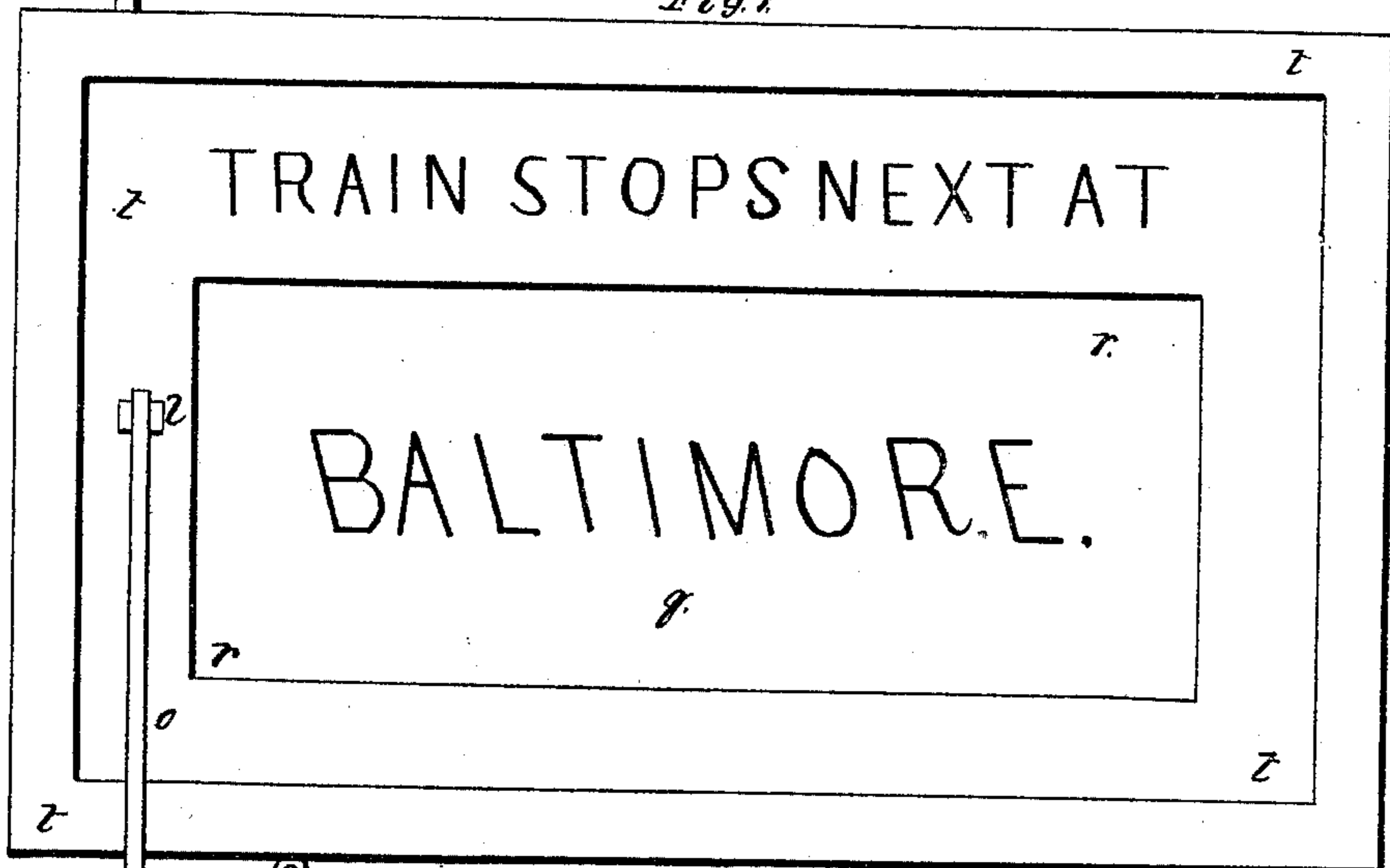


*J. Berthoud.*  
*Station Indicator.*

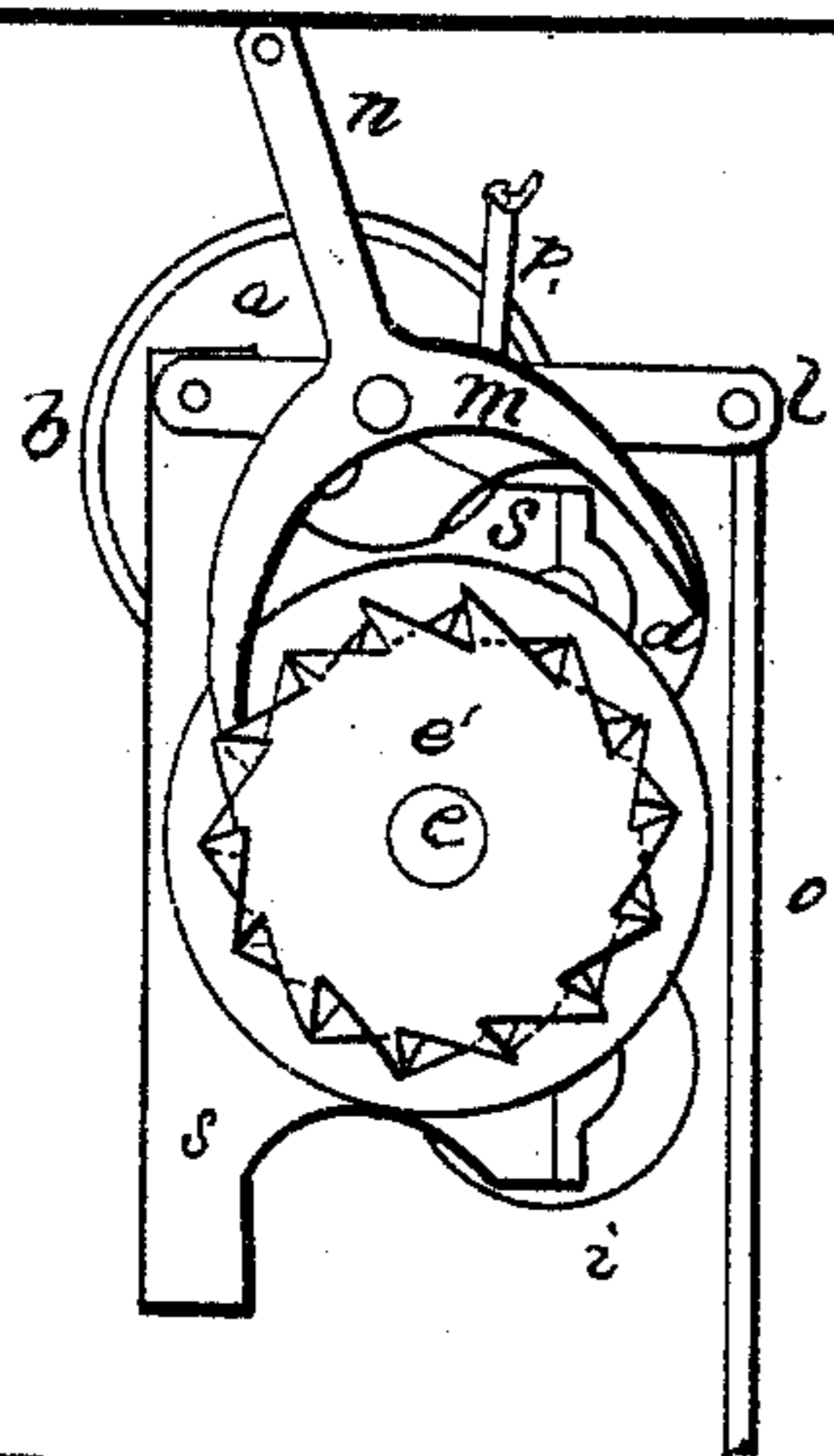
*N<sup>o</sup> 36,937*

