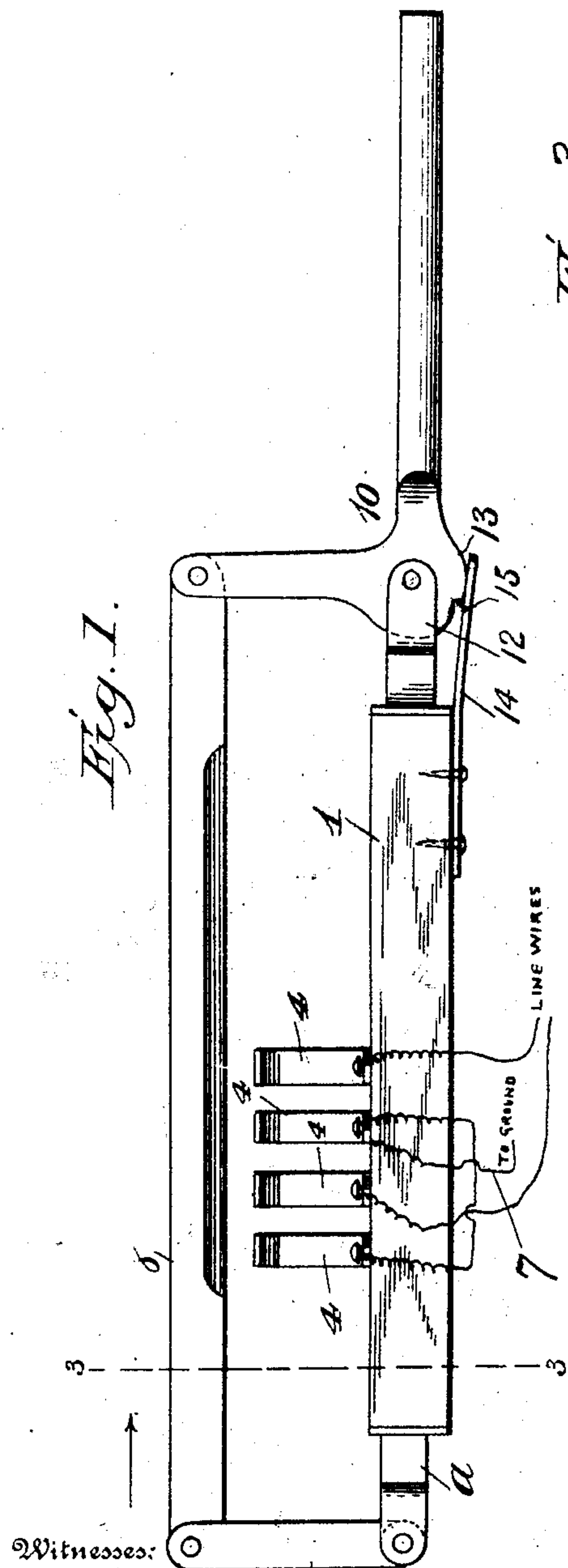


W. DRAKE & L. C. HATCH.
ELECTRIC SWITCH.
APPLICATION FILED JAN. 21, 1907.

917,025.

Patented Apr. 6, 1909.
2 SHEETS—SHEET 1.



Witnesses:
H. J. McKenney
J. K. Minter

Fig. 3.

