

initial pressure. The use of a fan-wheel may be applicable.

Although here, in and about this circle in the said map, no paying oil-well has been struck, nor does any great 'gas-gusher' 'blow,' yet good oil-sands, saturated with petroleum, are found, and a gas-belt is developed of most remarkable persistency and continuance; and the separated and scattered wells demonstrate a territory in which good paying oil and gas wells are liable anywhere to be struck. This territory embraces about the highest lands above Lake Erie, in the state of Ohio. This region gives proof of an abundance of gas for ages to come, for the supply of the surrounding manufacturing towns for light and heat.

The location of 'Neff's gas-wells' is in the eastern part of Knox and the western part of Coshocton counties, O.

PETER NEFF.

Gambier, Knox county, O., July 15.

### A remarkable swarm of *Sciara*.

In *Psyche* for September, 1880, Dr. Hagen, in discussing a swarming species of *Sciara* from South Carolina, made the statement, based upon Weyenbergh's list of swarms of Diptera (*Tijdschrift v. entom.* 1861), that the swarming of *Sciara* is new. In the *American naturalist* for February, 1881, Professor Riley states that he has frequently observed them in swarms so dense as to appear at a short distance like smoke, and quotes a letter from Dr. S. S. Rathvon concerning the swarming of a species of this genus in the upper room of a building in Bethlehem, Penn., where they were observed to issue between the floor-boards. These records indicate that some interest will attach to the following facts:—

Tuesday evening, July 20, I was sitting in my library of the second floor, when I became conscious of a humming noise, as of a distant army of flies. The noise gradually increased for nearly half an hour, when I went to the window to investigate. Outside I heard only the customary night noises; but, as I drew my head in, I saw that the ceiling of the library was covered with tens of thousands of minute midges of the genus *Sciara*. Except immediately above the lamp, the white ceiling was tinted brown with them. They made no attempt to reach the light, but clung to the ceiling around the edges of the room, extending down on the walls for several inches, and massed a dozen or more deep in the angles. All were in constant motion, and the noise was loud enough to drown the sounds of the crickets and tree-toads outside. The sound, as a whole, was a distinct musical note, varying but a fraction of a whole tone, and corresponded, as nearly as I could place it, with E flat above middle C. The number was beyond compute. I at once closed the windows, and in ten minutes they became almost opaque from the numbers which settled upon them. On going below stairs, I found, that although doors and windows were open, and a bright light was burning, very few of the midges had entered. I easily rid the library of those which had entered, by lighting a spoonful of pyrethrum in my ash-receiver. They fell as fast as snowflakes, and in the morning were swept up by the dustpanful.

The house is a new one, finished in April last, and is situated on a level, nearly clear plateau on Washington Heights. The gnats entered only at the second-

story windows. The night was clear and not sultry, and the wind was north-east. Later in the evening a heavy shower fell. The midges were not noticed on previous or succeeding nights. From these facts it seems quite plain that the gnats were flying in an immense swarm at some distance from the ground, and either met the house in the direct course of their flight, or were attracted from their regular route by the light.

L. O. HOWARD.

Washington, July 23.

### Another carnivorous rodent.

Over a year ago I recorded in this journal the carnivorous habits of several of the Rodentia (*Science*, v. No. 114). In that communication I called attention to the meat-eating propensities of the muskrat (*Fiber zibethicus*), and a species of field-mouse, that I then had in captivity. Since writing that, I have described the field-mouse, for it proved to be a new species, and it is now known as True's Piñon mouse (*Hesperomys truei*). No doubt others of the same genus will be found given to a similar diet when the opportunity offers. But here comes another rodent that strongly asserts his taste in that direction, and will consume raw meat even in preference to his regular diet list, as we have always conceived it to be. This is no less an animal than the 'prairie dog' (*Cynomys ludovicianus*). I have at the present writing a pair, half-grown, of these engaging little pets; and for the last two days they have been fed on raw meat, refusing their ordinary food served to them at the same time. They tell me that the Navajo Indians, when they keep them in captivity, feed them with raw meat half the time, and the little marmots eat it with avidity.

As I have noticed elsewhere, rats will devour raw meat whenever they can get it, and usually in preference to other things.

In time, no doubt, it will be proved that it is a universal habit of the order Glires.

R. W. SHUFFELDT.

Fort Wingate, N. Mex., July 16.

### Germ of hydrophobia.

I see in your issue of July 9, p. 23, that the credit of having at last discovered the germ of hydrophobia is claimed by the London *Lancet* for Dr. Dowdeswell, who finds it in a micrococcus in the medulla and spinal cord of animals affected with this disease.

I do not remember that the attention of your readers has been drawn to the fact that this discovery had been previously claimed, with much show of reason, by Professor H. Fol of Geneva (*Archives des sciences*, vol. xiv. p. 449, 1885, and vol. xv. p. 414, 1886). According to Fol, also, it is a micrococcus found only in this disease, and so minute that it requires a good  $\frac{1}{2}$  objective to see it at all. Of this micrococcus he has made pure cultures, which by inoculation communicate the disease with certainty.

JOSEPH LECONTE.

Berkeley, Cal., July 19.

### A bright meteor.

The meteor recorded by Mr. Brackett as having been seen at St. Johnsbury, Vt., on the night of Aug. 11, agrees as to size and direction, as well as date and time, with one seen at Salem, Mass.

E. S. M.