

G. W. Horton. Swift and Reel.

N^o 63,519.

Patented Apr. 2, 1867.

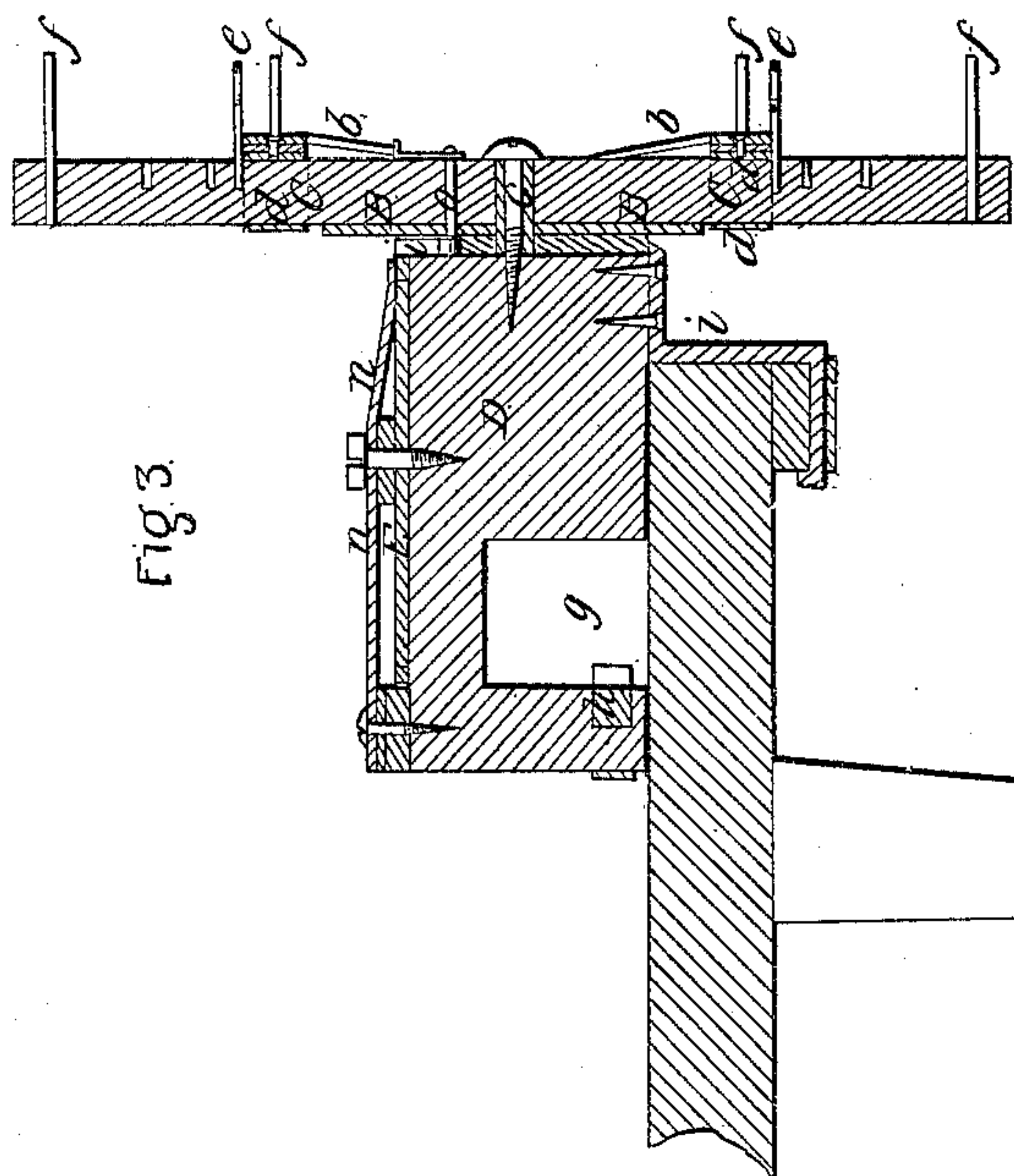


Fig. 3.

