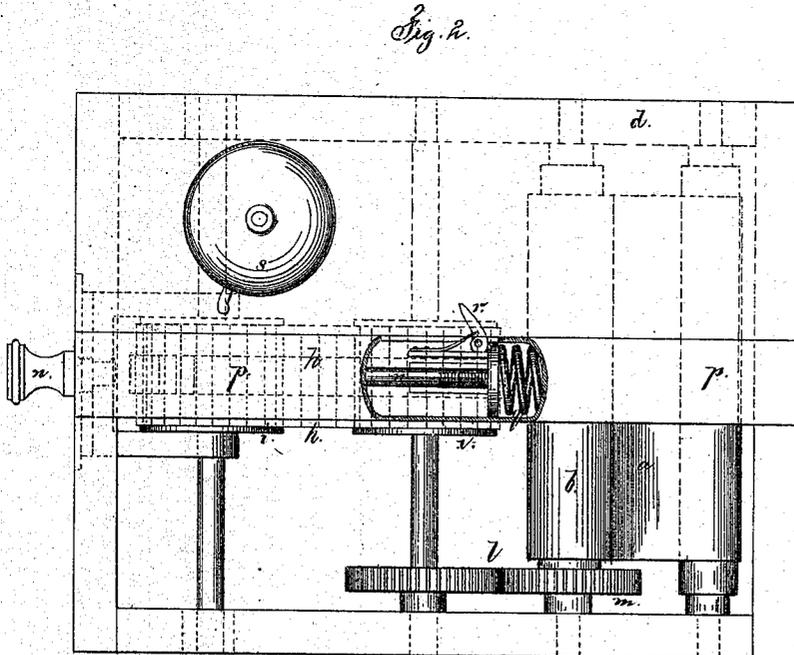
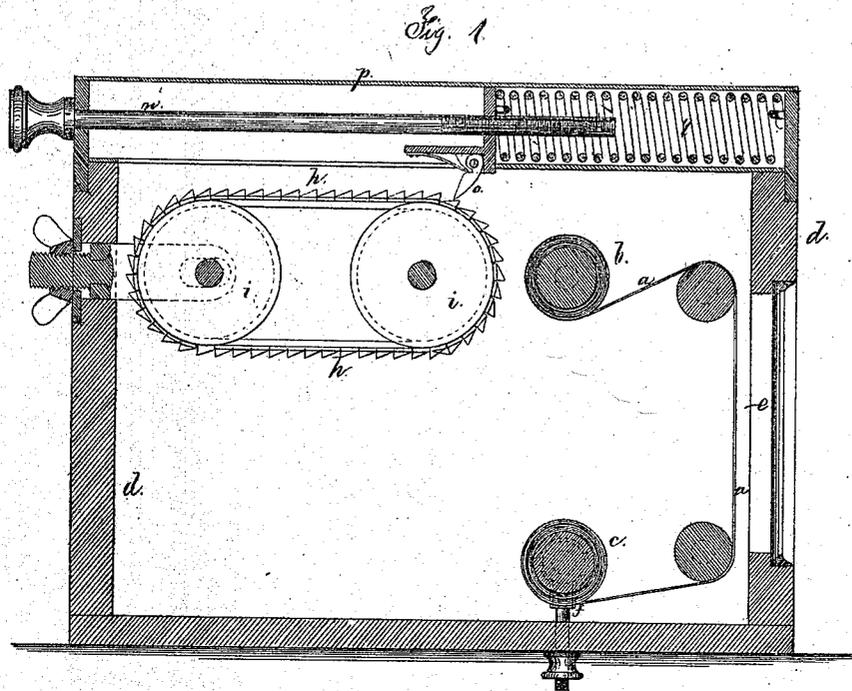


W. HEBDON.

STATION INDICATOR FOR RAILROAD CARS.

No. 103,179.

Patented May 17, 1870.



Witnesses,

Chas H Smith
Geo A Walker

William Heddon
for Lemuel W. Perrell atty

United States Patent Office.

WILLIAM HEBDON, OF NEW YORK, N. Y.

Letters Patent No. 103,179, dated May 17, 1870.

IMPROVEMENT IN STATION-INDICATOR FOR RAILROAD CARS.

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

To all whom it may concern:

Be it known that I, WILLIAM HEBDON, of the city and State of New York, have invented and made a new and useful Improvement in Indicating Apparatus for Railway Cars, Stations, &c.; and the following is declared to be a full, clear, and exact description of the said invention.

The object of this invention is to present, in regular rotation, the names of stations, street, or other signals in railroad or other cars, or wherever required.

My invention relates to a ratchet-belt, combined with a sliding pull and swinging pawl, whereby the belt of names, numbers, or signals can be revolved or wound off one roller upon another roller with facility.

The distance between the names upon the belt is to be increased in proportion to the increased diameter of the roll upon which the belt is wound.

In the drawings—

Figure 1 is a vertical section of the apparatus, and

Figure 2 is a plan illustrating the said improvement.

The belt or curtain *a*, upon which the names, numbers, or signals are placed, is mounted upon the rollers *b* and *c*, within the case or box *d*, and behind the opening *e*, so that the successive signals can be readily exposed through the said opening *e*. These parts are to be of any desired construction, and I remark that I apply the operative power to the axis of the roller *b*, and a friction-strap, *f*, applied to the roller *c*, serves to detain the said roller *c* sufficiently to prevent looseness of the belt *a*; and this friction-strap may be adjusted by a screw.

The ratchet-belt *h* passes around the pulleys *i i*, and is made with a series of triangular teeth attached upon the leather or other material of the belt.

The shaft of one of the pulleys *i* is connected to the shaft of the belt-roller *b* by gear-wheels *l m*, and I remark that the relative position of these may be varied

to suit the position of the pull relatively to the opening *e*.

The pull *n* is made with a spring or swinging pawl, *o*, that engages the teeth of the ratchet-belt *h*; and said pull is fitted to move in a case or slide, *p*, and is returned to a normal position by a spring, *g*.

This pull *n* can stand horizontally or vertically, but parallel with the belt of ratchet-teeth *h*.

A toe, *r*, at one side of the pull *n*, may be used to ring a bell, *s*, as the apparatus is operated.

It will now be understood that this mechanism allows the attendant to move the indicating-belt more or less, because the pull can be drawn entirely out to the extreme of motion, or be moved partially, or a second time, if required, to adjust the indicating-belt; and a large extent of motion can be given both to the ratchet-belt and the indicating-belt, in consequence of the ratchet-belt being parallel to the movement of the pull.

Each car in a train of railway carriages can be provided with one of these indicators; and the same can be operated separately, or all of them be connected together, so as to be changed with one pull.

I prefer that the belt *a* shall be of a length to contain the names of all the stations going and returning, so that the belt will be wound upon the roller *b* each complete trip, and then wound back by hand upon the roller *c*.

I claim as my invention—

The ratchet-belt *h*, provided with triangular teeth, in combination with the indicating-belt *a*, and pull *n*, carrying the pawl *o*, the parts being arranged and operating as and for the purposes set forth.

Signed by me this 1st day of March, A. D. 1870.

W. HEBDON:

Witnesses:

CHAS. H. SMITH,
GEO. T. PINCKNEY.