetle.

Professor Comstock, the entomologist of the United States Department of Agriculture, gives the following method of fighting an insect which has lately been a great pest in Canadian vineyards. The grapevine flea beetle (*Haltica chalybea*, Illiger) has been one of the most formidable enemies that the grape growers of this country have had to contend with. The only redeeming feature about it is that it seldom appears in the same locality in great numbers during consecutive years. These beetles leave their hibernating quarters in April, and attack and destroy the young leaf buds as soon as they appear; later they feed upon the leaves which have escaped their earlier ravages, and deposit their eggs upon them. The eggs are of an orange color, and soon hatch into small chestnut-colored larvæ. These larvæ also feed upon the leaves, and when they appear in great numbers sometimes strip the vines of their foliage. After a month of active life the larvæ descend to the ground and bury themselves near the surface, where they make cells of the earth, and change to pupæ of a dirty yellow color. The adult beetles, issuing in the course of a few weeks, again feed upon the leaves during the autumn, doing, however, but little damage, and later seek their winter quarters beneath the bark and splinters on the vines and the stakes which support them, as well as under any rubbish that may be in the vineyard. This week specimens of this insect were brought me by Mr. A. R. Phillips, of this city, with the statement that his vineyard in Virginia is infested with them to a perilous extent. I at once sent Mr. L. O. Howard, my first assistant, in company with two others, to the vineyard in question, for the purpose of experimenting with remedies,