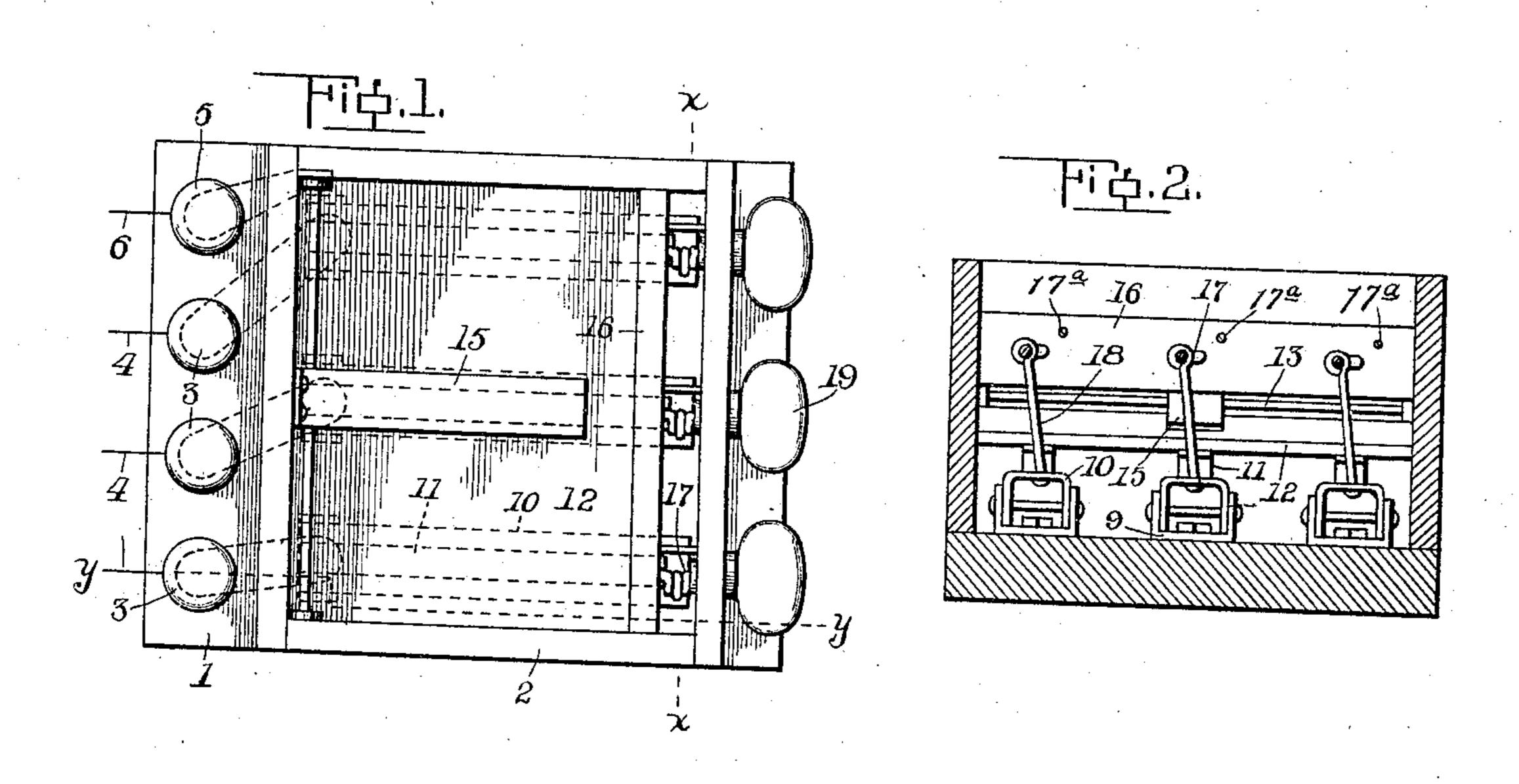
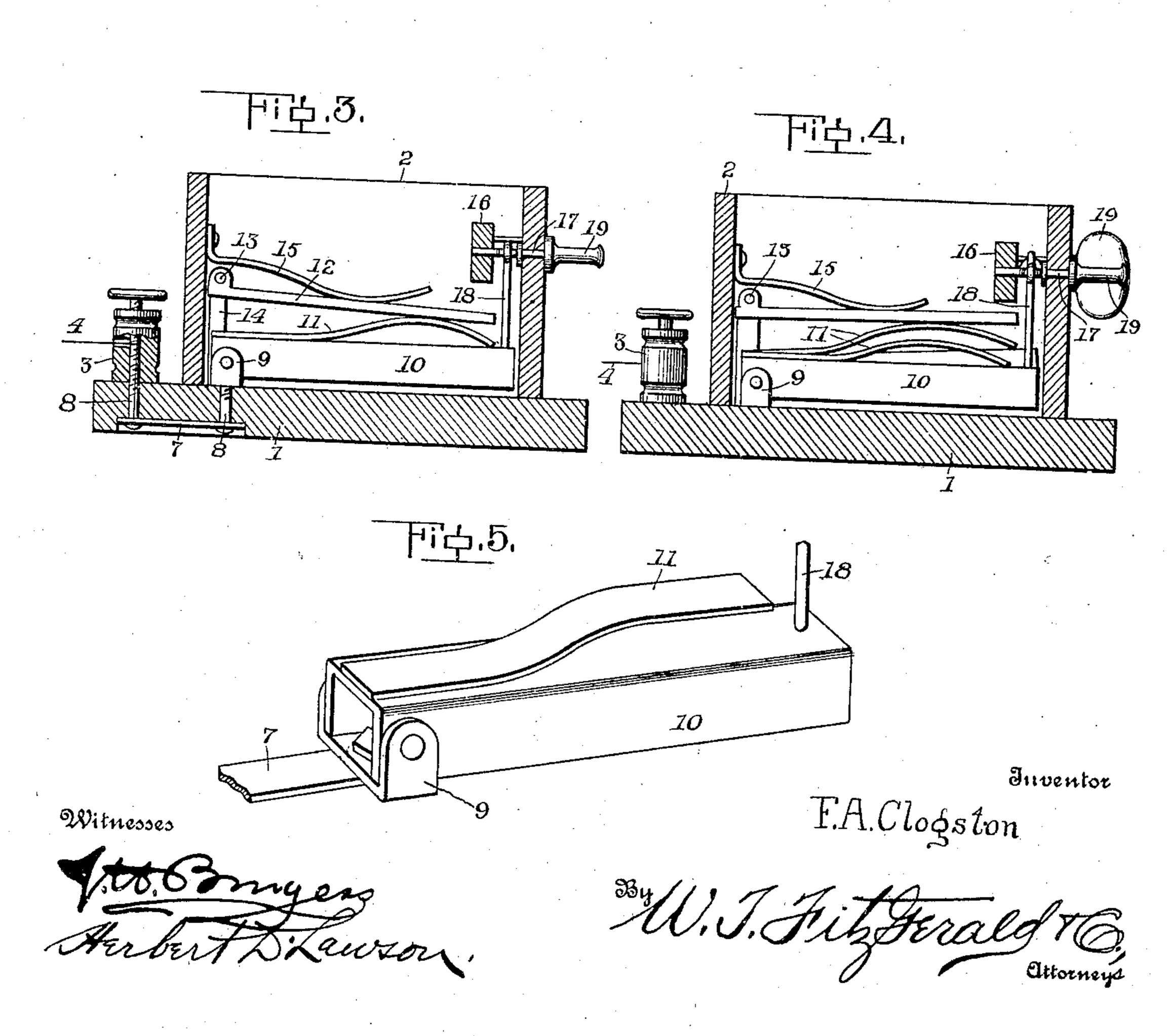
F. A. CLOGSTON. TELEGRAPH CUT-OUT. APPLICATION FILED NOV. 11, 1905.





