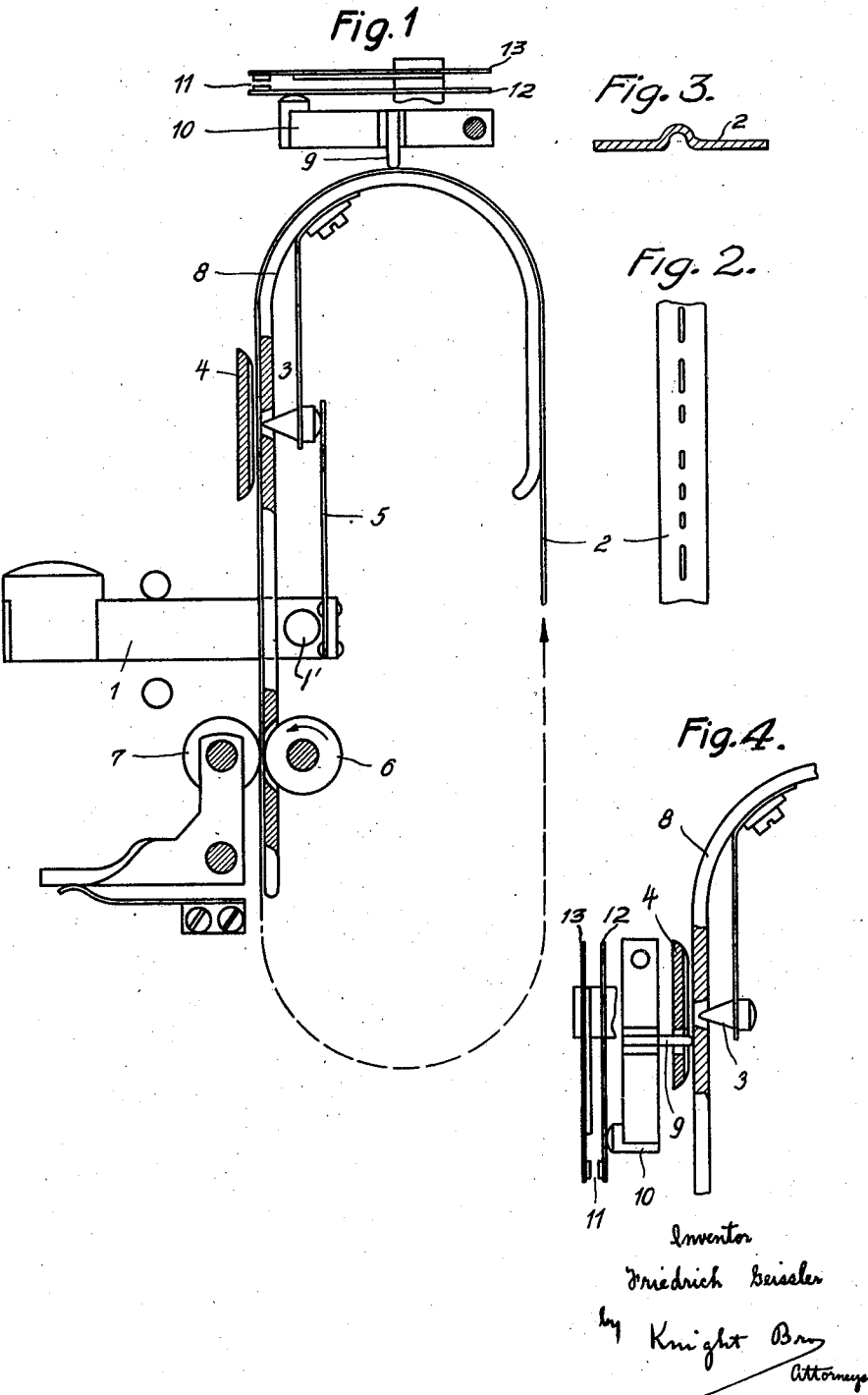


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EMERGENCY TRANSMITTER
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EMERGENCY TRANSMITTER

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1 Claim. (Cl. 178—80)

This invention relates to a method for mechanically storing impulse values, particularly for telegraphic purposes.

In electric engineering, particularly in telegraphy, it is often required to store the values of electric impulses so that a later or repeated transmission may be effected.

SOS transmitters are well known in which the impulse values are stored on a wax-coated cylinder. In this case, the cylinder consists of a conducting material and the impulse values are formed in the wax by uncovering at certain points the conducting material. The transmission is then effected by a contact which comes into engagement with the conducting material during the rotation of the cylinder.

