

With such a camera as I have indicated above, there is good reason to expect that it would be possible to detect the crawling of the lightning from point to point in its length, for, in the much less powerful instrument which I used in America, the two images of a flash were clearly different in shape, indicating the progression of the flash.

It is evident that the optical parts could be carried on an overhung shaft and be rotated within a fixed drum, or by the aid of concentric shafts both optical parts and drum could be made to rotate in opposite directions to obtain increased aberration if desired. But I prefer the simpler plan described in the first instance.

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Striations in High Frequency Discharges.

IN the course of an investigation dealing with the origin of the electrodeless discharge, high frequency striations have been observed in iodine vapour which are apparently unlike those recently described either by McCallum and Perry (*NATURE*, Jan. 12, p. 48) or Mukherjee and Chatterji (*NATURE*, April 20, p. 605). From the accompanying photographs it will be seen

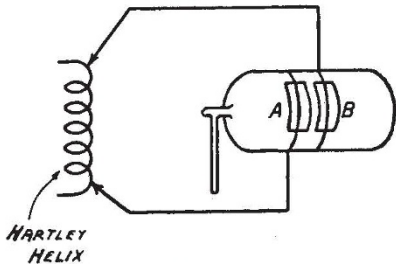


FIG. 1.

that the appearance of the striations is strongly suggestive of a sine curve. They were first obtained accidentally when a solenoidal coil was used with one half wound back on itself, so that a high potential existed between the adjacent initial and final turns. In the narrow region between these turns, of width about one centimetre, the striation pattern was observed when the coil carried an undamped high frequency current. It was afterwards found that, by means of the arrangement shown in Fig. 1, conditions

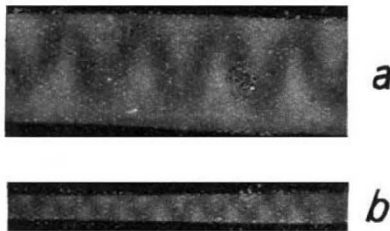


FIG. 2.

could be controlled so as to permit of a more careful, as well as a photographic, study.

To keep the striations steady and well-defined, a suitable distance between the electrodes is necessary. Frequently, the whole pattern has a rotational motion, the direction of which may be reversed sometimes simply by bringing the hand near the tube.

The length of the striations varies markedly with the wave-length. Thus, photograph *b* (Fig. 2) was taken with a wave-length of 65 m., and electrodes *A, B*, 0.2 cm. apart; photograph *a* (Fig. 2), enlarged

to the same extent, with a wave-length of 175 m., and electrodes 1 cm. apart. With a wave-length of 33 mm., the pattern was too fine to be photographed.

Although the striations resemble so strongly a continuous sine curve, a careful examination shows that they are in reality more like two sets of interlocking teeth. It is hoped that the exact origin of these striations will be revealed by the more extended investigation now in progress.

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Dragonflies in Folk-Lore.

IN a recent letter to *NATURE* (June 1, p. 837) Dr. R. J. Tillyard directs attention to a chapter on dragonflies in the late Mary Webb's novel "Precious Bane". He asks if the expressions "ether's mon" or "ether's nild" used in that chapter for the dragonfly are still in use in Great Britain.

The novel is set, according to the introduction, in north Shropshire—the Ellesmere district. Hence it is worthy of note, I think, that here over the border in North Wales the Welsh name for the dragonfly, which is in common use throughout the province, is 'gwas-y-neidr'—the adder's servant. The choice of the word 'gwas' (servant) appears to be particularly suited to the legend given in "Precious Bane" which reads "where the adder lay hid in the grass there above hovered the ether's mon as a warning". An interesting parallel of the use of 'gwas' in natural history is found in 'gwas-y-gog', the cuckoo's servant, which name is given to the hedge-sparrow owing to the belief that this bird follows the cuckoo and permits the latter to lay its egg in her nest.

I am indebted to Prof. Ifor Williams (of this College) for looking up the Welsh names for the dragonfly in the older dictionaries. He informs me that Pughe, 1832 (2nd ed.), gives 'gwas-y-neidr' and 'gwaell neidr' as terms used for the dragonfly. The latter literally means 'the adder's knitting needle'. I am not aware of the use of this term in North Wales at present, but it is interesting to note that Dr. Tillyard states he believes the dragonflies are still commonly called 'devil's darning-needles' in many parts of the United States of America.

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NEW ENGLAND is a long way from England, but our use of "darning needle", when I was a boy (Westborough, Mass., about 1895), is about the same as Dr. Tillyard's (*NATURE*, June 1, p. 837).

The 'darning needles', 'devil's darning needles', or 'blue darners' were definitely the smaller Zygoptera (Agrions). The 'blue darners' were of course in general the males, but we were not very careful in our distinctions. Larger dragonflies (Anisoptera) had no special name—they had to go as darning needles, but we felt the name did not really belong to them.

I have noticed that friends from the middle west, if they say 'darning needle' at all, mean especially the large Anisoptera; but they are more apt to say 'snake feeders', a term that is entirely unknown in our section, but recalls the "ether's mon" of Dr. Tillyard's letter. There is of course no real adder over here, and the word 'adder' is always used of a harmless snake.