*Patented Nov. 18, 1862.*

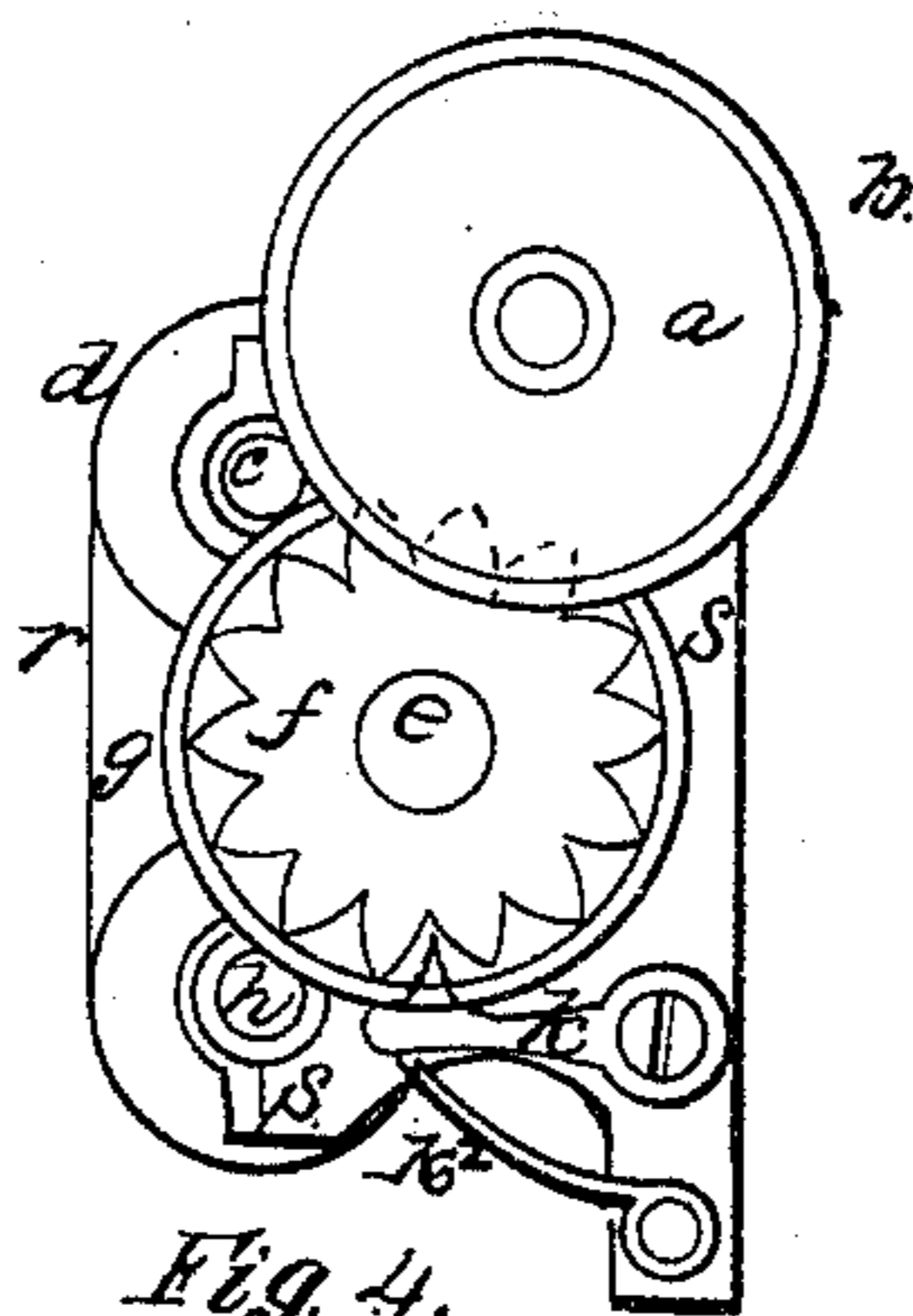
*Fig. 1*



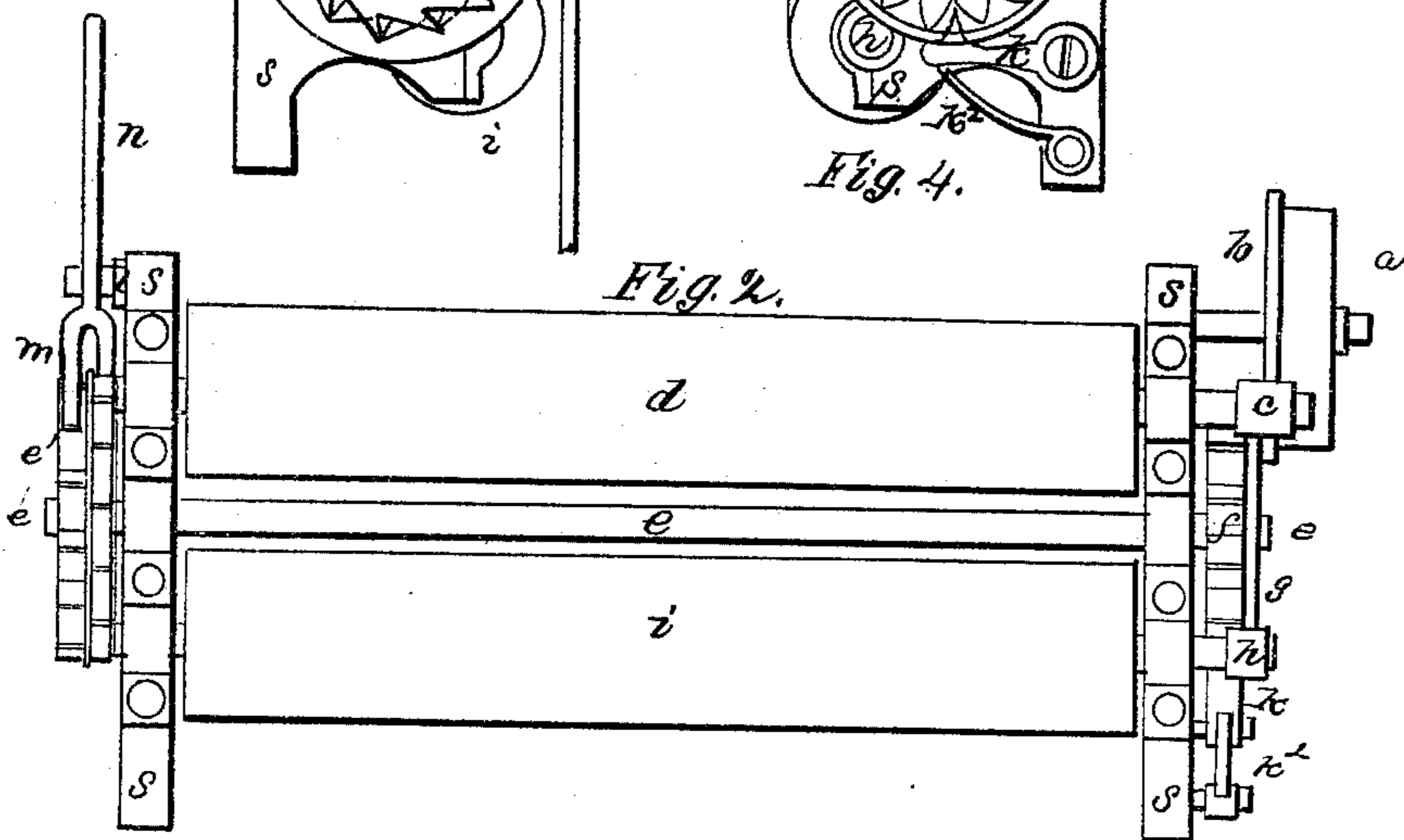
*Fig. 3.*



*Fig. 4.*



*Fig. 2.*



*Witnesses.*

*L. Dohrenwend*

*Inventor.*

*J. Berthoud*

# UNITED STATES PATENT OFFICE.

JOSEPH BERTHOUD, OF PARIS, FRANCE.

## IMPROVEMENT IN APPARATUS FOR PANORAMIC ADVERTISING.

Specification forming part of Letters Patent No. **36,937**, dated November 18, 1862.

