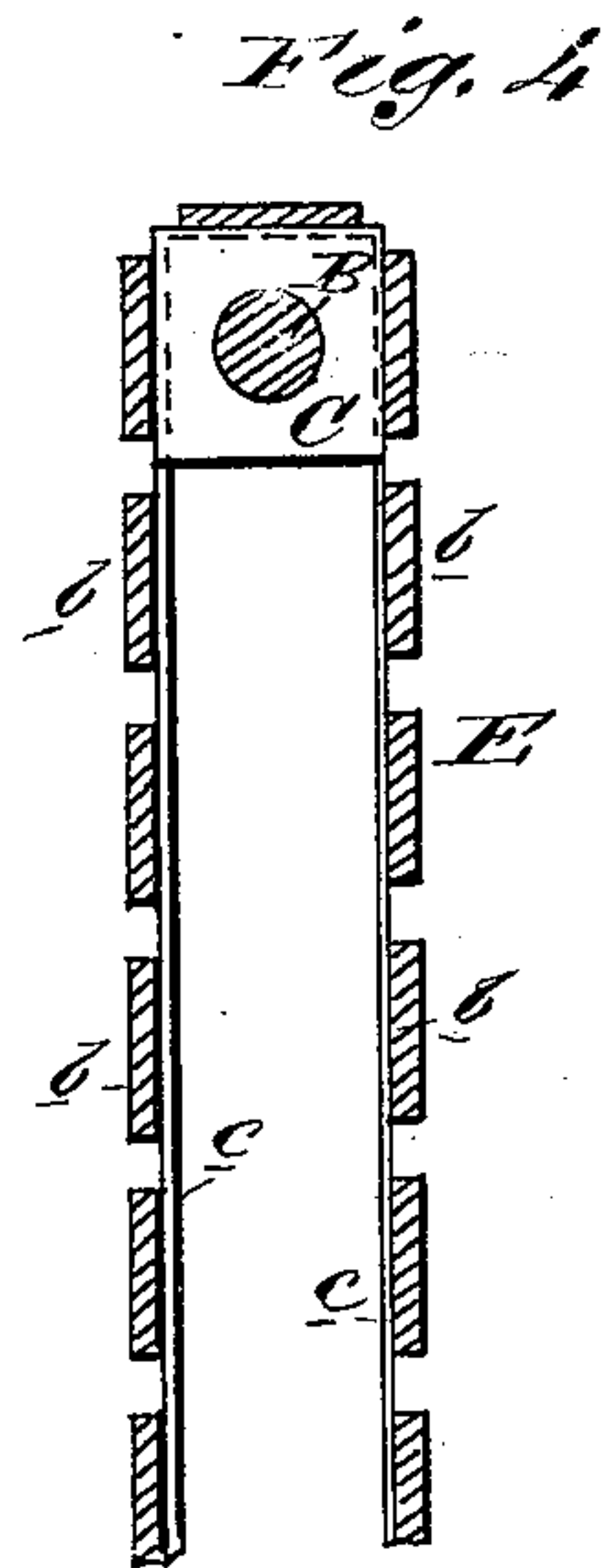