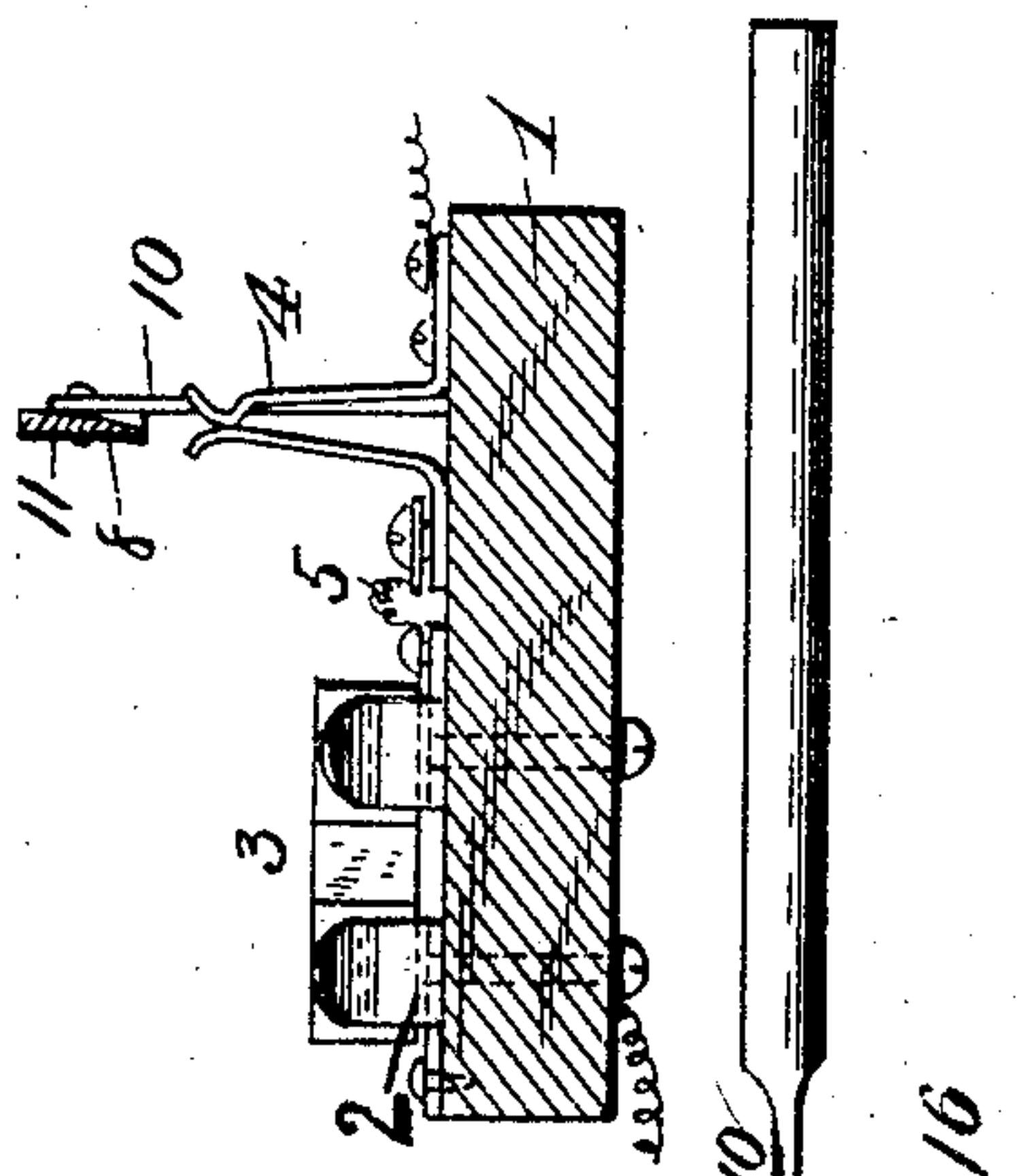
