A MALAISIAN SPIDER.

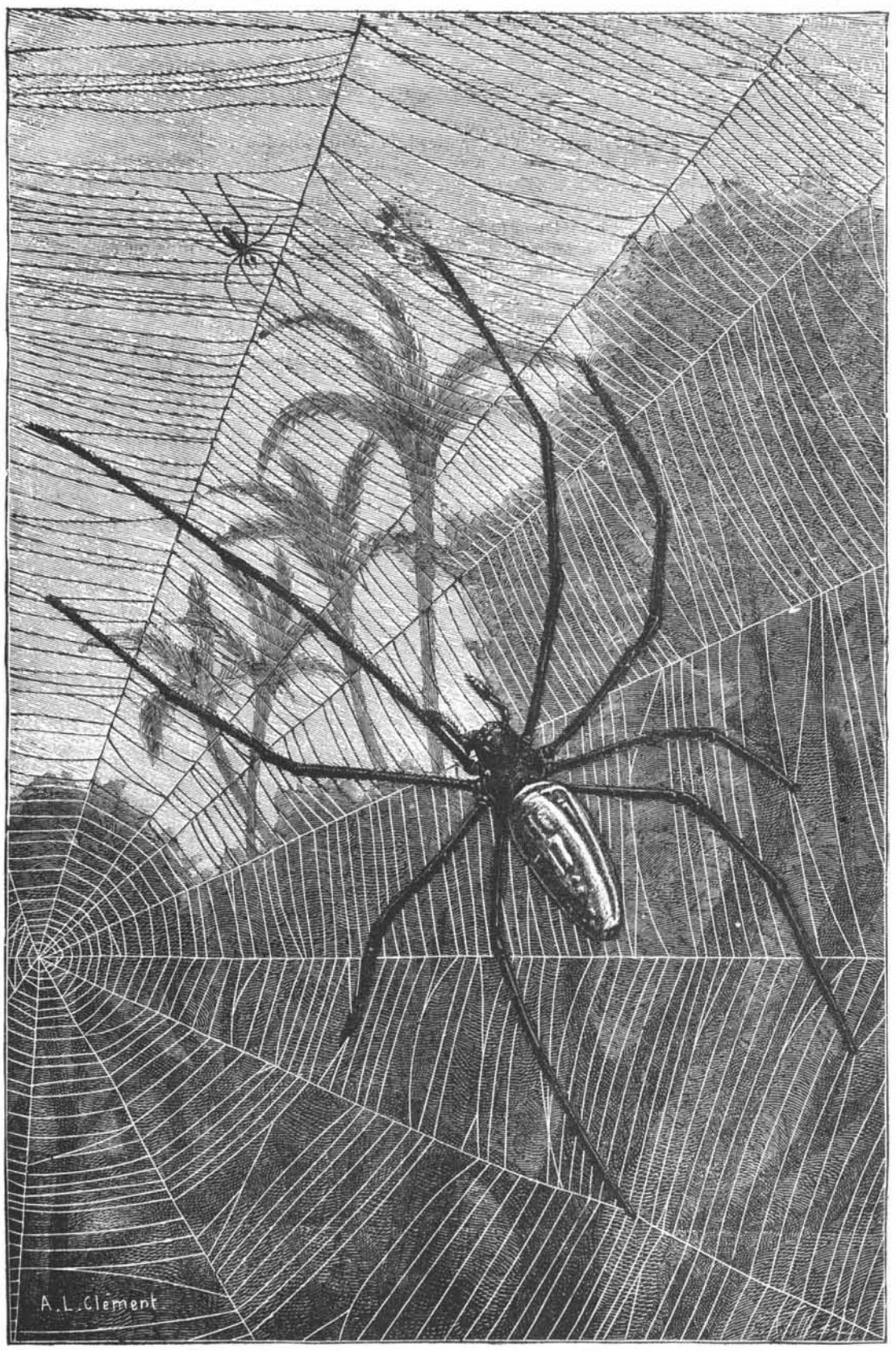
Like our Epeiras, the Nephilas of the Indian Archipelago construct their aerial nets at about five and a half feet above ground, and often at a greater height, and so that the interior can always be seen. In nowise afraid of being seen, the great spider walks calmly around on her long legs, which give her the appearance of an inhabitant of Landes mounted upon his stilts. She will run over your face, your arms, and your shoulders, and quietly descend along your body to the nearest leaf, and make no haste to disappear. There is nothing in these large spiders to remind us of the abrupt movements of our easily scared species. They seem to be conscious of their strength, and it may be suspected that they have few enemies. On the contrary, the entire winged and turbulent host of aerial insects pays them a large tribute. The heavy scarabæus, as well as the spring grasshopper, is arrested by the strong web, the wings of the butterfly become entangled therein, and the buzzing fly, despite its murmurs, is made a prisoner by it.

