vantages. I have been working chiefly at Coleoptera, Diptera and Hemiptera, and find them more abundant than the other orders. *At present* (25th Nov. 1847) my numbers stand thus: Coleoptera, 87 species; Diptera, 43 species; Hemiptera, 39 species; Hymenoptera, 25 species; Lepidoptera, 20 species; miscellaneous, 16 species."

This is certainly far above any published list of the insects of Madeira, and we have no doubt that our talented correspondent, Mr. Wollaston, of Jesus College, Cambridge, when less of an invalid, will add much to it. As it is, it will doubtless prove interesting to the entomologists who read this Journal.—A. W.

CURIOUS PHÆNOMENA IN THE NIGHT-BLOOMING CEREUS, &c.

Highgate, 11th Dec. 1847.

My dear Sir,—Two days ago a remarkable circumstance occurred in my greenhouse, which it may be interesting to you to communicate. The *Night-blooming Cereus*, of which I gave you a cutting, has long had a bud. Being a fine strong plant, it has been able to mature it even at this unusual season. It arrived at maturity on *Thursday*. The days however not being of the length usual at its ordinary season, it seems to have been somewhat puzzled how to bloom. When I entered my greenhouse at 8 A.M. I found all the petals on *one* side expanded [left side]. I thought this remarkable, but conceived that, in this dull weather, a longer effort at opening was necessary than usual. I watched it all day, but was surprised to find no advance. At 8 P.M. I went into my greenhouse for the express purpose of examining the bloom, when, to my great surprise, I found that *all the petals which had opened in the morning were closed up*, while all the petals of the *opposite* [right] side were then *fully expanded*! The left petals remained closed. The bud was a full-sized and healthy one. [The seed promises to mature. 27th December.]

It is obvious, I take it then, that the law which regulates the opening of these flowers, and which normally causes them to bloom at *night* only, and *for* [say] *twelve hours* only, affects the *individual* petals and not the totality of the bloom. Hence if, from any accident, as here, any number of petals mistake a dull day for the night, and open, their doom is sealed: they have begun their twelve hours' race, and can see it—and *no more*; and their more knowing companions, who keep closed till true night, must flourish alone in their glory,—but *will* do it, independent of the prior blooming and present decay of their companions.

I have often noticed that if the *Echinocactus Eyriesii* (a remarkably rapid bloomer) advances to the point of opening near morning, it remains in that exact state all the day, checked by the light, and does not begin to burst till the sun is going down.

While on vegetable life I have another curious matter to notice. In the 'Annals,' vol. xix. p. 470, is an article on "Monstrous Roses." A far more remarkable circumstance than any noticed there, or than I ever saw noticed, occurred in my own garden in the same year as the monsters there recorded, and in a plant of the same na-

tural family (*Rosaceæ*). A *Potentilla*, which had for some years been a favourite plant from its great luxuriance of growth and bloom, played in that year, without removal or any alteration of treatment, the following strange antics. As usual it grew luxuriantly and was covered with bud, but it did not bear *a single* true flower throughout the season. Every flower on the plant, without exception,—and none died off,—opened into a tuft of small regular green leaves: it was not a mere whorl of leaves for the petals, but, there being no stamens or pistils, the whole apparatus of the flower was replaced by green leaves of small size in a thick tuft. Sometimes a second would grow, smaller, from the centre of the first flower, but it presented the same aspect. All these leaves were of the same colour and character as the ordinary leaf of *Potentilla*.

I was much interested in observing this plant, and watched it the next spring, but it died after this unnatural effort.

If you think either of the above facts worth recording, you are welcome to them.

I am, my dear Sir, very faithfully yours,

J. Toulmin Smith.

W. Francis, Esq.

Descriptions of two new species of Planaria. By Joseph Leidy, M.D.

Planaria maculata. Superiorly convex, faintly blackish or brownish with irregular colourless maculæ; inferiorly flat, colourless; anteriorly trapezoidal; posteriorly spatulate or oval; eyes two, anterior, proximate, composed of a large semitransparent mass with a reniform mass of pigmentum nigrum at the postero-internal part; oral aperture ventral, one-third the length of the body from the posterior extremity; proboscis large and cylindrical. Length $2\frac{1}{4}$ lines; breadth $\frac{1}{2}$ line. Found in moderate abundance in the ditches below the city, creeping upon the submerged stems of aquatic plants.

Subgenus. *Prostoma*, Dugès. Mouth anterior and terminal.

Prostoma marginatum. Blackish, narrow lanceolate, anteriorly truncate; marginate, margin delicately striate; mouth large; proboscis large and oblong; eyes two, anterior, distant, each consisting of two round masses of pigmentum nigrum in contact with each other, and of which one is larger than the other; generative orifice one-fourth the length of the body from the posterior extremity. Length 1 line. A single specimen found with the preceding, but probably not rare; for, from its small size, it escaped my notice while collecting some of the former, and it was not until I got home that I detected its existence in the vessel of water containing the others.

The anatomy of *P. maculata* does not differ from that of *Planaria lactea*, as given by Dugès in the 'Annales des Sciences Naturelles.' In *Prostoma marginatum* the digestive cavity has not the dendritic arrangement of *Planaria*, but merely consists of a large capacious sac extending as far back as the posterior third of the body, and having a cæcum upon each side of the proboscis. The penis has a yellow colour, and consists of a round granular mass, with a moderately long