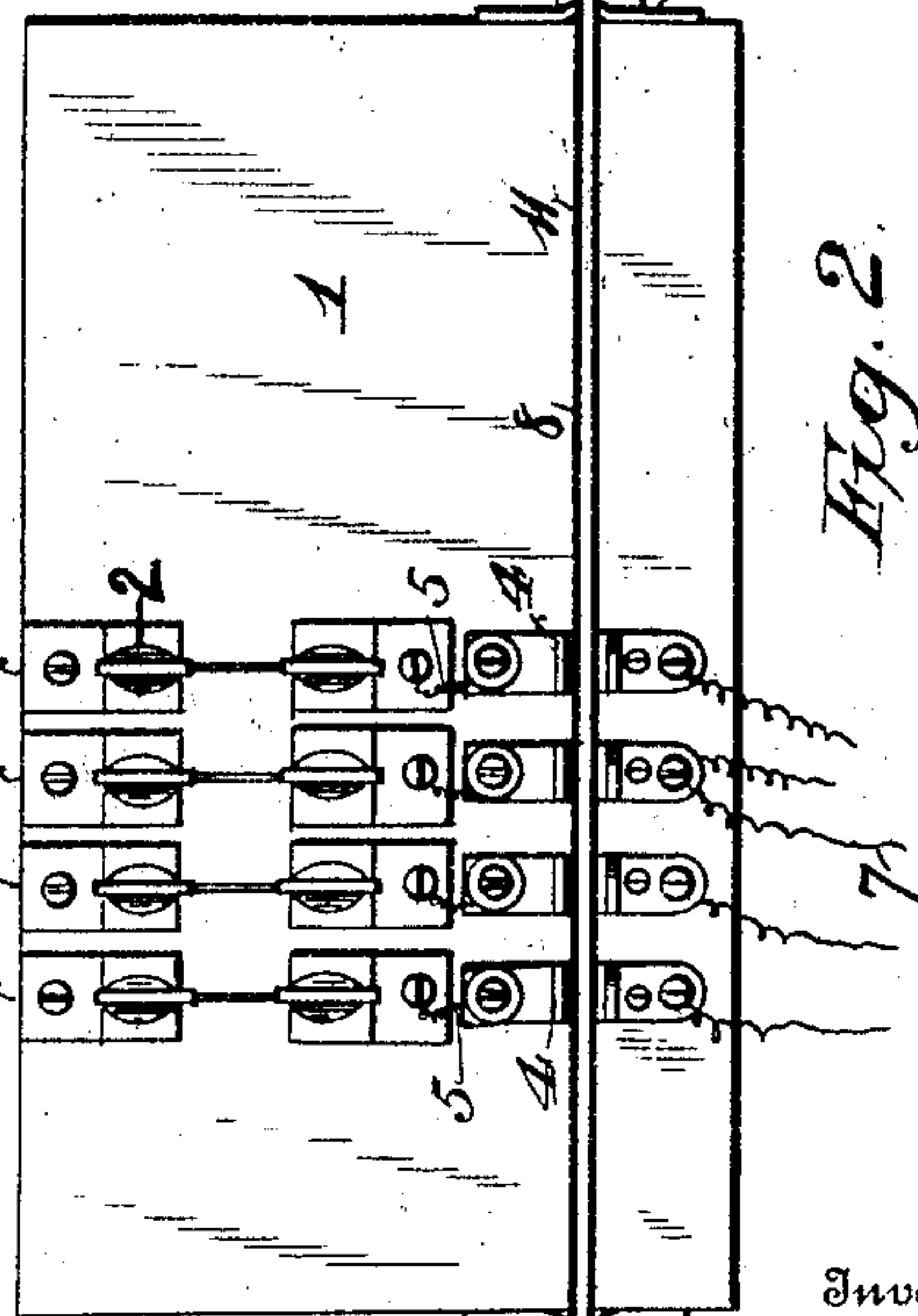


