

valve. Only fully developed flagellates were present, and Leishmaniasis form parasites and intermediate forms were not observed. A part of the material was stained and mounted and the remainder was used for the experiment. Two points on the left forearm of a volunteer were scarified and inoculated with material containing flagellates on June 26. On July 31 a small papule which would normally have passed unobserved was noted on one of the inoculated points, and on examination Leishman-Donovan bodies were found, *i.e.* the incubation period was less than half of that noted by the Sergeants and their collaborators. Nothing was noted on the other site of the inoculation, but it was examined and up to the time of writing has proved negative.

It must be further noted that the insect from which the material for the experiment was obtained was the only one from the batch of 198 which contained *Herpetomonas*.

The method of dissecting individual sandflies and experimenting with a positive individual is more satisfactory than crushing batches in saline and experimenting with the product, for in the latter case it is impossible to know whether a negative result is due to the fact that the sandflies contained no *Herpetomonas* or whether the *Herpetomonas* was non-infective.

For various reasons we do not think that the successful experiment of the Sergeants and collaborators and our own experiment provide a complete explanation of the etiology of cutaneous Leishmaniasis, and we intend to discuss this point elsewhere. It must be pointed out that Patton has on several occasions pointed out the necessity of the experiment performed by the authors (*Bull. Soc. Path. Exot.*, vol. 12, No. 8, pp. 500-504, and *Ind. Jour. Med. Res.*, vol. 9, No. 3, pp. 496-532.

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### Spiral Springs of Quartz.

MAY I express my interest in your recent correspondence on quartz spiral springs (*NATURE*, June 20, p. 943, and July 4, p. 14), and suggest a convenient laboratory method for the production of springs of extreme sensitivity. I refer to the use of fibres the diameter of which is  $10^{-3}$  cm. or so.

One end of a length of fibre is weighted and the other attached to a transparent quartz tube by fusion. This is accomplished simply, by heating to incandescence a small portion of the tube in an oxygen flame and quickly lowering the heated spot on to the fibre, which is held at right angles to the axis of the tube. A perfectly strong joint is made and the loaded fibre may be wound up at the desired pitch (difficulties arise owing to air-currents if the tube is not lowered on to the fibre). A similar procedure serves to finish off the spiral: a small portion of the tube, say 1 cm. away from the windings, is heated to incandescence, and, tilting the tube, the last turn of the spiral is wound over the hot spot. The spiral with its supporting tube is now placed axially in a wire wound resistance furnace and heated rapidly in air above the annealing point of fused silica—1 minute at  $1100^{\circ}$  C. is adequate for a fibre  $10^{-3}$  cm. diameter wound on a diameter of 1 cm. No trouble from devitrification is experienced and the elastic properties of the fibres are unimpaired; moreover, the curvature of the coil is uniform throughout.

Removal is best accomplished by unwinding slightly one of the end turns of the spiral; bending it outwards from the tube and away from the coils. In this position the end may be secured to a rigid

support by any suitable adhesive, the remaining turns being similarly opened and wound off. In this process a single camel hair is useful to guide the motion of the fibre, and is best used without artificial aid to vision. As an example of sensitivity, a spring so made with which I have experimented has an expansion rate of  $3 \times 10^6$  cm. per gram, this measured by deformation under its own weight.

By careful regulation of the time and temperature of heating, a coil may be made, which, when released at its ends, is of larger diameter than the tube on which it was wound. Incidentally, this technique for producing springs of varying curvature, under specified conditions of time and temperature, offers a very convenient method for the study of the annealing of vitreous bodies, since a simple series of experiments gives quantitative information as to the time rate of the release of strain.

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### Fish Poisons as Insecticides.

THE destruction of fresh-water fish by means of the poisonous properties of certain plants is almost as widespread as the use of the conventional form of fish trap in one or other of its common modifications. Like the savages of many tropical countries, the poachers of Southern Ireland employ a vegetable fish poison, and this they obtain from spurge (*Euphorbia hibernica*). The primitive method of use is merely to put the freshly gathered plant (leaves, stem, and root) into a sack and tread on this vigorously in the shallow water at the head of a pool. The expressed juices mingle with the water and rapidly render all fish helpless for, it may be, three-quarters of a mile downstream. It is said that affected fish never recover, and the amount of destruction wrought, especially in streams where quantities of salmon parr and small trout exist, can easily be imagined.

The more modern method of application is, I understand, to crush and chop the plant in a chaff cutter or some similar agricultural machine, collect the juice in a bottle, and put this into the stream either with, or without, the chopped-up plant.

If it were found that the spurge poison is also valuable as an insecticide, the plant would probably be more easily obtained, or cultivated, than some of the tropical forms.

Flax water, the scourge of certain rivers in Northern Ireland, is in its effects at least as deadly as spurge, but its effect is due to the product of the decomposition of the softer parts of the flax plant in water and not the juice of the plant itself.

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Fishery Board for Scotland,  
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### The Word "Australopithecus" and Others.

NEITHER Dr. Bather nor Dr. Allen (*NATURE*, June 20, p. 947, July 25, p. 135) directs attention to the fact that the names of all well-regulated families or sub-families should be based on a generic name, so that the term *Homosimiidæ* is ill advised. As for the name *Australopithecus* and any other combinations, it might be said that scientific names are not, strictly speaking, literature, though so regarded by the orthodox. Many years ago Le Conte, to show that a name need not necessarily mean anything, gave the name *Guyascutus* to a genus of beetle.

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The American Museum of Natural History,  
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