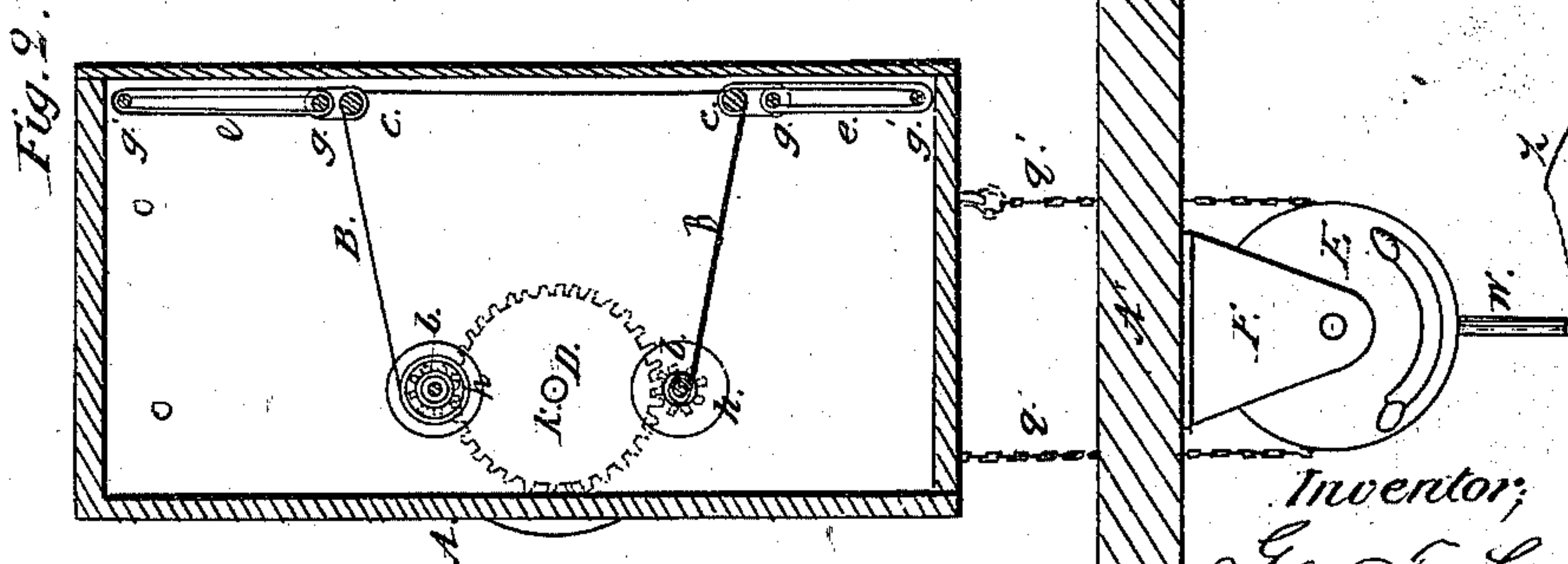
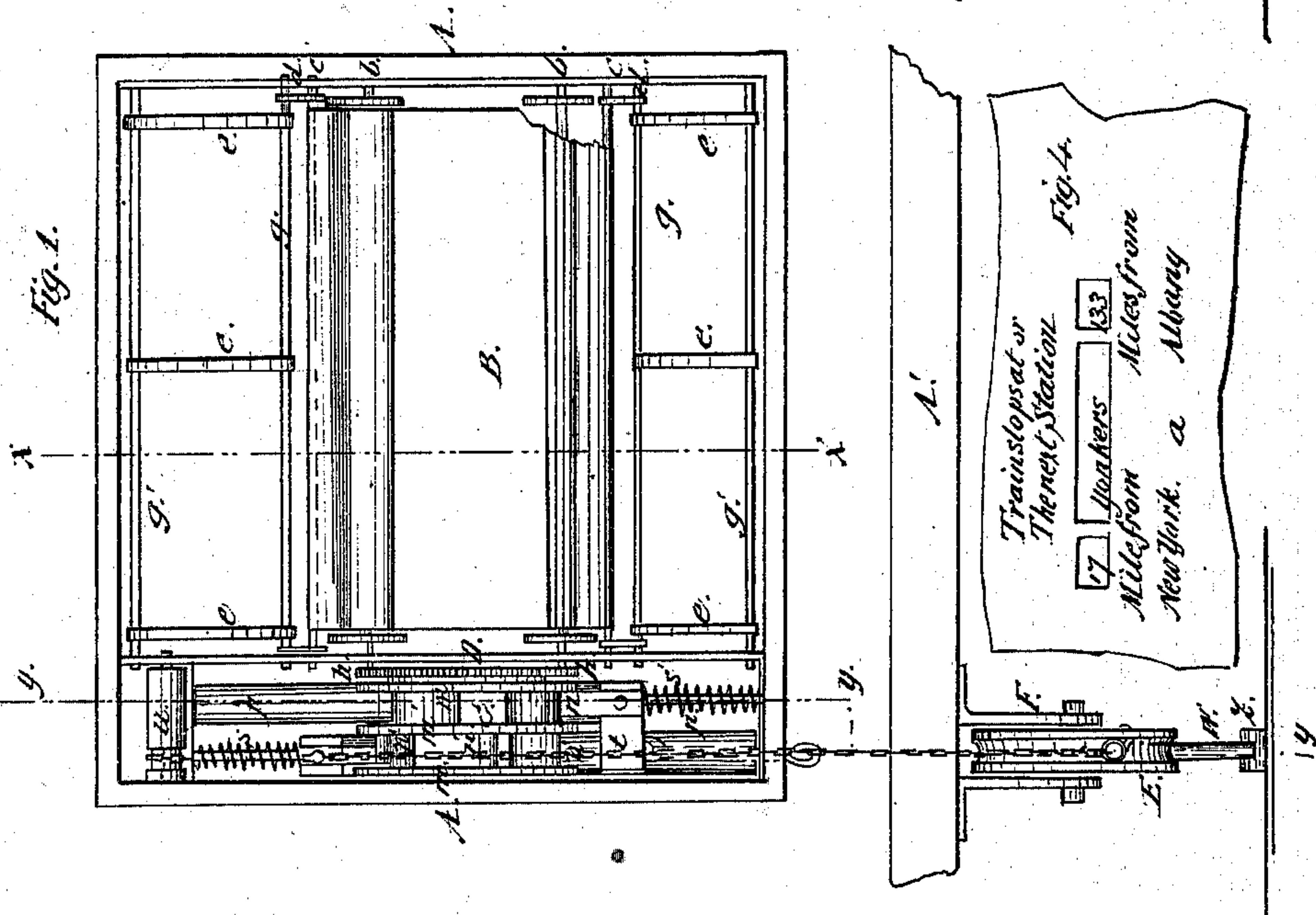