I made the acquaintance of the Nephilas ten years or more ago, to the north of Java, at Djockalan, a district now ravaged by the eruption of Krakatoa, says Mr. Maindron. These beautiful spiders were not rare in the great virgin forest, and their immense webs occupied spaces of several yards. These webs were composed of strong and elastic threads, and were so firm that my cork helmet, my *salacko*, easily remained suspended within. The male, as may be seen from the engraving, is a pygmy alongside of the female, and the latter, an incarnation of the myth of Semiramis, only too often devours her spouse. After she has laid her eggs, she envelops them in a silken cocoon, the first cradle of her progeniture.

In the Moluccas, in New Guinea, at Salwathy, as well as at Andaie, I again came across the Nephilas, and more than one of them even stretched its web between the bamboos extending above the roof of our rustic dwelling near the harbor of Dorey. But these spiders, being eminently sylvan and rural in their habits, never enter houses, and rarely even take up their abode in the vicinity of them. Their favorite places are clearings in the thickets of the virgin forest, and they leave the care of hunting insects in the dwellings of man to the squat bellied Agricopa and mouse colored Phyllodroma. This last named spider, which, with legs extended, is certainly larger than my hand, passed the day squatting in my mosquito net, where I left it in all tranquillity to hunt mosquitoes. During the night I many times felt it pass over my leg or face, but the least motion caused it to disappear. This companion of my nights never left my mosquito net except in the evening, when insects were flitting around the light. Suddenly, if some moth or grasshopper stopped upon the table, the fall of a heavy body from the ceiling was heard, and the spider disappeared with his prey. One evening, even, Mr. Raffray having driven it away, it returned a moment afterward to look among the cards of our piquet party for the grasshopper that it had been obliged to abandon.

The genus *Nephila*, which was proposed by Leach in 1817, differs especially from the genus *Epeira* in the buccal pieces (maxillary plates and labial piece), which are much longer than wide. In the male, the tibia of the jaw limb does not cover the bulb, the latter being simple and globular, but prolonged by a long coronate stylet. One European species, *E. fasciata*, has been referred to this genus, but erroneously, as the form belongs to the genus *Argiope*.

The number of known species of the genus *Nephila* is about fifty, distributed as follows: Africa and Madagascar, 20; Southern Asia and Malaisia, 7; Oceanica, 19; America, 4. It will be seen, then, that these spiders are confined to the tropics, with the exception of *N. clarata*, Koch, of Japan, and *N. plumipes*, Koch, of the Southern United States, and a few Australian forms. The best known species are *N. femoralis*, Lucas, of the west coast of Africa, *N. inaurata*, Walk., of Madagascar, *N. maculata*, Fabr., of Malaisia and India, *N. antipodiana*, Walk., of Malaisia and Indo-China, *N. clarata*, Koch, of China and Japan, *N. claripes*, Linn., of the Antilles, *N. Durvillea*, Walk., of Polynesia, *N. edulis*, Labill., of New Caledonia, and *N. fasciculata*, Degeer, of South America. The specimen figured herewith is *N. chrysogaster*.—*La Nature*.



