

battle unclasped one another, and they went on for several days amicably feeding, burrowing, and building. The same experiment was tried on the carpenter ants, which behead their enemies; their hostile proceedings were not stopped by eau-de-Cologne.

THE SNARE OF THE BASILICA SPIDER.—Science is under obligations to Mr. McCook of Philadelphia, for his study of the marvellous constructions of the Basilica spider (genus *Epeira*), near the Colorado River, Texas. It was first found about two feet from the ground upon a bush. The general form is pyramidal, the upper part of it a mass of straight lines knotted and looped, and crossing in all directions. Within this is suspended an open silk dome, of a vast number of radii crossed by regular concentrics. The dome was suspended from the upper erection so as to be perfectly steadied and kept in form. Beneath the dome was a light sheet of irregular cobweb. The spider itself is very beautifully coloured. This form appears to be a capital specimen of transition between the orb-weavers and the line-weavers. It has the characteristics of the line-weavers, namely, right lines and sheet-web in exact detail, and dome-shaped web in outline; it also has the geometric web of the orb-weavers, or radiating lines regularly crossed by concentrics. An allied species (*Epeira globosa*) is an orb-weaver, adding to the simple orb an open but distinct tube reaching almost to the centre of the web, with a free ray running along the floor of the tube, kept taut by the fore feet of the spider. An insect struggling in the web communicates the motion directly to the spider, which rushes along the covered gangway to its prey. Sometimes the gangway is imperfect, or even wholly omitted. The orb in the basilica spider appears to be the chief means of capture, the dome the dwelling-place, and the upper pyramid a suspension for this, and a protection against enemies.

SEXUAL CONDITIONS IN THE RED MAPLE.—It is commonly stated that maples bear hermaphrodite, male, and female flowers, but Mr. Thomas Meehan, of Philadelphia, asserts that the red maple is, according to his observations, really dioecious, having only flowers of one sex on the same tree. But the male and female flowers are similar in outward appearance at first opening, except that the small pistil is not developed in the male flowers. The female flowers have anthers of full size, and are supposed to be of both sexes, but the fact is that the anthers do not develop after the flower has opened, and shed no pollen. This is a very remarkable survival from a condition when the flowers were perfect. It is not uncommon to find trees, originally female, sending forth male branches, but Mr. Meehan has not found male trees produce female branches. The male flowers were found fragrant, the female not so.

#### GEOGRAPHICAL NOTES

UNDER the title of "Naturalists in the North West," a Sydney paper has recently published some interesting articles, the last of which relates to Mr. Miclucho-Maclay's account of the manners and customs of what he calls the Papuans of the Maclay coast. Their food consists mainly of vegetable products, but they have also some animal food, though it is somewhat scarce. Many of their domestic implements are of a very primitive nature; a flat splint of kangaroo bone forms a knife, of which a large kind is made from a smooth shell; axes are made sometimes of agate, and a few large ones, 3 inches wide, are kept as public property in each village. The dress of these natives is the *mal*, a piece of cloth prepared like the tapas of the Polynesians, from the bark of trees. The men all carry the *jambi* and the *gun*, to supply the want of pockets, the former being a bag suspended from the neck, and containing tobacco, &c., and the latter one woven of different coloured threads, and ornamented with shells.

The *gun* is slung over the left shoulder, and contains the box of lime, betel-nut, knives, bamboo boxes of red and black dyes, &c. The natives also wear bracelets of bark or grass above the elbows, into which the *dougan* is thrust, and implements or weapons are also placed in the bangles on their legs. Wild boar's tusks are highly prized as manly ornaments to be worn on the chest, and ear-rings of tortoise-shell, bamboo, stones, or flowers, are all considered the proper adornment of the men. The women do not decorate themselves to the same extent, but they have cords from the upper part of one ear passing over the forehead to the other, and also bunches of dogs' teeth hanging from the lobes of the ears; they carry two bags, in one of which they place provisions and in the other their young infants or some pet pigs or puppies. Their huts and villages are situated in groups round clearings in the forest, and the plantations are usually at some distance. They have three sorts of houses—for the single people, the families, and a common house, principally used by the bachelors. These habitations do not resemble the pile-dwellings of the Western Papuans, and are only slightly raised above the ground. In each cluster of huts is a gong, like a boat raised on trestles, which, when struck in the right place, emits so great a volume of sound that it can be heard at a distance of six miles. It may be mentioned that these people have no means of obtaining fire, and frequently have to go to the hill tribes, who are acquainted with a cumbersome mode of friction by which they obtain a light.

GREAT exertions are being made by the Marquis de Croizier, and others, to ensure the success of the coming International Congress of Commercial Geography, which will be opened at Paris on September 23, under the presidency of M. Meurand, of the French Foreign Office. Numerous foreign societies have been invited to send representatives to the Congress, and we believe that the Royal Geographical Society will be represented by some members of their Council. The programme of the Congress is an extensive one, the numerous subjects proposed for discussion being arranged under the following five heads: Explorations et Voies Commerciales; Produits Naturels et Manufacturés; Emigration et Colonisation; Enseignement; and Questions Générales. A detailed programme and a *résumé* of the proceedings of the Congress will be published each day and forwarded to all the members. The meeting will be brought to a close on September 28.

AT a recent meeting of delegates of the German African Society at Berlin, it was resolved to grant the sum of 10,000 marks (500*l.*) to the International Association for the Exploration of Africa, and also to support Dr. Buchner, who is about to start for a tour through the districts lying south of the Congo River. The reports recently received from Herr Schütte, the engineer of the society, who is now at the Congo, continue to be favourable, and are accompanied by excellent maps of the districts he visits.

DR. OTTO FINSCH, the Director of the Natural History Museum of Bremen, will start for a scientific expedition to Australia at the end of this year; he is sent out by the Royal Academy of Sciences of Berlin, who will defray his expenses from their Humboldt fund.

#### THE ELASMOTHERIUM

AMONG the extinct animals of the diluvial age, few have left such scanty remains as the elasmotherium. At the beginning of the present century Fischer von Weldheim, when examining the palæontological collections of the University of Moscow, came across the half of the under-jawbone of an unknown animal, to which he assigned a place between the rhinoceros and elephant. The name elasmotherium was given to the new species,