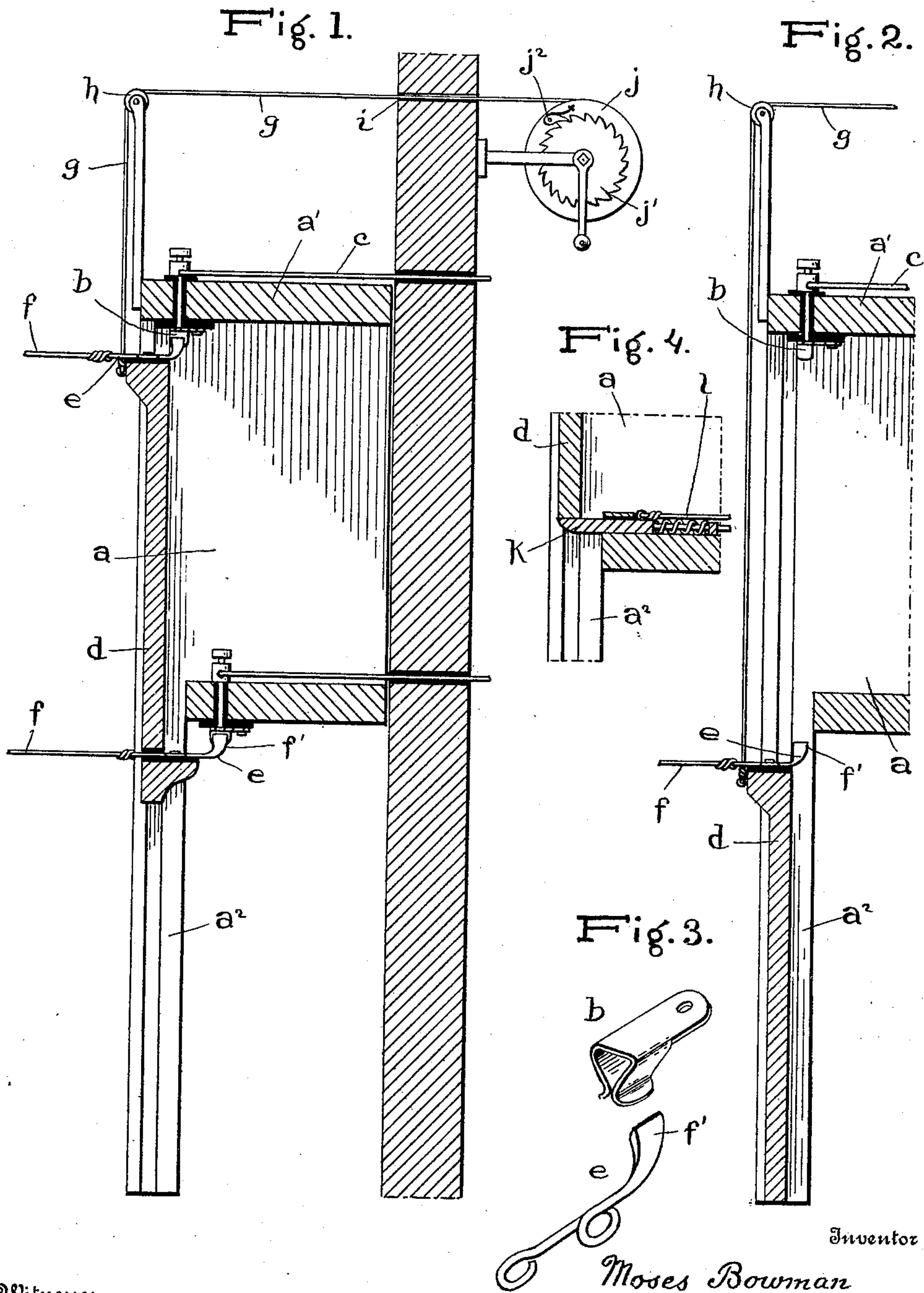


M. BOWMAN.  
MEANS FOR DISCONNECTING TELEPHONE LINES.  
APPLICATION FILED JULY 7, 1908.

925,420.

Patented June 15, 1909.



Witnesses

Stuart Hilder.  
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# UNITED STATES PATENT OFFICE.

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OF BOYNTON, PENNSYLVANIA.

## MEANS FOR DISCONNECTING TELEPHONE-LINES.

No. 925,420.

Specification of Letters Patent.

Patented June 15, 1909.

Application filed July 7, 1908. Serial No. 442,374.