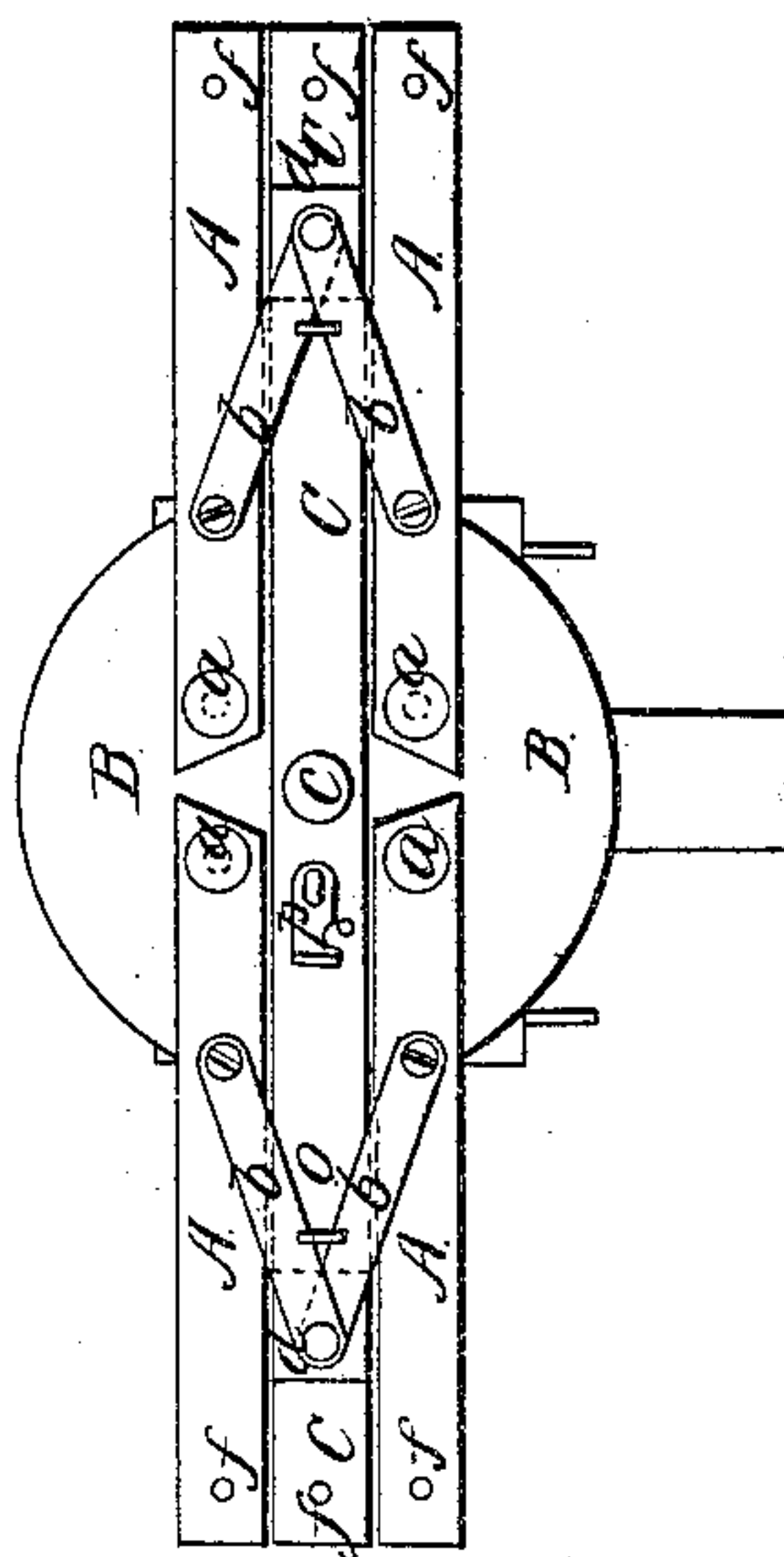


Fig. 4.