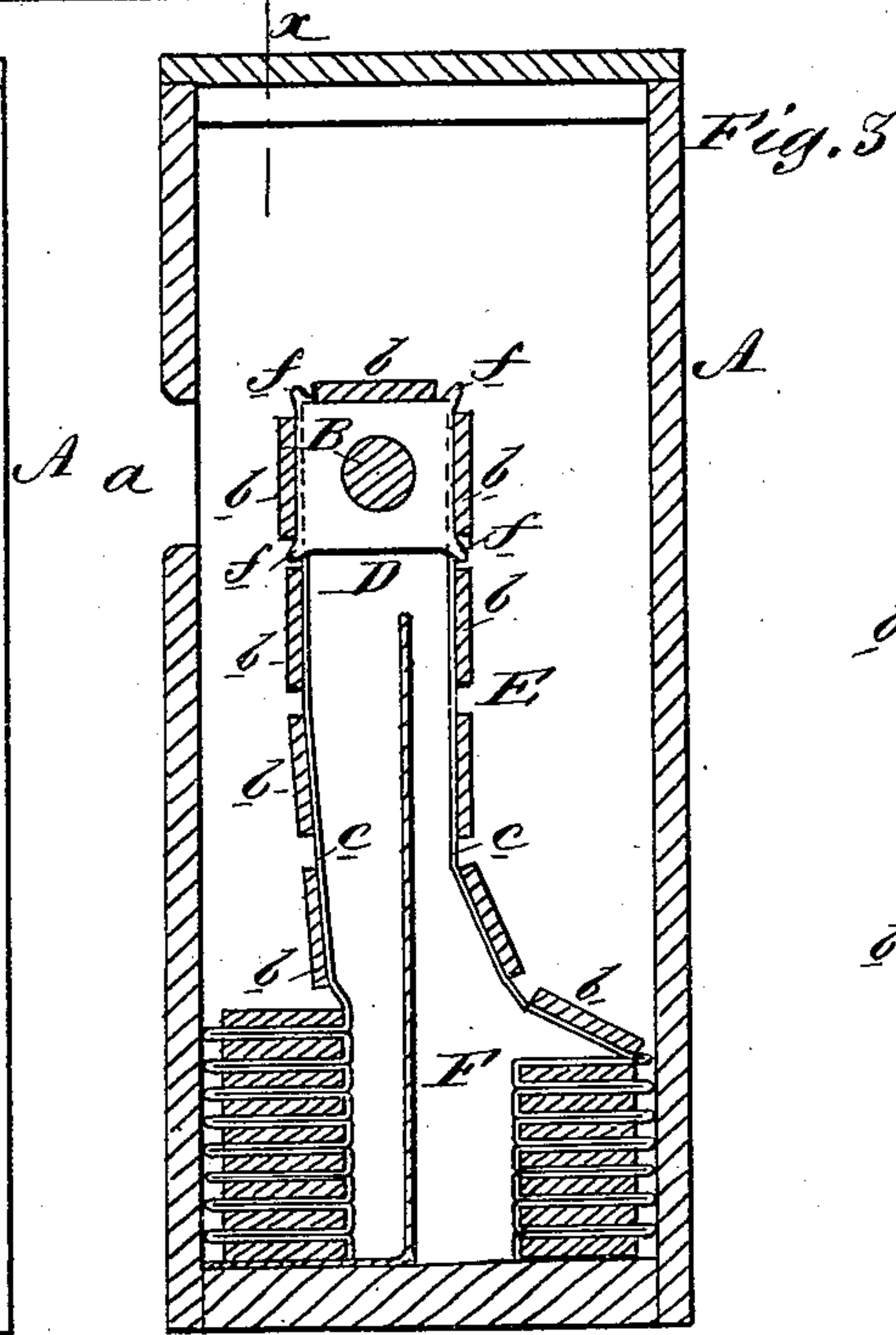