Fig. 2.



Inventors
Walter Drake,
Lisle C. Hatch

By *Sam. Rogers & Co.*
Attorneys.

917,025.

Patented Apr. 6, 1909.
2 SHEETS—SHEET 2.

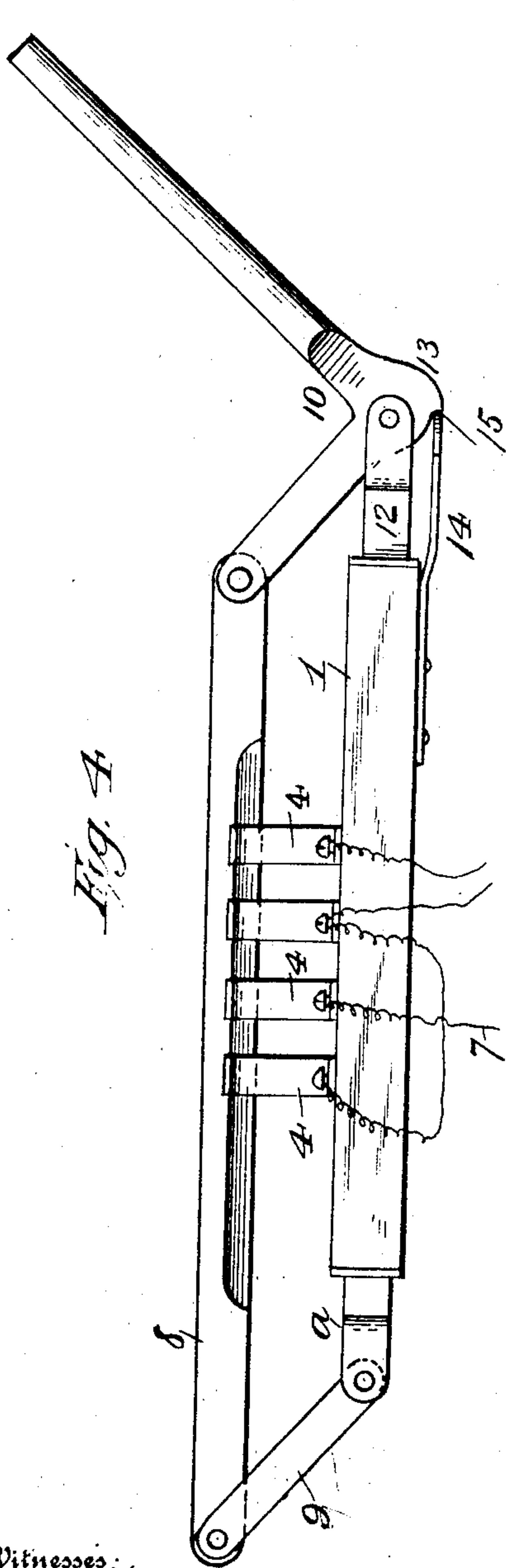


Fig. 4.

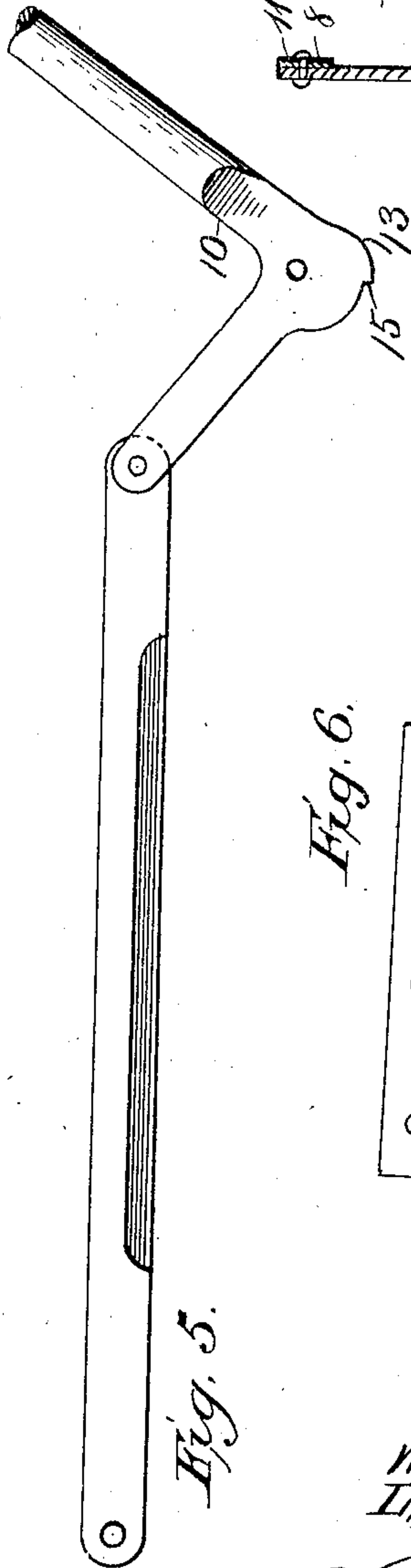


Fig. 5.

