

doubt remained that they had been introduced. Nevertheless, as Dr. Cooke informed me, no one knew whence they came, or what (if any) described species they represented. I find that they agree with *Veronicella leydigii*, described from specimens collected at Brisbane, Queensland. Simroth, who made the species known, gave good coloured figures, and figured the anatomy. Henry Tryon (1899) gave a popular account of the slug, showing that it was destructive in gardens. Both he and C. Hedley were of the opinion that the animal had been introduced from some unknown locality. Dr. Willey found specimens at Esafate, New Hebrides, and this may be the original home.

The species will be known by its large size, dark colour above, with a slender yellowish line; more or less black beneath (as well shown in Simroth's figure), with pale sole. I described the living specimen thus: upper tentacles black above, dull yellowish below; lower tentacles stout, pale basally, black at apex; back dull black, with a slender broken pale ochre-tinted line, best defined posteriorly; underside black, with the sole dull pale yellowish; length about 80 mm., width about 25 mm., width of sole about 13 mm. Internally, a noticeable feature is the great length of the filiform glands. Probably this slug has been carried to other places, and it will be of interest to record new localities, should they be found. The specimens described by Simroth were not of full size, but the large size of well-grown examples is shown by Tryon, who gives a good photographic plate.

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The Preparation of Line Sources of Radium C.

WHEN an active line source of radium C is required, the usual method of preparation is to seal a platinum wire into the end of a glass tube. Radium emanation is pumped into the tube with mercury, the wire being made the negative electrode with the mercury just beneath the wire forming the positive electrode. After a sufficient exposure, the emanation is pumped off, and the glass tube broken to remove the source. Even with quantities of emanation so small as 10 to 20 millicuries, the efficiency is very low, only 10 to 15 per cent. of the active deposit being found on the wire. This low efficiency is probably due to the distribution of the potential gradient along the wire. The drop takes place between the end of the wire and the mercury, while in the upper part of the tube there is practically no potential gradient. Thus most of the emanation is in a "dead" space.

The efficiency may be increased fourfold by the following device, which has been in use here for some time with satisfactory results. The wire is sealed into the tube as before, and a thin foil of iron or nickel, which will not contaminate the mercury, is slipped into the tube, forming a cylindrical sheath around the wire. The emanation is pumped into the tube and the mercury level raised until it makes contact with the sheath. The wire is made negative and the mercury and sheath positive. 110 volts gave 40 to 45 per cent. of the active deposit on a wire of 0.4 mm. diameter; 200 volts gave an efficiency of more than 50 per cent. The tube should be of not less than about 7 mm. internal diameter, and the foil should fit as snugly as possible against the wall right up to the end of the tube.

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Recent Work at Stonehenge.

THE extremely interesting article of Col. Hawley in NATURE of September 20 leads me to ask him two questions which are raised by it:

(1) Were the Bronze Age interments found on both sides of the rampart, or only on the outer side?

(2) Are the "Aubrey Stones" contemporaneous with the main structure of Stonehenge, or were they a subsequent addition?

A description of Stonehenge has long been recognised in Diodorus Siculus (ii. 47), which he derived from Hecataeus, a writer of the 6th century B.C., " & some other " authors. We are told that it was dedicated to Apollo, the sun-god, in whose honour a great festival was held every 19 years which lasted from the summer solstice " to the rising of the Pleiads." We are further told that in the immediate neighbourhood was a city inhabited by the priests and their disciples, who worshipped the god daily with hymns and the harp. It would seem to follow that in the time of Hecataeus or his authorities the sacred precincts of the temple could not as yet have been desecrated by cremation burials.

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September 23.

THE Bronze Age interments referred to by Prof. Sayce occurred both on the inside and outside of the Stonehenge rampart, but by far the greater number were on the inside and at the bottom of the slope. Here there is loose soil about 14 inches deep of humus and chalk rubble, affording easy digging, in which the remains had been deposited without any attempt to make a cist to contain them.

Occurrences of interments on the outside of the rampart were six in number, but the remains were deposited with greater care. They were found at the top of the silt which had filled the ditch, and were placed in bowl-shaped cavities excavated to about two feet from the surface where the rampart slope joins the silt. Owing to deeper burial, they were better preserved and were coated with a thicker deposit of lime than those found inside: they were also greater in quantity and probably represented the remains of an entire body, whereas those on the inner slope were mostly only portions of cremations.

The Aubrey Holes were evidently of Pre-Stonehenge date, as the stratum of that period passed over them and the chips characteristic of it were not found in the soil filling the holes. They were evidently open holes during the neolithic period, for in one of them there was a quantity of chips which had been discarded by an implement maker and evidently struck from one large piece of flint. Some of them can be fitted together, and when so placed it is interesting to see where the blow was delivered to detach them. There is a description with drawings of twenty-three of these holes in a report to the Society of Antiquaries given in the *Antiquaries' Journal*, vol. 1, Part 1, of January 1921.

I have read the supposed description of Stonehenge given by Hecataeus of Miletus, but regard the existence of a city anywhere near here to be impossible. There are no Bronze Age settlements very close, and those with which I am acquainted in the neighbourhood must have been extremely primitive and rough - very dirty too, if one may judge by the refuse of black ashes, animal bones, and sheards of badly baked pottery strewn about them.

WILLIAM HAWLEY.