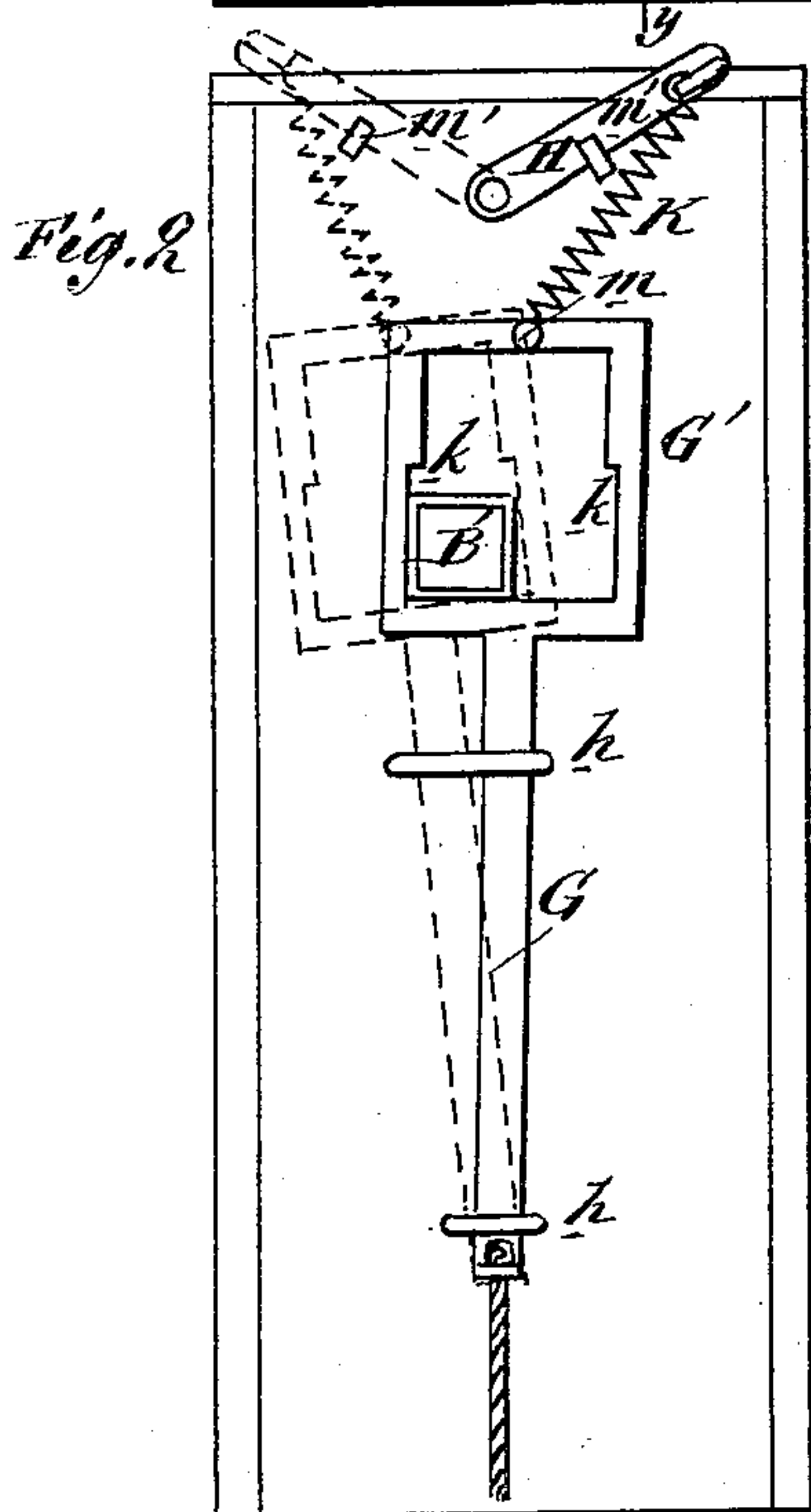