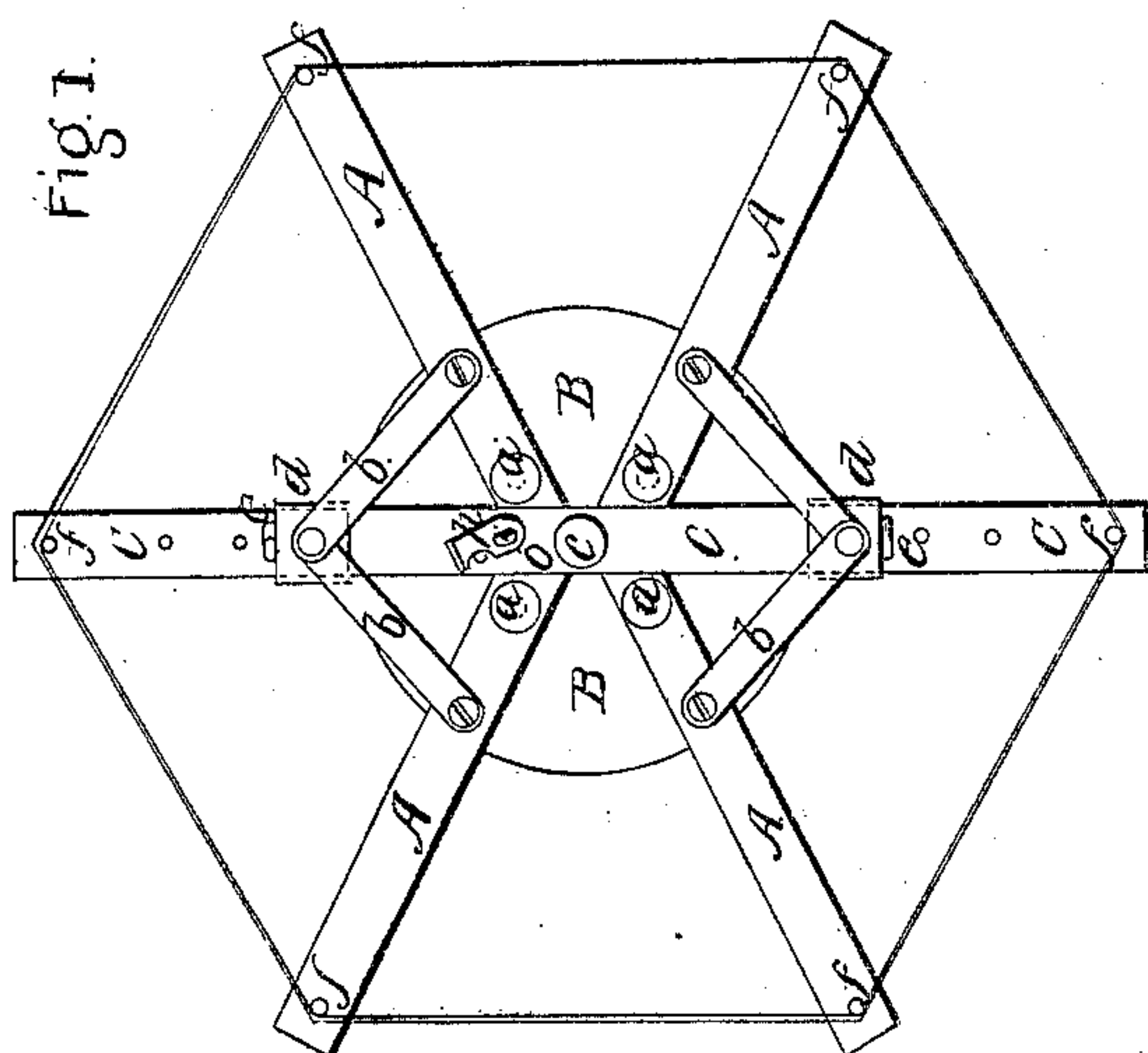


Fig. 1.