It is also known to control telegraphic transmitters by means of a perforated tape. In this case, the perforations of the tape correspond to the impulse value. A perforated tape requires, however, the use of a comparatively complicated perforating mechanism. When employing the Morse code particular means are necessary for producing perforations of different length.

The object of the present invention is to provide a method for a durable storage of impulse values. The invention resides in embossing the impulse values on a tape-like storing member consisting of a deformable material. The impulse values are then stored on the tape in the form of embossings or depressions. The method for embossing the impulse values is to a certain extent similar to the method for making printed impressions on paper for the blind.

As a deformable material a metal foil, for instance, an aluminum foil is preferably employed. According to the invention a simple Morse transmitter may be employed when using the above-mentioned embossed tape, the Morse transmitter being particularly suitable as an emergency transmitter; for instance, for the transmission of SOS signals.

The invention will now be described in detail by reference to the accompanying semi-diagrammatic drawing in which is shown such a transmitter.

Fig. 1 illustrates the complete transmitting device, Fig. 2 a plane view of part of an embossed metal tape used in the transmitter, and Fig. 3 an enlarged cross-sectional view of the same tape. Fig. 4 shows a different modification of part of the transmitting device.

Referring at first to the embodiment represented by Figs. 1, 2 and 3, the metal tape 2 is moved in the direction of the arrow in Fig. 1 in

front of the embossing pin 3 over the guide path 8 with the aid of the driving rolls 6, 7 rotated, for instance, by means of a spring motor or electric motor (not shown). The metal tape 2 consists, for instance, of thin aluminum foil. If now the key 1 pivoted at 1' is operated in accordance with the Morse characters the pin 3 attached to key 1 by spring 5 is moved towards the counter-supporting plate 4 which guides the tape during the embossing operation, and permits the embossing of the tape 2 with longer or shorter embossings or depressions according to the length of duration of the key depression as is shown at the right-hand side of the transmitter. In this case, the spring 5 limits the pressure exerted on embossing pin 3 so that always the same embossing pressure is available.

When using the apparatus as an SOS transmitter the text of the distress call is embossed on the tape by the key 1 and the embossing text is then brought within the range of the scanning device 9, 10, 11. According to the character of the embossings on the tape the stylus 9 is moved in the upward direction, whereby the contact 11 between two springs 12, 13 is closed. These springs form part of a conventional transmitter circuit (not shown here) by which the signal recorded on the tape is transmitted. If, for instance, the text of the SOS call has thus been embossed the device may remain continuously in operation, and the text of the SOS-call may be transmitted as often as is desired.

The text of a ship distress call consists of the thrice repeated transmission of the SOS signal, name and position of the ship. The two first-mentioned signals are always the same for a given ship. When using the invention for the transmission of SOS calls a metal tape may therefore be prepared on which is embossed the invariable portion of the emergency call. The wireless telegraphist when transmitting an emergency call need only add the position of the ship. While embossing the position of the ship the already prepared portion of the emergency call may in the meantime be transmitted.

As will be seen from Fig. 1 the Morse transmitter in the case of an embossed tape as above described must be spaced in the tape-traveling direction a sufficient distance from the embossing pin 3 so that the required text of the emergency call may be embossed on the portion of the tape lying between pin 3 and stylus 9 of the transmitter.

In other cases it is, however, desirable to

transmit immediately the emergency call when embossed. In this case the stylus 9 is placed in the immediate neighborhood of the embossing pin for embossing the impulse values.

In Fig. 2 are shown the corresponding parts of such a Morse transmitter which may be otherwise constructed substantially in the same manner as that shown in Fig. 1. By the pin 3, operated by a key similar to the manner shown in Fig. 1, the Morse characters are embossed on the tape and then immediately scanned by the stylus 9 and transmitted to the contact 11.

What is claimed is:

Device for storing and automatically repeating a telegraphic emergency call, including an endless tape of a deformable material to permit embossing of permanent signal characters thereon, means for continuously moving said tape,

an embossing device having a hand control, an embossing pin disposed adjacent to one side of said tape and connected with said control, a counter-support plate for said pin having guiding means for said tape and being disposed on the opposite side of said tape, and a resilient means interposed between said embossing pin and said hand control for limiting the force exerted by said pin against said tape, a signal transmitter disposed adjacent to said tape and spaced from said embossing device in the direction of the tape motion at least a distance corresponding to that covered by the signals of a complete emergency call, said transmitter having means operable by said signal embossings for producing signals in accordance with the stored emergency call.

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