*To all whom it may concern:*

Be it known that I, JOSEPH BERTHOUD, of the Empire of France, but now residing in the city and State of New York, have invented certain new and useful Improvements in Machinery or Apparatus for Panoramic Advertising; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention relates to that class of advertising which is represented in a continued series on traveling strips of cloth or other proper material, which strips are wound around a roller or rollers in such a manner that in the winding or unwinding of such rollers by mechanism the notices are alternately presented to the eye, the apparatus being secured in a proper case, which is intended to be conspicuously placed in vehicles of travel, or in any other proper position.

My invention consists in a peculiar arrangement of machinery of simple and compact form for turning the carrying-rolls for the advertisement or sheet, and for arresting and holding the same, and for reversing such motion, the apparatus being moved by the hand or foot of an attendant at will. (See drawings.)

Figure I is designed to show the front of the case containing the apparatus. Fig. II shows a plan or front elevation of the machinery; Fig. III, the left-hand vertical view, and Fig. IV the right-hand vertical view, or the two end of the same.

*a* shows a drum for holding a coiled spring similar to an ordinary watch-spring, and arranged the same. This rotates the drum and gives tension and rotation to the advertising-sheet through the agency of the intermediate machinery, the drum being placed upon an independent shaft secured to the frame-work of the machinery, and has fast upon one of its sides a friction or toothed wheel, *b*, which rotates a corresponding pivot, *c*, fixed upon the shaft of the roller *d*.

*e* shows a rotating shaft extending across the machine between the rolls *d* and *i*. Upon one end of this shaft is a double ratchet-wheel, *e'*, with its teeth reversed, those on one side being to the right and those on the other side to the left, as shown in black and red lines in

Fig. III. On the opposite end of this shaft is a clutch or ratchet wheel, *f*, with radial notches having curved sides. (Shown in red lines in Fig. IV.) Secured to the side of this wheel *f* is a toothed or friction wheel, *g*, which rotates a corresponding pinion, *h*, secured upon the end of the shaft for the roller *i*.

*k* shows a pawl or dog, which takes into the notches of the wheel *f* to hold it in position, and *k'* is a spring bearing against this pawl to hold it in place against the wheel *f*. The teeth upon this wheel *f* and the catches upon the ratchet-wheel *e'* correspond in number and dimensions circumferentially.

*l* shows a rock-lever, held at one end by a stud attached to the frame-work *s*. This lever carries the double acting or oscillating lever *m*, provided with two legs which take into and rotate the ratchet-wheel *e'*. One leg takes into one ratchet, and the other leg, being bent out of the vertical plane of the other leg, takes into the other ratchet. The outer end of the lever *l* is extended beyond the casing of the apparatus, as shown in Fig. I, to receive a rod or cord, *e*, while being pulled downward, and causes one foot of the double-acting lever *m* to bear against one of the teeth of the ratchet-wheel *e'* and cause it to rotate. When upon releasing the cord the spring *p*, secured to the lever *l* and the casing *t*, will draw up the lever *m* into another tooth. The compound lever *m* is provided with an upright arm *n*, which extends through the casing, as shown in Fig. I, and is for the purpose of reversing the direction of motion of the sheet by throwing this arm backward or forward, which brings one or the other leg of the lever *m* into contact with the wheel *e'*, and hence causes it to turn backward or forward accordingly.

*q* shows a space left in the casing for exposing the requisite portion of the advertising-band *rr*.

In adjusting the band the lower end should be secured to the roll *i*, around which roll the entire band, then secure the other end to the roll *d*. Now with the hand turn the drum *a* until the band is transferred from *i* to *d*. When the apparatus is ready for action, as by pulling the cord or rod *e*, and by the changing of the position of the arm *n*, the action of the apparatus may be indefinitely kept up. The ratchet-wheel *f* and the dog *k*

at each interval hold the rolls in place against the constant force acting on the band from the spring in the drum *a*. Now by pulling the cord *o* with intermittent jerks the band will be wound from *d* onto *i*, and by placing the bar *n* in a forward action (opposite to that shown in Fig. III) the band will be again restored to its first position on roll *d*.

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

The levers *l* and *m*, the ratchet-wheel *e'*, and the stop-wheel *f*, combined with the carrying-rolls *d* and *i*, when actuated substantially as described, and for the purpose specified.

J. BERTHOUD.

Witnesses:

J. B. HYDE,  
L. DOHRENNEND.