*To all whom it may concern:*

Be it known that I, MOSES BOWMAN, a citizen of the United States, resident of McHenry, in the county of Garrett and State of Maryland, have made a certain new and useful Invention in Means for Disconnecting Telephone-Lines; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

The invention has relation to means for disconnecting the house and line wires of telephone lines, the object being to provide simple and efficient means for this purpose adapted for making and breaking the connection by a controlling chain or cord running within the house or station, the invention being equally applicable to a single line or to multiple lines at a central station.

In the accompanying drawings, Figure 1 is a vertical sectional view of the invention as applied, with the weight in raised position to establish the normal electrical connection, and showing an upper and lower series of clasp devices and binding strips; Fig. 2 is a similar view with the weight down to break the normal electrical connection, and showing a single series only of clasp devices and binding strips; Fig. 3 is a detail perspective view of a clasp device and a binding strip; and Fig. 4 is a sectional view of the auxiliary spring latch.

In these drawings illustrating the invention, the letter *a*, designates a supporting frame having a horizontal top piece *a'*, and vertical grooved standards *a''*, located outside the house, said top piece carrying beneath the same a plurality of insulated spring metal clasp devices *b, b*, having connection with house wires *c, c*, this description having reference to the central station.

*d*, is a reciprocatory vertical planular frame or weight working at its vertical lateral edges in the grooves of said standards and carrying at the upper horizontal edge thereof a series of metal binding strips *e, e*, equal in number to the clasp devices *b, b*, said strips having connection with the line wires *f, f*, and being provided with upward extending tapering arms *f', f'*, capable of

engagement with the clasps *b, b*, to establish the normal electrical connection between the house and line wires. This normal electrical connection is controlled by means of an insulated cord or chain *g*, attached at its lower end to the reciprocatory frame *d*, passing upward over a guide pulley or roller *h*, and within the house or station at *i*, where it passes around a reel or roller *j*, having spring ratchet wheel connection *j'*, located within the house or station. Upon release of the pawl *j''*, of the ratchet wheel the cord or chain *g*, will unwind from the reel and the frame *d*, will drop, breaking the connection of the house and line wires, inasmuch as the weight of the frame is sufficient to overcome the frictional engagement of the arms *f', f'*, of the metal binding strips with the clasp devices *b, b*. In this manner in case it is desired to break the connection of the house and line wires on account of an approaching storm or for other reason, this can be readily and instantly accomplished without leaving the house or station. If a single line only is in question there will be no duplication of the metal binding strips and spring metal clasps, one only of each being required, and the supporting frame and reciprocatory weight being of course smaller.

In Fig. 4 of the drawings is shown a modification of the invention, wherein a spring latch *k*, is employed to support the reciprocatory weight, the cord or chain being still used however to raise the weight. A cord *l*, running within the house or station is used to release the latch when it is desired to break the circuit. A suitable ground connection (not shown) may be employed for the line wires when the circuit is broken.

If desired a lower series of horizontal binding strips for line wires and of spring metal clasp devices having connection with the house wires near the central station may be provided at the lower portion of the reciprocatory weight, as shown in Fig. 1 of the drawings.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:

1. In a device for disconnecting the house and line wires of telephone lines, a supporting frame, an insulated spring metal clasp carried thereby and having electrical con-



nection with one of said wires, an upright frame having guide grooves, a reciprocatory vertical planular weight having its vertical lateral edges working in said grooves and carrying upon its top horizontal edge an insulated horizontal binding strip having at one end connection with the other of said wires, and at its opposite end an upward extension for engagement with said clasp, a cord for raising said weight to establish the normal electrical connection of the parts, and a reel for winding said cord having a pawl and ratchet connection.

2. In a device for disconnecting the house and line wires of telephone lines, a supporting frame, upper and lower series of insulated spring metal clasps carried thereby and having electrical connection with the house wires, an upright frame having vertical guide grooves, a reciprocatory vertical

planular weight working at its vertical lateral edges in said grooves and carrying at its horizontal upper edge an insulated upper series and near its horizontal lower edge an insulated lower series of horizontal binding strips having each at one end connection with one of the line wires and at its other end an upward extension for engagement with one of said clasps, a cord for raising the weight to establish the normal electrical connection of the parts, and running within the house, and a reel for winding said cord, having a pawl and ratchet connection.

In testimony whereof I affix my signature, in presence of two witnesses.

MOSES BOWMAN.

Witnesses:

GEORGE M. ANDERSON,  
CHARLES E. WIRE.