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PICTURE TELEGRAPH

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Fig.1

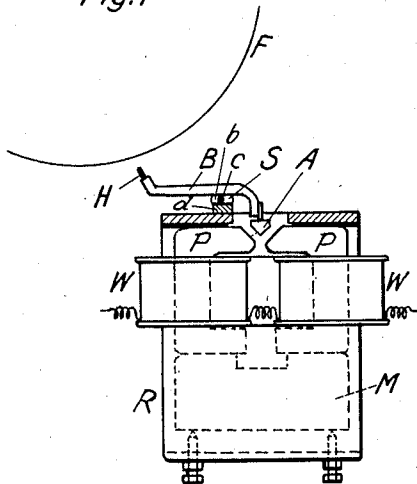


Fig.2

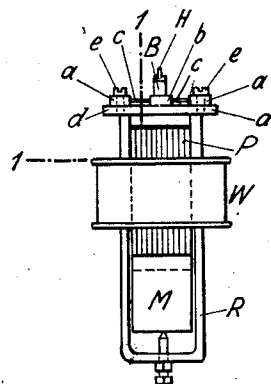
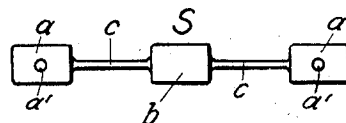


Fig.3



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PICTURE TELEGRAPH

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2 Claims. (Cl. 178—13)

This invention relates to picture telegraphs of the kind having a magnetically acting system wherein a style or pencil, fixed to a lever, is pressed against a chart with the aid of an armature of the magnetic system, so that the signals arriving as current impulses are reproduced on such chart.

Difficulty is encountered here if this lever is journaled in trunnion bearings. Further a high tuning of the system is not possible in this case. A high tuning, however, is much to be desired in order that also very high picture frequencies can be recorded. Furthermore, resilient buffers must be provided heretofore in order to damp the system elastically.

Drawbacks of this kind are avoided in the novel arrangement. Here the lever carrying the recording style is fixed to a bar not journaled in trunnion bearings, but fixed at its two ends and adapted to be twisted so that on the release of the armature the style is returned to normal by the torsional stress of the bar.

One embodiment of the invention is described hereinafter, reference being had to the accompanying drawing in which

Fig. 1 is a partially sectioned elevation of this embodiment, the section being on the line I—I of Fig. 2. Fig. 2 is an end view to Fig. 1. Fig. 3, drawn to a larger scale than Figs. 1 and 2, is a plan view of the bar intended to support the lever carrying the recording style.

Mounted in a frame portion R is the magnet M which is fitted with pole pieces P provided with coils W. These serve to guide the currents by which the recording style H is pressed against the chart F carried in a well known manner on a cylinder, the so called picture cylinder, or arranged in any other suitable manner. The style H is fixed to a lever B, carrying an armature A of the magnet M. Lever B is fixed on the centre portion b of a small bar S. This bar is fixedly connected with a frame portion d, for example by screws, e, extending through apertures a' (Fig. 3) of the end portions a of the bar. Between portion b and the two portions a reduced portions c are provided which are of so small a cross-sectional area that they are twisted whenever the armature A is attracted by magnet M. Bar S is preferably manufactured from a flat piece of material. The portions c are by preference circular

in cross-section and may to such end be produced by turning down the flat piece of material. Owing to the portions a being flat, the bar S is resting with plane surfaces on the frame portion d and will thus be seated steadily thereon, while the bar owing to the flat shape of portion b can be fixed to lever B by reliable means, such as by welding. Armature A is wedge-shaped and is located between bevelled surfaces of the pole pieces P, as will be seen in Fig. 1.

When a current flows through the coils W, the armature A is attracted and consequently lever B is so moved that the style H comes against chart F, the portions c becoming twisted in this way. The torsional stress thus originating in the parts c is the sole power by which the device A, B, H is returned to normal on the release of the armature. Springs or other means of retraction are here not necessary. The material from which the bar S is made being elastic, a high tuning of the system can be attained without the aid of resilient buffers and without any difficulty attributable to the kind of mounting of the lever B. The novel system is therefore adapted for use with simple picture-telegraphic arrangements of the kind in which no photographic method but a mechanical recording is employed. In such case for instance, carbon paper is so placed on the chart F that the signals will be printed thereon through the medium of the carbon paper.

What is claimed is:

1. A reproducing arrangement for picture-telegraph apparatus comprising a writing lever, an electromagnet for actuating said lever, a bar rigidly fixed at its end for supporting said lever, said bar being stressed in torsion upon movement of said writing lever, said writing lever consisting of a rod supported by said bar at a point intermediate its ends and provided at one end with a writing point and at the other end with an unpolarized iron armature which is arranged in the field of said electromagnet, to move the writing point into operative position.

2. An arrangement according to claim 1, wherein said bar has flat end portions and a flat centre portion to which said lever is fixed, and reduced portions between this centre portion and the said end portions.

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