UNITED STATES PATENT OFFICE.

FRED ALBERT CLOGSTON, OF BRIDGER, MONTANA.

TELEGRAPH CUT-OUT.

No. 834,659.

Specification of Letters Patent.

Patented Oct. 30, 1906.

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To all whom it may concern:

Be it known that I, FRED ALBERT CLOG-STON, a citizen of the United States, residing at Bridger, in the county of Carbon and State 5 of Montana, have invented certain new and useful Improvements in Telegraph Cut-Outs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the ro art to which it appertains to make and use the same.

My invention relates to cut-outs for use in telegraph-offices where two or more sounders are employed; and its object is to provide 15 means whereby all of the sounders within the office except the one being used can be simultaneously cut out, so that the operator will not be annoyed by the operation of other instruments than the one manipulated by him.

Considerable annoyance and inconvenience has heretofore been experienced by operators because of the noise made by several sounders working when a message is being sent or received, and it has been customary to dis-25 connect the sounders or else stop their operation by placing obstructions within them.

The object of the invention is, as heretofore stated, to provide means whereby all of the sounders except the one being used may 30 be cut out, so as to obviate their noise, and whereby all of the sounders may be promptly

placed in circuit wherever desired.

The invention consists of a casing having a plurality of levers each of which is electric-35 ally connected to a sounder. All of the levers support and are normally in contact with a return-plate which is electrically connected to a common return-wire, so that when the parts are in their normal positions 40 the current will pass through all of the sounders and through the levers connected thereto and from thence to the return-plate and to the common return-wire, so that all of the sounders can be operated in unison. Each 45 lever, however, has means whereby it can be raised independently of the others, and by raising any one of the levers the return-plate will be elevated therewith and off of the remaining levers, so that but the one lever will 50 remain in circuit and the others be cut out. The position of the keys may be determined in any suitable manner, preferably by the position assumed by its operative button.

The invention also consists of the further 55 novel features hereinafter more clearly set

forth.

In the accompanying drawings I have shown the preferred form of my invention.

In said drawings, Figure 1 is a plan view of my improved cut-out with its cap removed. 60 Fig. 2 is a section on line x x, Fig. 1. Fig. 3 is a section on line y y, Fig. 1. Fig. 4 is a view similar to Fig. 3, but showing the positions of the parts when all but one of the levers are cut out of circuit with the return- 65 plate; and Fig. 5 is a detail view of one of the levers of the cut-out.

Referring to the figures by numerals of reference, 1 is the base of the cut-out, having walls 2 thereon, which constitute the casing 70 of the device, and secured upon the base adjacent one of the walls are binding-posts 3, which are adapted to be connected by wires 4 with sounders. (Not shown.) Another binding-post 5 is located upon the base and has a 75 common return-wire 6 extending from it. Each binding-post 3 is electrically connected, as by means of a plate 7 and screws 8, with a yoke 9, which is secured within the casing and embraces one end of a lever 10, which is 80 pivoted to the yoke. One of these levers is provided for each binding-post 3 and the levers are preferably arranged parallel with each other and extending to points adjacent the front of the casing of the cut-out. Each 85 lever has a spring-strip 11 fastened to it and extending longitudinally thereof, and the springs of all the levers normally contact with and support a return-plate 12, which is pivoted to a rod 13, extending from side to 90 side of the casing and electrically connected, by means of a plate 14, with the binding-post 5 of the return-wire. A spring 15 is secured to the casing and bears on the return-plate, so that the same will be pressed in contact 95 with all of the springs 11. A cross-bar 16 is disposed within the casing above the front or free ends of the levers 10 and return-plate 12, and journaled within this bar and within the front of the casing is a series of cranks 17, one 100 being provided for each lever 10 and being disposed above its lever. A rod 18 connects each lever and its crank, and each crank has a button 19 disposed on the front of the casing, whereby the crank may be readily rotated 105 manually.