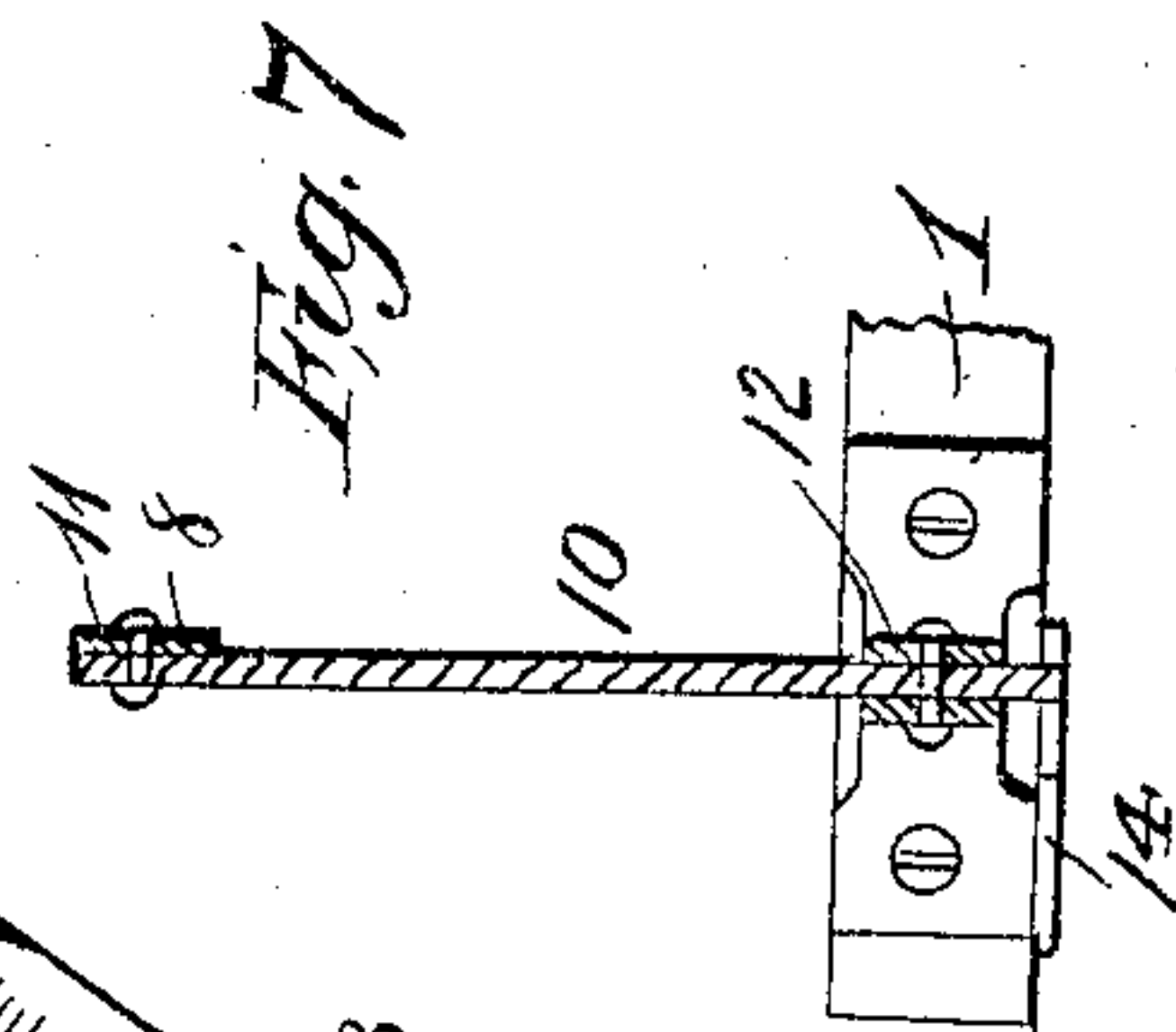


Fig. 7.