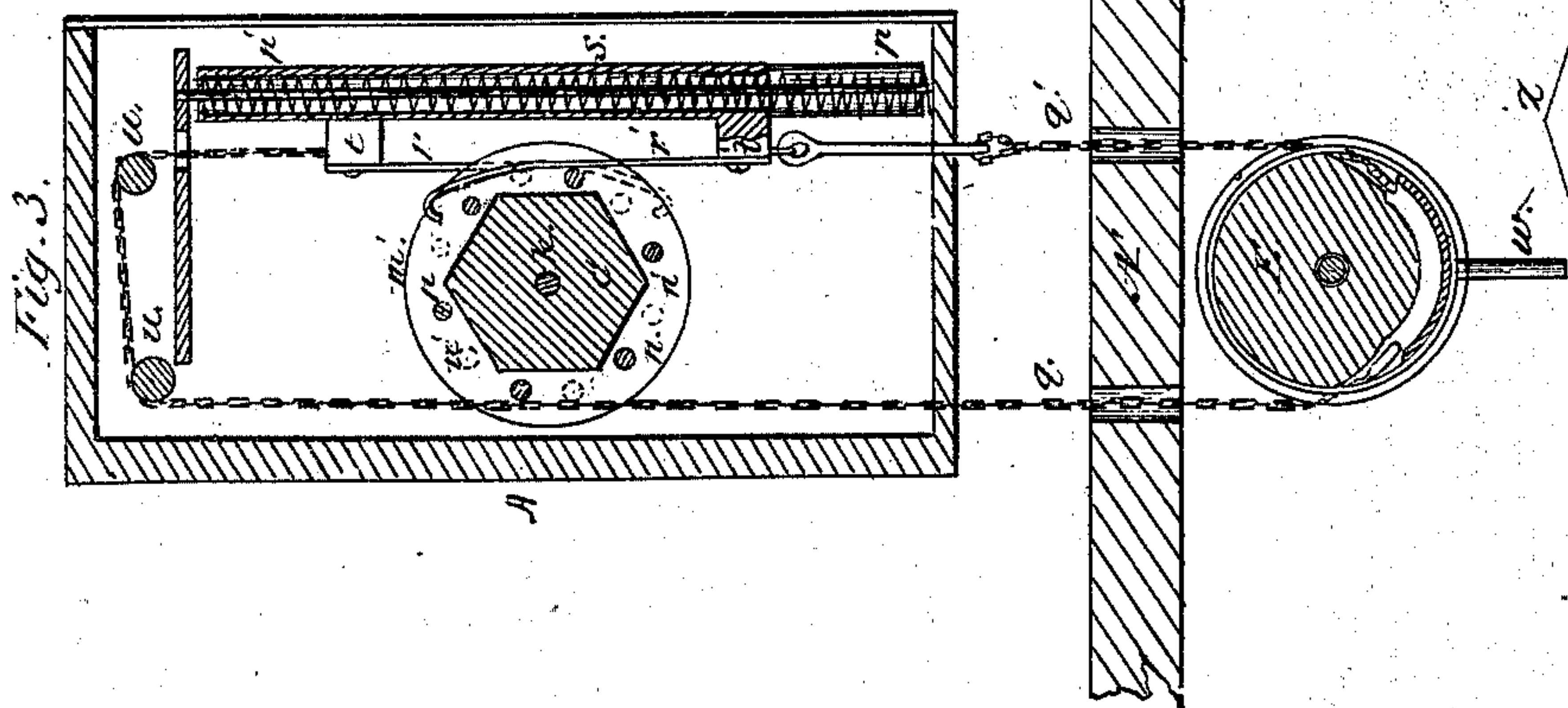