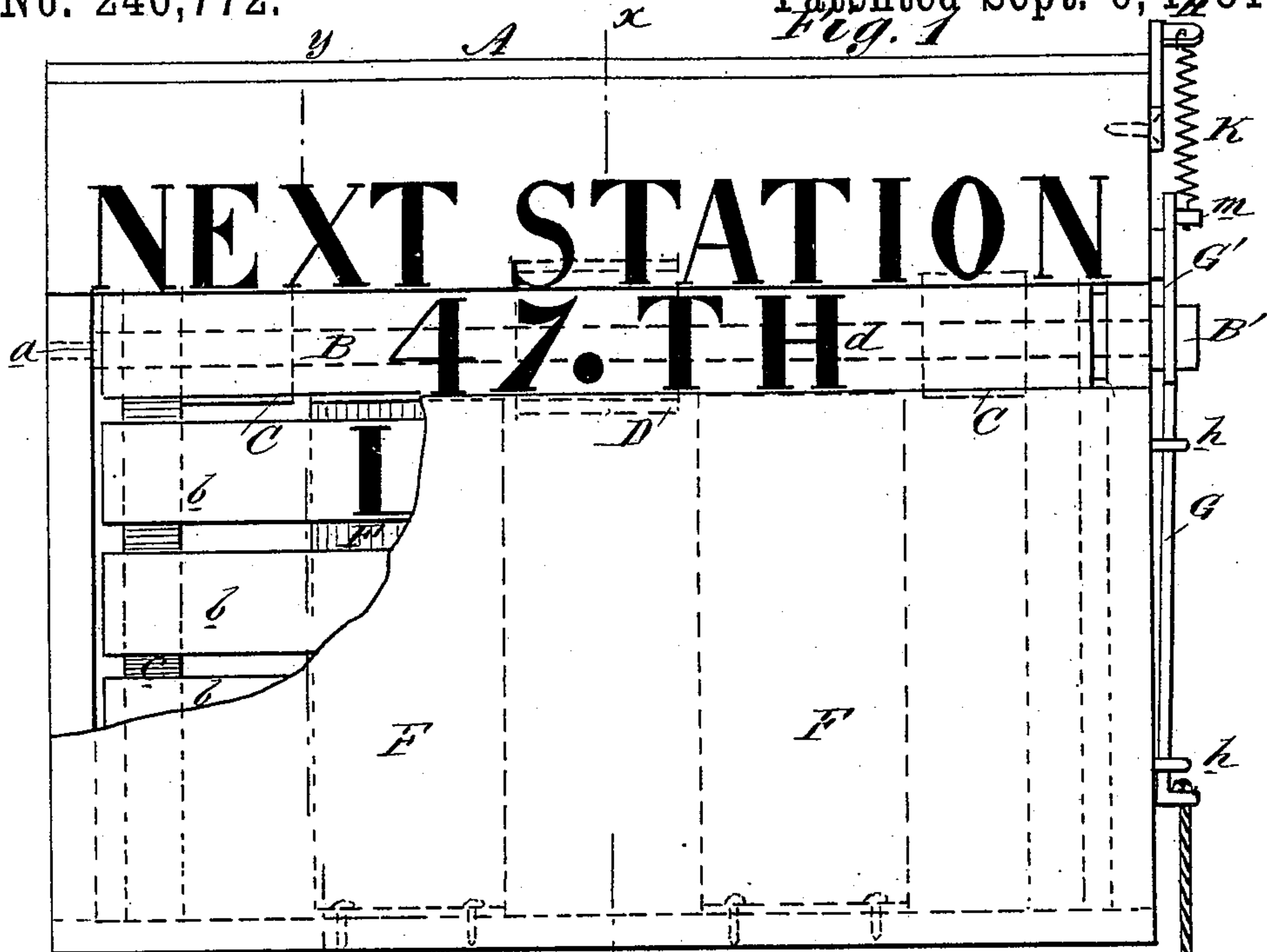