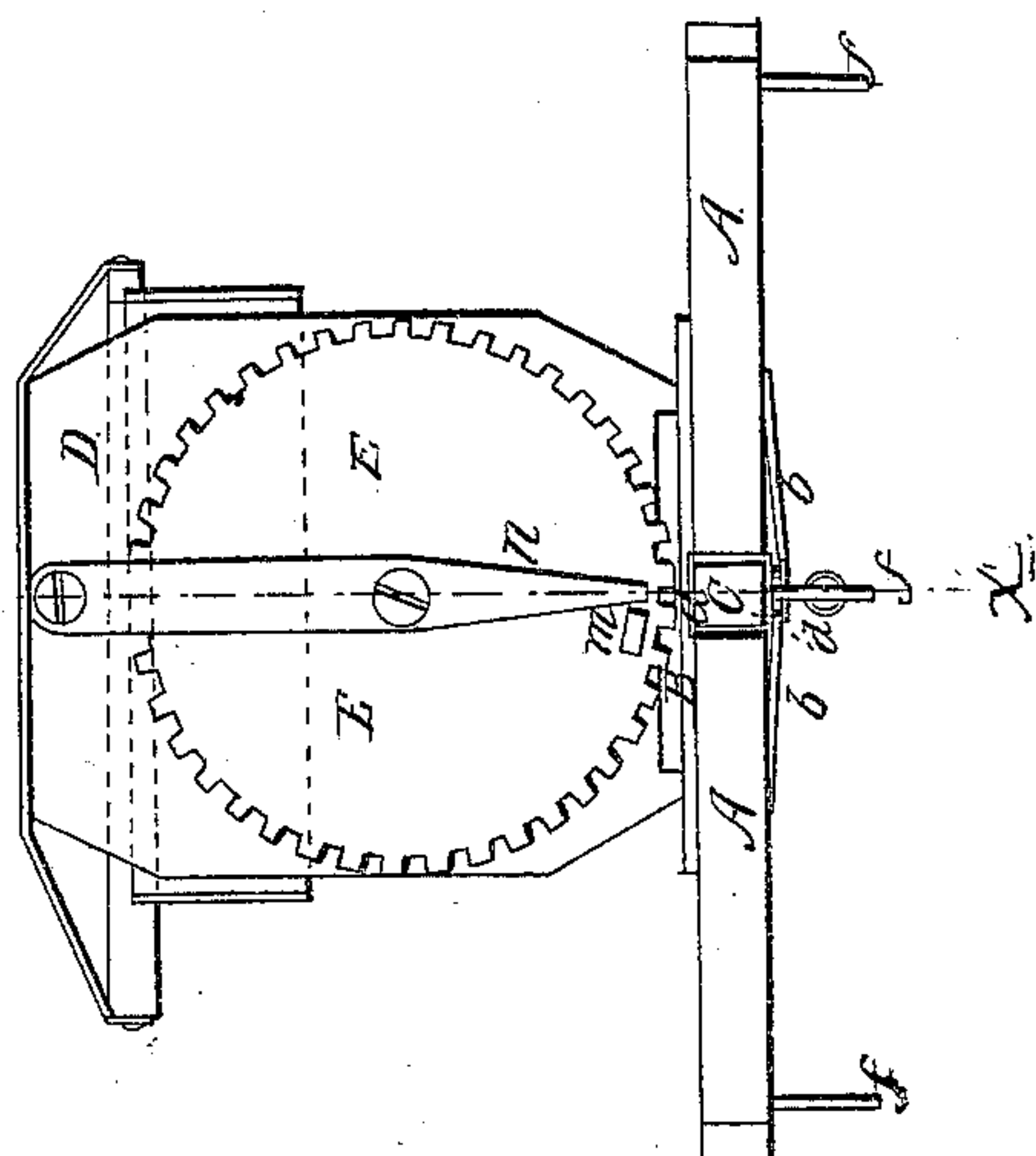


Fig. 2.