In using the cut-out attachment herein described the common return-wire 6 is connected to the negative poles of all the batteries, while the wires 4 are connected to the 110 instruments and thence through relays to the positive poles of the batteries. One wire

4 extends to each instrument, and it will | therefore be understood that as plate 12 normally contacts with the springs 11 of all the levers 10 the currents entering through the 5 wires 4 will all pass through their respective levers 10 and springs 11 to the return-plate 12 and the common return-wire 6. All the instruments will therefore operate simultaneously. Should the operator desire to 10 cut out all but one of the instruments, so that he would not be annoyed by their noise, he turns the button 19 of the instrument which he desires to operate to the right, thereby rotating the crank 17 and elevating the lever 15 and rod secured thereto, that end of the rod secured to the crank being directed to the right and slightly beyond a vertical plane and into engagement with the pin 17a, placed in the path of the crank, the weight of the 20 parts carried by the rod serving to hold the crank against casual rotation in the opposite direction. This upward movement of the lever and its spring 11 will lift plate 12 off of the springs 11 of the remaining levers, and 25 therefore the circuits will be broken through all of the levers except the one which has been raised by the operator. When it is desired to return the parts to their initial positions, it is merely necessary to turn the but-30 ton so as to swing the crank back from its supporting-pin 17^a, and as all the buttons are normally in the same relation horizontally the proper button to be turned to bring the parts back to their original posi-35 tions can be readily distinguished.

A cut-out such as herein described can readily be connected to telegraph-circuits, and it will be understood that the same may be used with any desired number of instruments, it only being necessary to employ one

lever 10 for each sounder.

Having thus described my invention, what I claim as new, and desire to secure by Let-

ters Patent, is—

1. In a cut-out of the character described, the combination with a series of pivoted devices each adapted to be electrically connected to a sounder; of a common return device movably mounted above and normally contacting with all of the pivoted devices, and means for actuating any one of said pivoted devices to raise the return device out of contact with the remaining pivoted devices.

2. In a cut-out of the character described, 55 the combination with a series of pivoted devices each adapted to be electrically connect-

ed to a sounder; of a spring-pressed, electrically-supported return device mounted above and normally contacting with all of the pivoted devices, and means for sepa-60 rately actuating any one of the pivoted devices to raise the return device out of contact with the remaining pivoted devices.

3. In a cut-out of the character described, the combination with a series of levers, each 65 adapted to be connected to a sounder; of a return device normally supported by and electrically connected to all of the levers, and means for separately actuating any one of the levers to remove the return device from electrical connection with the remaining levers.

4. In a cut-out of the character described, the combination with a series of levers adapted to be electrically connected to a series of sounders; of a spring-pressed return-plate 75 movably mounted adjacent to and normally electrically connected with all of the levers, and means for separately actuating any one of the levers to break the electrical connection between the return-plate and the remaining 80 levers.

5. A cut-out of the character described comprising a series of levers adapted to be electrically connected to a series of sounders and springs mounted upon the levers, a 85 spring-pressed return-plate adapted to be electrically connected to a common return-wire, said plate normally contacting with all of the springs of the levers, and means for separately actuating any one of the levers to 90 move the plate out of contact with the springs of the remaining levers.

6. A cut-out of the character described comprising a series of levers adapted to be electrically connected to a series of sounders, 95 and springs mounted upon the levers, a spring-pressed return-plate adapted to be electrically connected to a common returnwire, said plate normally contacting with all of the springs of the levers, cranks mounted within the casing, rods connecting each crank with one of the levers, and means for separately rotating the cranks to actuate any one of the levers to move the plate out of contact with the springs of the remaining levers. 105

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRED ALBERT CLOGSTON.

Witnesses:

L. V. Stryker, J. H. Trumbs.