G. T. Lane.
Station Indicator

N^o 68,997.

Patented

Sept. 17. 1867.



Witnesses
Thos. Tusche
Wm. Trewin

Inventor;
Geo. T. Lane
Per *M. M. M.*
Attorney

Fig. 4.
Translators or
The next Station
Miles from Albany
New York. a

United States Patent Office.

GEORGE T. LAPE, OF SUMMIT, NEW YORK, ASSIGNOR TO HIMSELF AND
JEPHTAH LEATHE, OF NEW YORK, N. Y.

Letters Patent No. 68,997, dated September 17, 1867.

RAILROAD-STATION INDICATOR.

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, GEORGE T. LAPE, of Summit, in the county of Schoharie, and State of New York, have invented a new and useful Improvement in Automatic Railroad-Station Indicators; 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 is an open end view of my improved apparatus for indicating the stations.

Figure 3, a vertical section in the line *y y*, fig. 1.

Figure 4, view of index.

Similar letters of reference indicate like parts.

This invention relates to a new and useful mode of constructing apparatus for indicating to passengers in a railroad car the names of stations as they approach or pass them, and the distances between them and the termini of the road; and it consists in placing at one end, or at some convenient part of a passenger car, an index of names and distances, which is operated on by a low post or cam placed on the railroad track at each station, by means of a vibrating rod that projects through the floor of the car and strikes the cam when the train passes a station, and thus moves an apron or scroll, and thereby brings the name of a station into view in a conspicuous index in the car, together with the distances to and from the termini of the road, or to the next station, or the time the train is due at any point on the road, as hereinafter described.

