

seems by inflaming the tissues to determine a flow of blood, and also to prevent the coagulation of blood or other proteid. (The blood subsequently coagulates in the mosquito's stomach.)

The poison-duct resembles a trachea in being transversely striated, but differs by the uniform diameter of its tubule of about 6 micromillimetres, by the absence of fine ramifications, and by the great thickness of its wall. The two ducts, proceeding one to each mandible, arise by the bifurcation of a common duct in the region of the neck below the œsophagus. Behind this the difficulty of dissection is considerable, as the parts are so small that they cannot be followed with low microscopic power; they are greatly entangled among the large muscles, tracheæ, and other furniture of the prothorax, and they are easily torn so as to be lost to the search. I have succeeded, however, by working back from the neck, in spreading out the entire system. The common duct arises from three prothoracic glands, all sessile on its lower extremity like the leaves of a trefoil, each supplied with a precurrent ductlet, the three ductlets meeting at a point so as to form the common duct. The glands are each about one-third of a millimeter in length and one-twenty-fifth in diameter. The two lateral glands are of the usual salivary kind common to insects. The central or azygos gland is entirely different, scarcely lobed, but being a mass of brown evenly distributed granules, with oil-like globules intermingled, its ductule having finer walls than in the lateral glands. We may regard this as emphatically the poison-gland, but the intermingled products of all three have their only outlet by the common duct, and thence by its two branches to the mandibles, which therefore play the part of 'poison-fangs.'

Some tentative notes recently given before the American Association involved inaccuracies, which are here rectified and the work completed. Measurements given above are from a small species which may perhaps be identified by its maxillary palps being as long as the maxillæ themselves. They seem to be the same for all the common species.

G. MACLOSKE.

Aug. 20.

Rockwood Meteorite.

ABOUT the middle of March last there was found by Mr. Elihu Humbree, on land owned by Mr. W. B. Lenoir, eight and one-half miles west of Rockwood Furnace, Cumberland county, Tenn., several pieces of what has proved to be a meteorite of very great interest, belonging to the rare class of siderolites, resembling in general appearance the Atacama but differing very widely in the nature of the silicate.

When first found it excited the curiosity of Mr. Humbree, and, after much pounding with an axe, he succeeded in detaching several large pieces and many fragments without finding the large lump of silver in it for which he was looking, the bright specks of nickeliferous iron scattered through the mass having been mistaken by him for that metal.

Three or four weeks later Mr. Lenoir, suspecting the nature of the find, secured the whole of it (with the exception of some small pieces which had been given to friends), and forwarded samples to us for examination. Two or three weeks later, on the 2d of June, I visited Rockwood, and brought the entire find away with me, with the exception of the small pieces already mentioned: these have nearly all been gathered up since and are now in our possession.

The main mass is an irregular ellipsoid, with one side a little flattened, and noticeable by the almost entire absence of the usual pittings, which are present elsewhere on the surface.

The three greatest dimensions are $14\frac{1}{2} \times 10 \times 8\frac{1}{2}$ inches. The weight, which owing to the loss of some of the fragments cannot be determined accurately, was about 83 pounds. Three other smaller masses bring the weight of the entire find to fully 100 pounds (probably two or three pounds more), of which to the present time we have secured 96½ pounds. Specimens have been submitted to Prof. F. W. Clarke of the U. S. National Museum for examination, and very full analyses by Mr. J. E. Whitfield will be published as soon as the work is completed. The analyses thus far made show it to be in the main a silicate of alumina, lime, magnesia, and ferrous oxide, — probably in the form of anorthite and augite, with no olivine. Further analyses are being made to clear up this point.

The iron grains contain 12 per cent of nickel, with a trace of copper, and, so far as examination has gone, seem to be distributed through the mass quite evenly; one nodule of iron, however, has been observed which measures three-quarters of an inch in diameter, and exhibits the Widmannstadian figures very characteristically on the etched surface. Other nodules of iron equally large will probably be met with by further cutting. Although the analysis shows an unusually large amount of chlorine present, decomposition has only affected the surface and in the seams, and has been so little that the original black crust is preserved over a considerable portion of it.

This brings us to the interesting question of how long it could have been exposed to the action of the weather, and it is possible some readers of *Science* can help us to determine that important point.

In the late autumn of 1880, between five and six o'clock in the afternoon, a meteor was seen passing to the north-west over Morgan county, Georgia, which "left a dense trail, not very wide, of light-colored smoke, which could be seen for at least half an hour, and which gradually spread out thin and woolly, like ordinary smoke." A loud report, thought to be about three minutes after the passage of the meteor, was heard by persons who did not see it, as well as by those who were fortunate enough to observe its flight. It would be very interesting if a connection could be traced between this meteor and the meteorite found in Tennessee. If they are the same, it would seem that it should have been seen and heard by different persons all along the line. Any information on this subject will be thankfully received.

EDWIN E. HOWELL.

Rochester, N.Y., Aug. 22.

Swill-Milk.

I HAVE read the discussion about 'swill-milk' recently published in *Science* with great interest, especially as I had thought the unhealthiness of distillery-slops as food for animals had been settled and agreed to fifty years ago. Will you permit me to cite an experience of my own bearing on the question? About fifty years ago, — I cannot give the precise date, — I worked in a 'pork-house' one winter, during which I trimmed the hams of five hundred 'still-fed' hogs. It was admitted by all hands that there was not a sound hog in the lot. But few of them were well fattened, although their appearance was good. It was not at all an uncommon thing, in cutting up a hog, to cut through an abscess, varying in size from a cherry to a half-pint; the largest one being in the region of the kidneys. The kidneys and 'tenderloin,' which lies along the vertebra in the region of the kidneys, were invariably infested with kidney-worms, and I have never had any desire to eat tenderloin since.

The testimony of all packers in that section of country — the Miami Valley — was that all still-fed hogs were similarly diseased, though not generally so badly as this lot. The meat was soft and oily, — unfit for barrel-pork.

Some years afterwards, upon my removal to this city, I called upon the butcher of whom I purchased my meat, who was an intelligent man, and asked him if he found the livers of well-fatted cattle in a healthy condition. His answer was no, that it was very rarely that the liver of a well-fatted beef was fit for human food, especially still-fed cattle. They, he asserted, were always diseased; and he added that he never bought still-fed cattle unless they had been taken off slops and fed on corn some weeks before being killed. He asserted that he could distinguish between still-fed and corn-fed beef, after it was slaughtered, by the sight and touch.

JOHN J. JANNEY.

Columbus, O., Aug. 19.

The Pronunciation of 'Arkansas.'

It is really exasperating to be obliged to explain and apologize every time one pronounces this word correctly in intelligent New England circles, where the later and improper pronunciation was invented and has been established parasitic upon our nomenclature. Had not the Legislature of the State officially declared the final syllable to properly have the sound of *saw*, not *sass*, or had not the inhabitants, from earliest settlements, to say nothing of the people