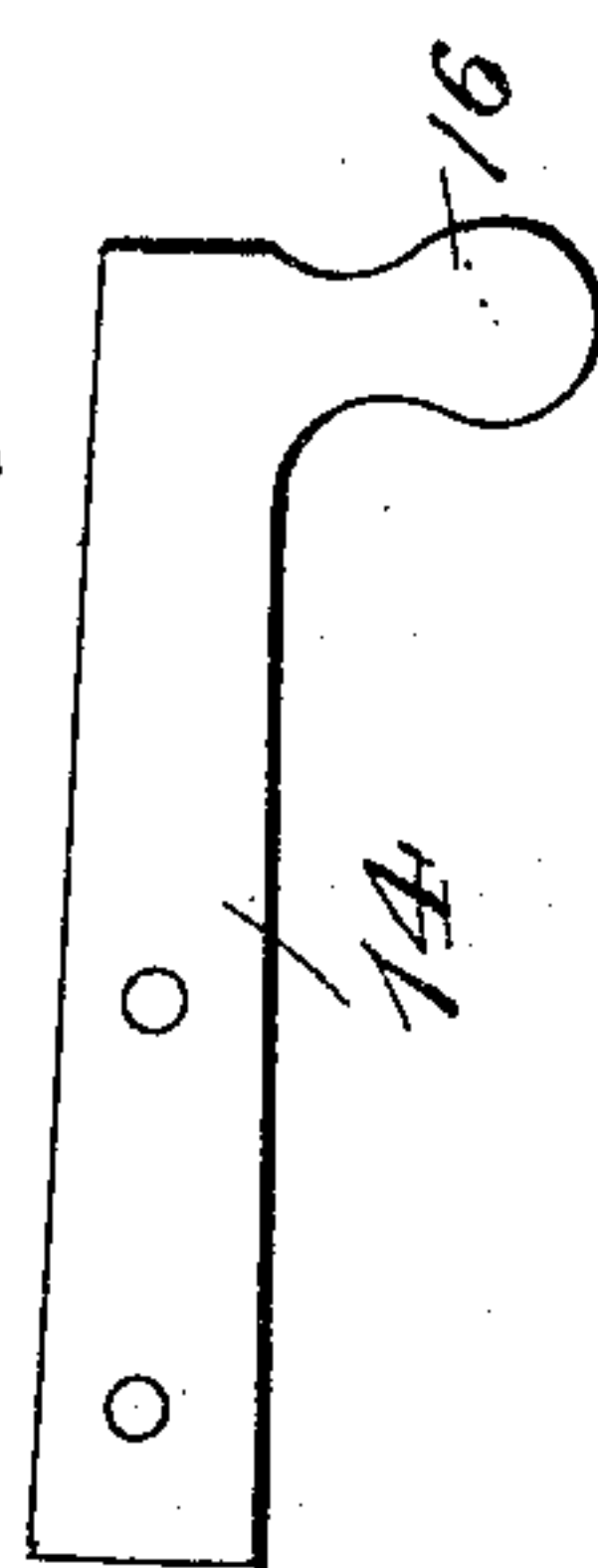


Fig. 6.

Witnesses:
H. J. McKeen
W. M. Minter

Inventors:
Walter Drake
Lisle Hatch,
334
S. H. Rager & Co.,
Attorneys

UNITED STATES PATENT OFFICE.

WALTER DRAKE AND LISLE C. HATCH, OF BLACK EARTH, WISCONSIN.

ELECTRIC SWITCH.

No. 917,025.

Specification of Letters Patent.

Patented April 6, 1909.

Application filed January 21, 1907. Serial No. 353,362.

To all whom it may concern:

Be it known that we, WALTER DRAKE and LISLE C. HATCH, citizens of the United States, residing at Black Earth, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in Electric Switches, of which the following is a specification.

