

in them had been specially aroused by seeing a house-fly, which had previously narrowly escaped capture, swoop down on his mortal enemy and touch him on the back with his claws (as though twitting him on his failure), the spider apparently taking no notice whatever. On seeing, therefore, one of these spiders stalking a small moth on my wall in Cape Coast Castle, I devoted my attention to the operation.

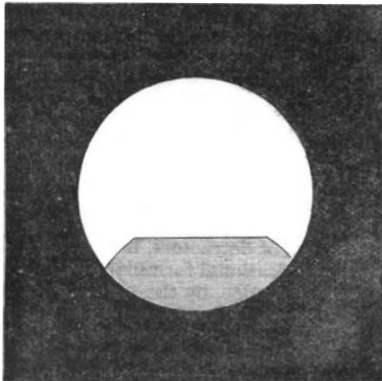
After moving off several times the moth at length settled on the ceiling, and I thought the chase was over. The spider, however, followed on to the ceiling, and approaching within striking distance (about two inches) anchored his web; then moving round in a circle from the moth until he was about equi-distant from his anchor and his prey, he made his spring. He had evidently calculated how much loose web he would require to reach his prey, for when he fell (as was inevitable from the force of gravity) he was suspended in mid-air by the loose web. The spider regained the ceiling by his own web, having narrowly missed a good meal.

C. B. LYSTER.

19 Waterloo Crescent, Dover, August 12.

The Lunar Eclipse of August 3.

IT would be interesting to know if the following phenomenon was observed at other places. At 9.30 p.m., local time, at Hamburg, a small cumulus cloud was observed a little distance below the moon, and the darkened part of the lunar surface was taken to be part of the cloud, from its upper edge being flattened. Ten minutes later the cloud had passed away, but the



Sketch of Lunar Eclipse of Wednesday, August 3, 1887 (as observed at Hamburg).

flattened appearance on the moon remained, and it was evident that the earth's shadow was distorted, as seen in the annexed sketch. Several persons noted the peculiarity, which was visible until about 10.30 p.m. in a very clear sky.

H. H.

August 8.

BOTANY OF SAN DOMINGO.

THE vegetation of this, the largest of the West India Islands next to Cuba, has long been almost totally unknown to botanists. The absence of all but the scantiest data about its flora has made any general conclusions as to the main facts of the geographical distribution of plants in the West Indies very uncertain. It has usually been supposed that any attempt to explore any part of the island botanically would present almost insuperable difficulties. The following extracts from a letter from San Domingo received at Kew from Baron Eggers, who has laboured so assiduously in the investigation of West Indian botany, will be read therefore with much interest.

W. T. THISELTON DYER.

Puerto Plata, Sto. Domingo, July 11, 1887.

I HAVE now been about three months in this island. I arrived in Samana on April 14, and the following day in this place. After having spent a couple of weeks in exploring the

lower mountains here (2600 feet), I proceeded to Santiago, where again I spent some time in exploring the Vega Real and the Monte Christi range. From Santiago I went further into the interior to Jarabocón and the Valle de Constanga (3860 feet), from where I made an expedition up to the highest peaks I could find (Pico del Valle, 8680 feet), and which I succeeded in climbing, though with considerable hardship and fatigue. From this Sierra I returned to Santiago, and from thence to Puerto Plata, where I have latterly been exploring the region to the east towards the rivers Yasica and Jamao.

This, in short, is an outline of my travels here. I have been so far very fortunate, as I have succeeded in penetrating to regions where no European seems ever to have been before: my collections are very rich—about 1200 species—and my health has not suffered from the rather hard life here.

This island is, to a considerable extent, in a state of uncivilization: the roads are frightful, and hardly deserve that name; in fact, there is not one single good road in the whole island. You could hardly believe that the principal road from Santiago to Puerto Plata, on which the greater part of the traffic of the island goes, in the rainy season is impassable often for weeks. With regard to the vegetation, it does not strike me as being very luxuriant. It is much less so than I expected, and is certainly less luxuriant than that of Dominica.

The Cacti, which are a good criterion with respect to dryness of climate, are seen very frequently in the Vega by Santiago; higher up, the mountains in the interior are covered with pine forests to an immense extent. There the soil is gravelly and rather sterile. I found the pine growing from 600 feet up to the very highest peaks. The Sierra and Monte Christi, a coast range, consists of Tertiary limestone, and has no pines at all. But here you find also Cacti, Acacias, and Agaves not unfrequently. Palms are comparatively scarce—only about six or seven species are known (*Oreodoxa*, *Sabal*, *Thrinax*, *Euterpe*, and one called "Yarey" here, which I believe is a species of *Thrinax*), comparatively few *Orchideæ*, and no *Cycadeæ* at all. I believe in the south, near San Domingo, there is a *Zamia*; and, on the whole, the eastern part of the island is more moist, especially near Samana Bay and along the river.

Of remarkable plants I have found here a *Clavija*, which seems to be known only from Trinidad among the West India Islands, *Phyllocoryne jamaicensis*, a *Stanhopea* or *Lalia*, and several tree ferns. In the high mountains, of course, I found a greater number of interesting species: several *Tupa*, two *Ericaceæ*, two *Fuchsias*, of which one has a most beautiful large pendulous flower, *Ranunculaceæ*, Ferns, *Loranthus*, and others which of course were all unknown there. The *Juglans cinerea* grows here at a height of about 1800 feet; I obtained a number of seeds.

Among *Conifera* I should especially mention a splendid *Taxodium*, the wood of which is dark red and very odorous. It is called *Sabium* here.

The Cacti are, no doubt, very rich and interesting, but as they require to be preserved in alcohol, and the means of transport are so very difficult, I have not made any collections of them this time. The beautiful *Rudolphia rosea* grows from the coast up to 4000 feet.

On the stems of the pines a number of curious Bromeliads are growing, none, however, very conspicuous; at about 1000 feet a bulbous *Oxalis* with white flowers is found, commonly among the pines in the sandy soil. A number of herbaceous *Synantheræ* were found among grasses in the upper regions above 7000 feet.

The *Podocarpus* of Jamaica I did not see here at all. A number of beautiful *Echites* are found in the lowlands, as well as some striking Orchids (*Bletia*, *Leliopsis*); also two remarkable *Coccolobas*, the immense-leaved *C. macrophylla*, and another species with somewhat lesser