A MALAISIAN SPIDER. (MALE AND FEMALE; NATURAL SIZE.)

Electrical Ice Cream Poison.

Dr. George S. Hull, of Chambersburg, Pa., advances the theory that ice cream poisoning is due to chemical action which takes place in the ice cream freezer, and which dissolves the zinc. He demonstrated his theory by means of a galvanometer.

In conducting the experiments, the doctor connected the zinc, paddle, and tin can by means of a copper wire with a moderately sensitive galvanometer introduced in the circuit. He first experimented with pure cream, which deflected the galvanometer seven degrees at freezing point, thus showing that some slight solution was taking place, and proving that if pure cream caused a deflection of seven degrees, the other ingredients of ice cream would probably cause more, and in such case sufficient zinc would be dissolved in the ice cream as ordinarily made as would make it decidedly dangerous as a delicacy. The deflections caused by various other substances used were: Half cream and milk 25 degrees, pure milk 45 degrees, one-half cream, half milk, sugar and vanilla flavor 58, the same mixture with corn starch 44, the same mixture with eggs 80.

Poisonous Toadstools.

Science pour Tous observes that no certain method exists for distinguishing poisonous from edible toadstools, but that it is possible by a very simple means to remove from the poisonous ones their active principle.

This process, made known a long time ago, but brought to light again a few years since by Mr. Fred. Gerard, is based upon the fact that the poisonous principle of these fungi is soluble in saline or acidulated water. This granted, the operation is as follows.

The toadstools are quartered, if of medium dimensions, or are cut into eight pieces if large. One pound of them is put into a quart of water to which has been added a spoonful of good, strong vinegar or two spoonfuls of table salt. They are allowed to macerate in this liquid for one or two hours, and are then washed with an abundance of water and put into a vessel of cold water, which is to be placed over a fire. After a quarter of an hour's or half an hour's boiling, the fungi will have lost their noxious principle. They are again washed, and will then be fit for preparation for the table, without any danger.

Experience has perfectly demonstrated the safety of this method. Mr. Fred. Gerard and his family, before a committee of three members of the Health Board of Paris, partook of a repast of fungi, among which was the poisonous "fly agaric" (*Agaricus muscarius* and *Agaricus bulbosus*). No one was incommoded. The best advice to give to those who cannot distinguish between poisonous and edible fungi is to steer entirely clear of this sort of food. Granting the efficiency of the above method of rendering toadstools innocuous, there is a certain delicate and peculiar flavor in the edible species that would be lost in the manipulations here suggested, and it certainly would not render poisonous kinds desirable food, even after their venom had been removed.

Illuminating Streets by "Smoke."

When William Murdoch made his discovery of combustible air, or gas, even great and wise men laughed at the idea. "How could there be light without a wick?" said a member of Parliament, when the subject was brought before the House. Sir Humphry Davy ridiculed the idea of lighting the town with gas, and asked one of the proprietors if he meant to take the dome of St. Paul's for a gas meter. Sir Walter Scott made himself very merry over illuminating London "by smoke," though he was glad enough, not long afterward, to make his own house at Abbotsford light and cheerful on wintry nights by the use of that very smoke. When the House of Commons was lighted by gas, the architect imagined that the gas, ran on fire through the pipes, and therefore insisted on their being placed several inches from the wall for fear of the building taking fire. The members might be observed carefully touching the pipes with their gloved hands, and wondering why they did not feel warm. The first shop lighted in London by this new method was Mr. Ackerman's, in the Strand, 1840; and one lady of rank was so delighted with the brilliancy of the gas lamp on the counter that she asked to be allowed to take it home in her carriage.—*Invention*.

In a note to the *Photographische Mittheilungen*, E. Vogel, Jr., states as the result of experiments made by him that he finds when isochromatic plates have been prepared by immersing ordinary plates in a bath of azalin they lose their sensitiveness to some extent, but by subsequently immersing them in a two per cent solution of ammonia their sensitiveness is quite restored.