Our invention relates to improvements in "cut outs" for fuse-boards for telephone-switches. Its objects are principally to provide for grounding the current in cases of emergency, as during an electrical disturbance or thunder-storm; and to carry out that end in a simple, ready and effective manner.

Said invention consists of certain features or instrumentalities substantially as herein-after fully disclosed and specifically pointed out by the claims.

In the accompanying drawing illustrating the preferred embodiment of our invention—Figure 1 is a side elevation, Fig. 2 is a plan view, and Fig. 3 is a cross-section thereof. Fig. 4 is also a side view with the parts in position as in grounding the current. Fig. 5 is a detached side view of the lever and blade attachment. Fig. 6 is a detached plan view of the spring-retaining latch for said lever. Fig. 7 is a vertical transverse section taken through said lever and latch.

In practicing our invention, we employ a fuse-board 1 having the usual equipment of metallic contacts 2, adjunctive fuse connections 3 attached thereto, and contacts 4 of uniform height or approximately of uniform size wired as at 5 to the aforesaid connections; said contacts 2 being wired as at 6 to the telephone switch-board (not shown) and said contacts 4 having connected thereto wires 7 leading to the ground, all of well known type in this connection. A plate-like bar 8 suitably beveled to form a blade and arranged in vertical alinement, and standing normally out of engagement with the contacts 4, has one end pivoted to an up-standing link 9 in turn pivoted to an out-standing bracket *a* fixed to one end of said fuse-board 1, said blade having its opposite end pivoted to the upper end of the vertical arm of a right-angled lever 10. Said blade has suitably applied to one side thereto, as by gluing or otherwise, preferably hard rubber insulation 11 for obvious purposes.

Said right-angled lever 10 is fulcrumed at its angle between the branches of a bifurcated bracket 12 fixed to the opposite end of the fuse-board 1, said lever being also rounded at its angle into cam-form as at 13 and adapted to bear normally at that point upon a spring-plate latch 14 fixed to the underside of said board and projecting beyond it. The cam-formation 13 has a slight shoulder 15 which is so arranged that, as the lever 10 is moved so as to depress the blade 8 and bring it into engagement with the contacts 4 as in moving the same for grounding the current, it, said shoulder, will be engaged with the forward edge of the spring-plate latch 14 and thus retain said lever in such position by the stress of said catch as disclosed by Fig. 4. Said latch has a lateral arm 16 at its forward free end for its convenient depression, as in disengaging the corresponding edge of said latch from the shoulder 15 of the cam-formation of the lever 10, which becomes necessary in order to depress said lever for oppositely affecting or elevating the blade 8, as in breaking the ground-connection, as will be readily apparent. Also it will be noted that, after effecting such disengagement of parts, the spring-plate latch will instantly spring into engagement with the heel of the cam 13 and thus deliver its stress or pressure thereon for the automatic retention of the lever 10, together with the blade 8, in inoperative position.

This device is therefore simple, readily applied and quickly operated for its intended purpose.

We claim—

1. An electric switch comprising a plurality of approximately uniform size contacts, a blade supported at either end, pivotally mounted supports connected with the blade at or near each end, and a handle connected with one of said supports for swinging the latter and with it causing the blade to simultaneously engage the several contacts.
2. An electric switch comprising a plurality of approximately uniform size contacts, a blade supported at either end, pivotally mounted supports connected with the blade at or near each end, a handle connected with one of said supports for swinging the latter and with it causing the blade to simultaneously engage the several contacts, and a latch for locking the blade in position.

3. A device of the character described, comprising a depressible blade having one end pivoted to a link itself pivoted in position, a right-angled lever fulcrumed at its angle and having a shoulder at said angle, and a spring-latch having a lateral actuating arm and effective for engagement with said shoulder.

In testimony whereof we affix our signatures, in presence of two witnesses.

WALTER DRAKE.
LISLE C. HATCH.

Witnesses:

HARRY M. HOBBS,
O. W. DONKLE.