Witnesses:

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G. W. HORTON, OF BELVIDERE, ILLINOIS.

Letters Patent No. 63,519, dated April 2, 1867.

IMPROVEMENT IN SWIFT AND REEL.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, G. W. HORTON, of Belvidere, in the county of Boone, and State of Illinois, have invented a new and improved Combined Swift and Reel; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a front view of my invention.

Figure 2 is a plan or top view of the same.

Figure 3 is a vertical sectional view of the same taken on the line *x x*, fig. 2.

Figure 4 is a front view of the same representing it folded up.

Similar letters of reference indicate like parts.

The object of this invention is to construct a reel or swift for winding up yarn, which may without the use of set or other screws be easily secured to any table or chair-backs, &c., in a horizontal or vertical position, and which can, when not used, be folded up so as to fill the least possible room; and which is connected with an indicator-wheel, whereby the number of revolutions of the reel can be accurately ascertained, and consequently, also, the length of the yarn wound around the same.

The arms A of the reel are pivoted by means of pins *a* to a metal disk, B. They are connected by braces *b*, with the main bar C, which is firmly secured to the disk B so as to revolve with the same; the disk B turning loose around its axis *c*. The axis *c* of the disk is firmly secured in a block, D. The braces *b* which connect the arms A with the main bar *c* are pivoted to the arms, and at their opposite ends to metal slides, *d*, which slide loosely on the bar C, as shown in figs. 1 and 3. To keep the arms apart, as shown in fig. 1, a pin, *e*, must be inserted in the bar C close to the outside of the slide *d*. As soon as that pin is removed the arms A can be folded up, as shown in fig. 4, and are held in that position by inserting the pins *e* close to the inside of the slide *d*, as shown. It will be noticed that this reel has four folding arms, making, with the ends of the bars C, six arms in all. Two of these arms are folded to each end of the bar C, and are secured to the same by a pair of braces, *b*. But this principle would work as well with any other number of arms as long as a pair of folding arms are provided for and connected to each stationary arm. To the ends of the folding and stationary arms are secured the pins *ff*, around which the yarn is to be wound, as indicated in fig. 1. The block D is provided with a groove, *g*, at its under side, (see fig. 3,) whereby the reel can be set on a table edge, in a horizontal position, or to a chair-back in a vertical position, being clamped by a wedge, *h*. An elbow-arm, *i*, is also secured to the under side of the block D, whereby the reel can be held in a vertical position to a table by the aid of a wedge, K, (as indicated by red lines in fig. 3,) or in a horizontal position to a chair-back, &c. On the block D is further secured a toothed wheel, E; the teeth of which are engaged by a cam, *l*, which is secured to a pin, *o*, which is attached to the revolving disk B, the operation being such that as the reel is revolved once, the pin *l* will move the wheel E one tooth, so that to each revolution of the reel the wheel E is turned one tooth. A cam, *m*, is secured to the face of the wheel E, and a spring, *n*, which is secured to the block D, and the end of which presses upon the face of the wheel, is raised by the cam *m* once in each revolution of the wheel E, the sound made by the spring as it drops off the cam, indicating that the wheel E has once revolved, or that the reel has made as many revolutions as the wheel E has teeth. The wheel E may, if desired, be connected to another indicating wheel, whereby the revolutions of the former may, if desired, be recorded. The cam *l* by which the wheel E is turned may be thrown out of gear, as the pin *o* is on the face of the disk B, provided with a crank-handle, *p*, by turning which the cam may be so placed as not to come in contact with the indicating wheel.

What I claim as new, and desire to secure by Letters Patent, is—

1. The construction and arrangement of the disk B, pivoted to the block D, and having secured thereto the main bar C, on which works the slide *d*, connected to the arms A, by the pivoted braces *b*, as herein set forth for the purpose specified.

2. In combination with the above I claim the indicating-wheel E, as herein described.

G. W. HORTON.

Witnesses:

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C. E. HORTON.