W. G. LINN.

Telegraph Cut-Outs.

No. 145,064. Patented Dec. 2, 1873.

Fig 1

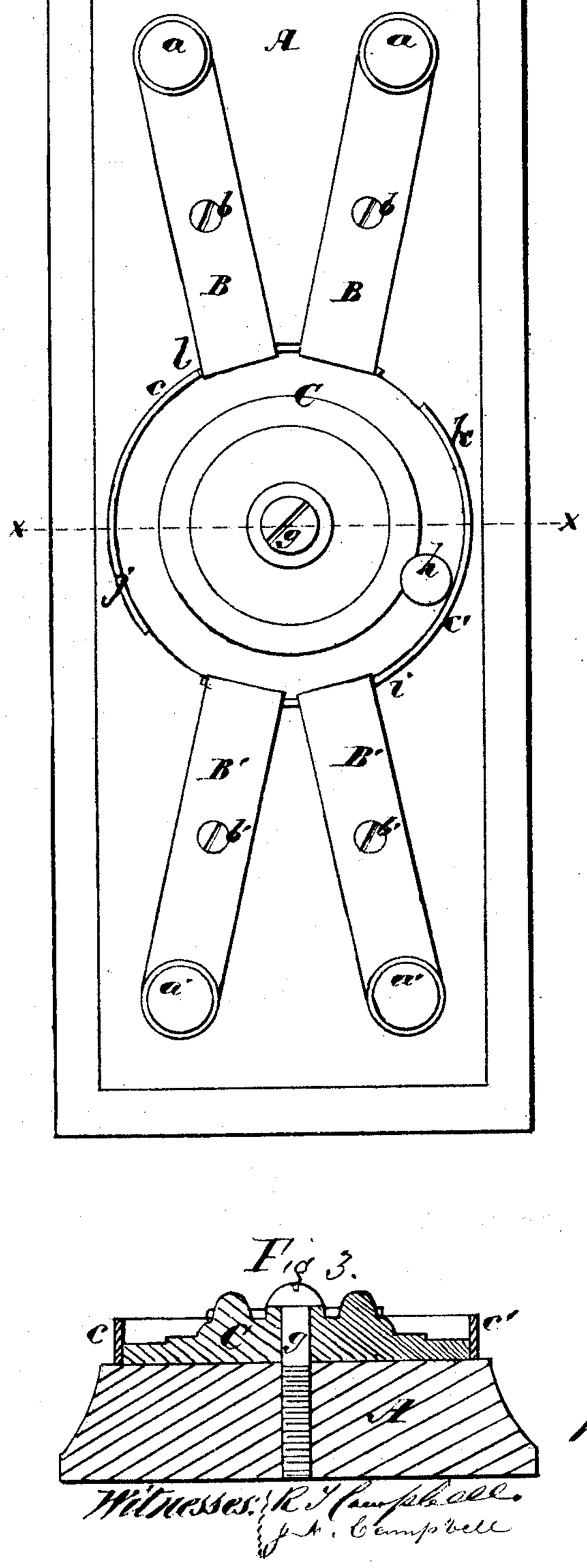

Fig 2

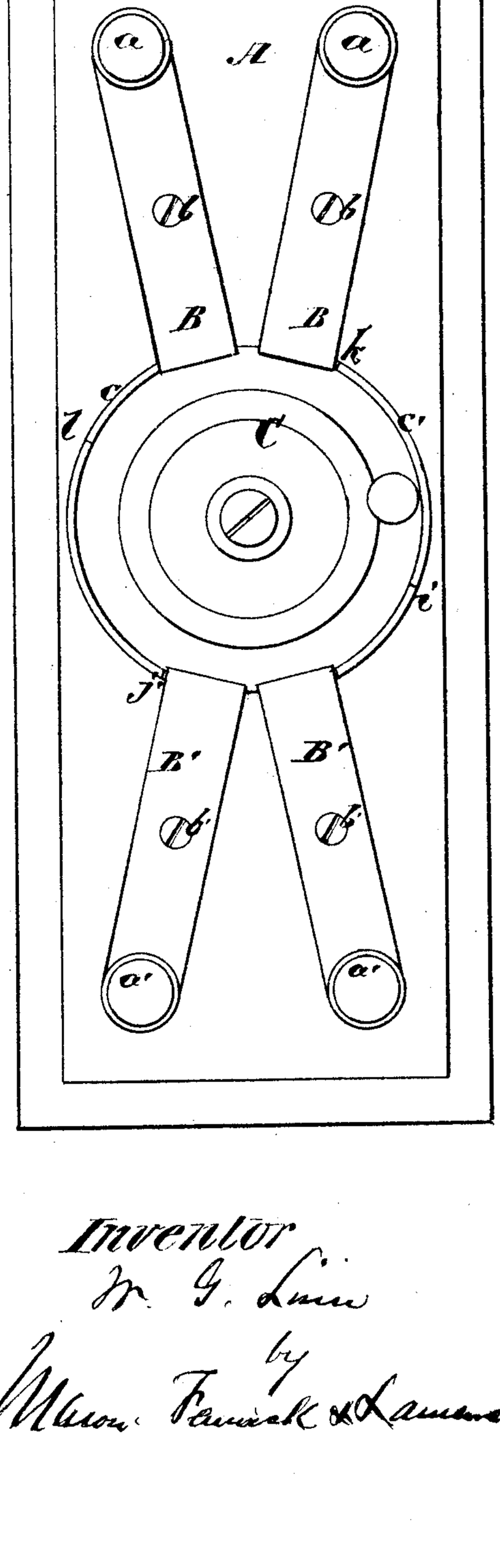

Fig 3.

Witnesses: R. J. Campbell.
J. A. Campbell

Inventor
W. G. Linn
by
Munn, Fenwick & Lawrence

UNITED STATES PATENT OFFICE.

WILLIAM G. LINN, OF BLOOMFIELD, IOWA.

IMPROVEMENT IN TELEGRAPH CUT-OUTS.

Specification forming part of Letters Patent No. **145,064**, dated December 2, 1873; application filed April 21, 1873.

To all whom it may concern:

Be it known that I, WILLIAM G. LINN, of Bloomfield, in the county of Davis and State of Iowa, have invented a new and Improved Telegraph Cut-Out; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a front view of the improved cut-out representing the main line disconnected from a branch office. Fig. 2 is a similar view of the same parts, showing the main line connected with branch office. Fig. 3 is a section taken transversely through the movable center.

Similar letters of reference indicate corresponding parts in the several figures.

This invention is designed to improve cut-outs for telegraph-wires by the employment of spring conducting-arms, in combination with an intermediate movable circuit-changer, whereby a person can, by a single movement of said changer, "cut out" an office from the main line, or connect it with such line at pleasure, as will be hereinafter explained.

The following description of my invention will enable others skilled in the art to understand it.