(Model.)

Z. M. HIBBARD.
STATION INDICATOR.

No. 246,772.

Patented Sept. 6, 1881.



WITNESSES:

C. Newell
C. Sedgwick

INVENTOR:

Z. M. Hibbard
BY *Mum Ho*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

ZEBINA M. HIBBARD, OF ST. LOUIS, MICHIGAN.

STATION-INDICATOR.

SPECIFICATION forming part of Letters Patent No. 246,772, dated September 6, 1881.

Application filed July 5, 1881. (Model.)

To all whom it may concern:

Be it known that I, ZEBINA M. HIBBARD, of St. Louis, in the county of Gratiot and State of Michigan, have invented a new and Improved Station-Indicator, of which the following is a full, clear, and exact specification.

This invention is designed as an improvement on the station-indicator for which Letters Patent Nos. 209,122 and 214,776 were issued to me October 22, 1878, and April 2, 1879, respectively.

The invention consists in the combination, with the slatted indicator-belt, of a horizontal feed-shaft having a central rag-wheel for preventing the passing of more than one of the belt-lags at a time; and it consists, further, of a novel reversible device fixed on the outside of the indicator-box for operating the indicator, all of which will be hereinafter set forth.

Figure 1 is a front elevation of the indicator with parts broken away to exhibit other parts. Fig. 2 is an end elevation of the same. Fig. 3 is a vertical sectional elevation on line *xx*, Fig. 1. Fig. 4 is a vertical sectional elevation on line *yy*, Fig. 1.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents the box or case of the indicator, having in its front a longitudinal opening, *a*, for the display of the names of the stations.

Within the box A, journaled in the ends thereof, is the driving-shaft B, having fixed on it, near each end, within the box A, rectangular blocks C C, and having fixed on its center a rag-wheel, D, whose functions will be hereinafter set forth.

E represents the indicator-belt, consisting of a series of parallel lags or slats, *b b*, connected at their ends by flexible strips *c*, of cloth or other suitable material, said lags or slats *b b* having printed or marked upon their faces names of stations, as shown at *d*.

Secured upon the bottom of the box A, on the inside thereof, are one or more partitions, F, preferably of sheet metal, that reach centrally upward nearly to the shaft B, and serve to prevent the entangling of the belt E when the device is in operation.

The rectangular blocks C C are designed to

be of the width of the lags or slats *b b*, so that when the belt E is laid over the shaft B and the latter revolved the said blocks C C will easily support and carry over one slat or lag, *b*, at each quarter-revolution of said shaft B. The corner projections *f* of the rag-wheel D protrude between the slats *b b* as the shaft B revolves, and thereby prevent said belt E from slipping.

On that end of the shaft B which extends through the end of the box A is rigidly secured a square block, B', preferably of metal.

Movably held in a vertical position on the end of the box A by staples *h h* is a sliding dog, G, having as its head a rectangular open frame, G', that rests against the end of the box A, encircling the block B', said dog-head G' having its sides notched or shouldered on their inner edges, as shown at *k k*.

Directly and centrally above the head of the dog G is pivoted a swinging bar, H, whose upper and free end is connected with the dog-head G'—to a stud, *m*, in the top thereof—by a spiral spring, K. When the bar H is thrown from the perpendicular to one side or the other, as shown in Fig. 2, an inner edge of the dog-head G' is brought by the tension of the spring K against a side of the block B', with a shoulder, *k*, just above a corner of said block B', while the bar H rests in an angular position on a lug or stop, *m'*, as shown. When the parts are in this position a downward pull on the dog G will engage a shoulder, *k*, upon the contiguous corner of the block B', and thereby turn the shaft B a quarter of a revolution, so as to present at the opening *a* in the box A the name of the next station. On then releasing the dog G it is drawn upward by the spring K in position for another pull upon it, for the purpose of giving the shaft B another quarter-revolution, to present the name of the next station. When, on the return trip, it is desired to display the names of the stations in reverse order, the bar H is thrown over in the opposite direction, whereby the opposite side of the dog-head G' is brought against the block B', so that upon pulling down the dog G the shaft B is revolved in the reverse direction. As the indicator-belt E is turned over the shaft B said belt E piles

or folds up in the bottom of the box A, as indicated in Fig. 3, the partitions F preventing the ends of said belt E from interfering with each other.

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

10 1. A station-indicator constructed substantially as herein shown and described, consisting of the case or box A, driving-shaft B, provided with blocks C C, rag-wheel D, and square end block, B', sliding dog G, bar and spring H K, stops *m'*, and indicator-belt E, arranged as set forth.

2. In a station-indicator, the shaft B, provided with the block B' on its outer end, and the open-headed sliding dog G, provided with internal shoulders, *k k*, and secured on the end of the indicator-case, the pivoted bar H, and its dog-connecting spring K, whereby the position of the dog and the movement of the shaft may be reversed, as described. 15 20

ZEBINA MOREY HIBBARD.

Witnesses:

J. W. WEZSELS,
CHAS. L. TAFT.