The apparatus is enclosed in a suitable box framing, *A*, set up in the side of the car, having a face or front, *a*, in which are suitable openings for showing the names of stations and distances in figures, to and from places on a railroad, as they are changed from time to time in the passage of the train, and as exhibited in fig. 4. These names and figures are printed on a long apron, *B*, of any suitable fabric, which is secured at the ends upon two rollers *b b* at the back of the box *A*, as shown in Figure 2, around which the apron is wound in such manner as to pass over two other rolls *c c* in the front part of the box *A*, and travel back and forth to wind upon one or the other of the rolls *b b*, according as a train may move in one or another opposite direction. The rolls *c c* are suspended in slides *d d* working in slots in a casing, and drawn in opposite directions to keep the apron taut by means of India-rubber springs *e e* that are fastened to rods *g g* attached to the slides and stationary rods *g' g'* fixed in the framing of the box above and below the apron *B*. On the ends of the rolls *b b* are pinions *h h* which gear into a cog-wheel, *D*, placed between them, and hung on a shaft, *k*, that carries a hexagonal or polygonal disk, *C*, the periphery of which has flanges *m* on the sides, and an intermediate flange partition, *m'*, in the middle, in which flanges are fixed cross-rods or pins *n n'*, extending across the divisions of the disk *C* in different positions on its periphery. One set of pins *n* is placed a little way from each apex of the polygonal sides in one division of the disk *C*, and the other set *n'* is placed a little way from the opposite side of each apex in the other division of the disk, as shown clearly in fig. 3. At one side of the disk *C* are placed two vertical spiral springs, *s s'*, on fixed guide-rods running through them, upon which they can contract and expand freely. These springs are enclosed partly in tubes *p p'* that are capped at their opposite ends, so as to bear on one end of each spring to contract it, as hereinafter described. On the sides of the tubes *p p'* are fastened blocks *t t'* at their open ends, to which are attached hooked rods *r r'* for hooking upon the pins *n n'* in reverse position, so that one rod shall draw upon one set of pins *n* and turn the disk *C* in one direction, and the other rod shall draw upon the other set of pins *n'* and turn the disk in the opposite direction. Chains *q q'* are attached at one end to the blocks *t t'* respectively, and at the other end on opposite sides of a vertical rock-wheel, *E*, which is suspended to a bracket or hanger, *F*, under the floor *A'* of a car. The upper part of the chain *q* passes over rollers *u u* at the top of the box framing *A*. The rock-wheel *E* is provided with a projecting bar, *w*, at the under side, which reaches near enough to the surface of a railroad track to strike a cam-block or post, *z*, set firmly in the ground.

It is apparent that with this apparatus, arranged as described, whenever the car passes the cam-block *z* the bar *w* will strike the cam and vibrate the rock-wheel *E* in one direction and draw a chain, *q* or *q'*; in such man-

er that it will pull the disk C partly around, by means of one of the hooked rods *r* or *r'*, and thus, operating on the gearing D, *h* will shift the apron B on the rollers *b b*, and present in the index a name of a station and the figures of distance next in succession, as shown in fig. 4. Each station, and the distances to and from places on the road, will thus be successively indicated as the train passes or approaches another station. The operations are reversed when the trains move in opposite directions.

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

1. The slides *d d* attached to the India-rubber springs *e e*, in combination with the apron B, arranged and operating substantially as and for the purpose specified.
2. The arrangement of the polygonal disk C, spiral springs *s s'*, tubes *p p'*, chains *q q*, rock-wheel E, cam L, and apron B, as and for the purpose specified.

GEO. T. LAPE.

Witnesses:

WM. F. McNAMARA,
ALEX. F. ROBERTS.