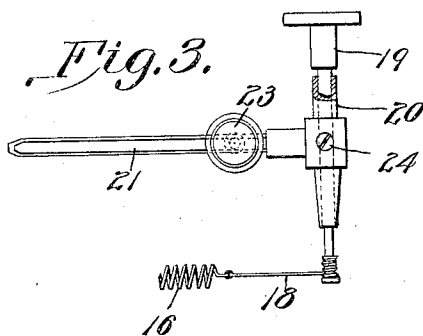
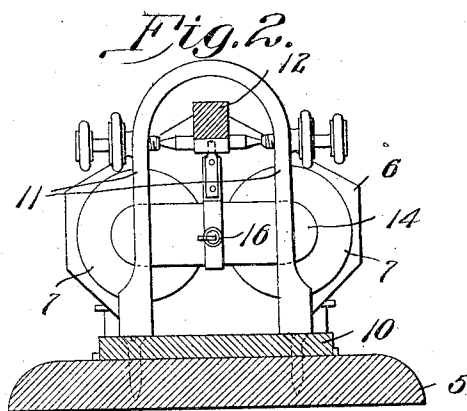
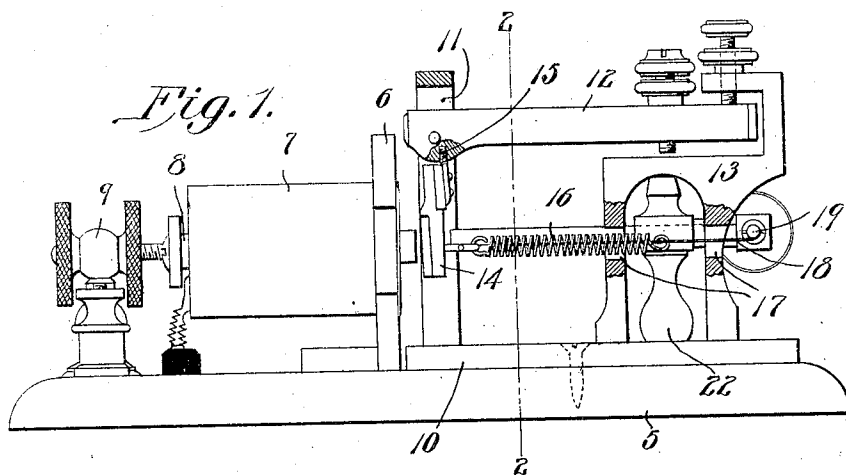


No. 835,647.

PATENTED NOV. 13, 1906.

D. O. STINSON.
TELEGRAPH INSTRUMENT.
APPLICATION FILED AUG. 26, 1906.



Witnesses

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TELEGRAPH INSTRUMENT.

No. 835,647.

Specification of Letters Patent.

Patented Nov. 13, 1906.

Application filed August 26, 1905. Serial No. 275,944.

To all whom it may concern:

Be it known that I, DANIEL O. STINSON, a citizen of the United States, residing at Falkville, in the county of Morgan and State of Alabama, have invented a new and useful Telegraph Instrument, of which the following is a specification.

This invention relates to a combined relay and sounder, and has for its object to provide an inexpensive, durable, and efficient device of this character by means of which the usual local batteries and magnets for actuating the sounders at the several stations along the line may be dispensed with.

A further object of the invention is to provide novel means for centering and regulating the tension of the armature-spring and means for holding said spring in adjusted position.

A still further object is to improve, simplify, and cheapen the construction of this class of devices, so as to add to their utility and durability, as well as to reduce the cost of manufacture.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in form, proportion, and minor details of construction may be resorted to without departing from the principal or sacrificing any of the advantages of the invention.

In the accompanying drawings, forming a part of this specification, Figure 1 is a side elevation of a combined relay and sounder constructed in accordance with my invention. Fig. 2 is a transverse sectional view taken on the line 2 2 of Fig. 1, and Fig. 3 is a top plan view of the tension device detached.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

The improved device comprises a supporting-base 5, upon which is mounted in any suitable manner the relay 6, the latter consisting of a pair of horizontally-disposed electromagnets 7, the cores 8 of which are adjustable longitudinally of the coils by means of the usual adjusting-screws 9. Secured to the base 5 in front of the relay 6 is a plate 10, and pivotally mounted between a pair of up-

rights 11, secured to said plate, is the striking lever or bar 12, the free end of which engages the anvil 13.

The armature 14 of the relay is provided with a threaded extension 15, which engages a correspondingly-threaded socket in the pivoted end of the striking-lever 12, so that as the magnets are energized and deenergized the movement of the armature will cause a corresponding movement of the lever 12. Secured to the central portion of the armature 14 is one end of a retractable spring 16, the opposite end of which passes through alined guiding-openings 17 in the anvil 13 and is connected to a cord or other flexible medium 18, the latter being secured to the winding pin or spindle 19 of the tension device. The spindle or pin 19 is mounted for rotation in a sleeve or collar 20, secured to the end of a rod or bar 21, the latter being slidably mounted in a supporting-bracket 22 and locked in adjusted position by means of a set-screw 23. The tension-screw 19 is also movable longitudinally of the sleeve or collar 20, whereby the spring may be adjusted laterally to properly center the same with respect to the armature, a small screw or similar clamping device 24 being employed for locking the screws 19 in adjusted position.

By having the instrument constructed in this manner the usual local batteries and sounder-magnets at the several stations along the line may be dispensed with, the instrument being connected in the main line and actuated by the current from the main battery, while by having the armature detachably secured to the striking-lever the former may be quickly detached and replaced by a new one when necessary.

Having thus described the invention, what is claimed is—

A device of the class described comprising a base, a relay-magnet mounted on the base and having a vertically-disposed armature, an inverted-U-shaped supporting-frame arranged in advance of the armature, a horizontally-disposed striking-lever pivotally mounted in the closed end of the supporting-frame and having a threaded socket formed in its pivoted end, a bar secured to the armature and provided with a threaded extension for detachable engagement with the socket, an anvil coöperating with the strik-

ing-lever and provided with alined openings,
a standard secured to the base, a bar mount-
ed for longitudinal movement on said stand-
ard and provided with a terminal sleeve, a
5 longitudinally-adjustable spindle mounted
for rotation in the sleeve, a coiled spring
passing through the openings in the anvil
and attached to the armature, a flexible me-
dium connecting the spring and spindle, and
10 a set-screw carried by the sleeve and adapted

to engage the spindle for locking the latter
against longitudinal and rotary movement.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature
in the presence of two witnesses.

DANIEL O. STINSON.

Witnesses:

JOSEPH W. SIMPSON,
CLAUDE W. LYNNE.