In the accompanying drawings, A represents a board, on which the instrument is applied, and which, in practice, will be fastened up in a convenient position near the operator's table. In the center of the board A, and connected to it by a central pivot, *g*, is a disk, C, having applied to its periphery two separated conducting-strips, *c c'*, forming raised rims. B B and B′ B′ represent four metallic spring-arms, which are secured to the board A by means of screw-bolts *a a*, *a' a'*, and adjusting-screws *b b*, *b' b'*.

In Fig. 1 of the drawing the lower ends of the spring-arms B B are represented resting on the conducting-strip *c*, while the upper ends of the lower arms B′ B′ are resting on the conducting-strip *c'*. By this adjustment of the disk the circuit of the main line is from the left-hand post *a*, through the two arms B B, and conducting-strip *c*, and is cut out from the office.

By means of a handle, *h*, the disk can be readily moved about its center, and adjusted as represented in Fig. 2, which establishes a connection with the office through arms B B′ and strip *c* on the left-hand side, and thence through arms B and strip *c'* on the right-hand side. Thus it will be seen that the adjustment can be made by a slight movement of the disk C.

The shoulders *i*, *j*, *k*, and *l* on the conducting-strips *c c'* serve as right and left hand stops for determining the proper positions for the disk, and the screws which are between the ends of the arms B B are designed for holding the ends of the latter against the conducting-strips *c c'*.

It will be observed that the main-line wire may be connected either to the posts *a a* or *a' a'*—that is to say, either end of the instrument may be up.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The movable disk with its separated conducting-strips, combined with the conducting-arms B B B′ B′, substantially as described.

WILLIAM GEORGE LINN.

Witnesses:
W. J. HAMILTON,
EDWARD F. HAMILTON.