

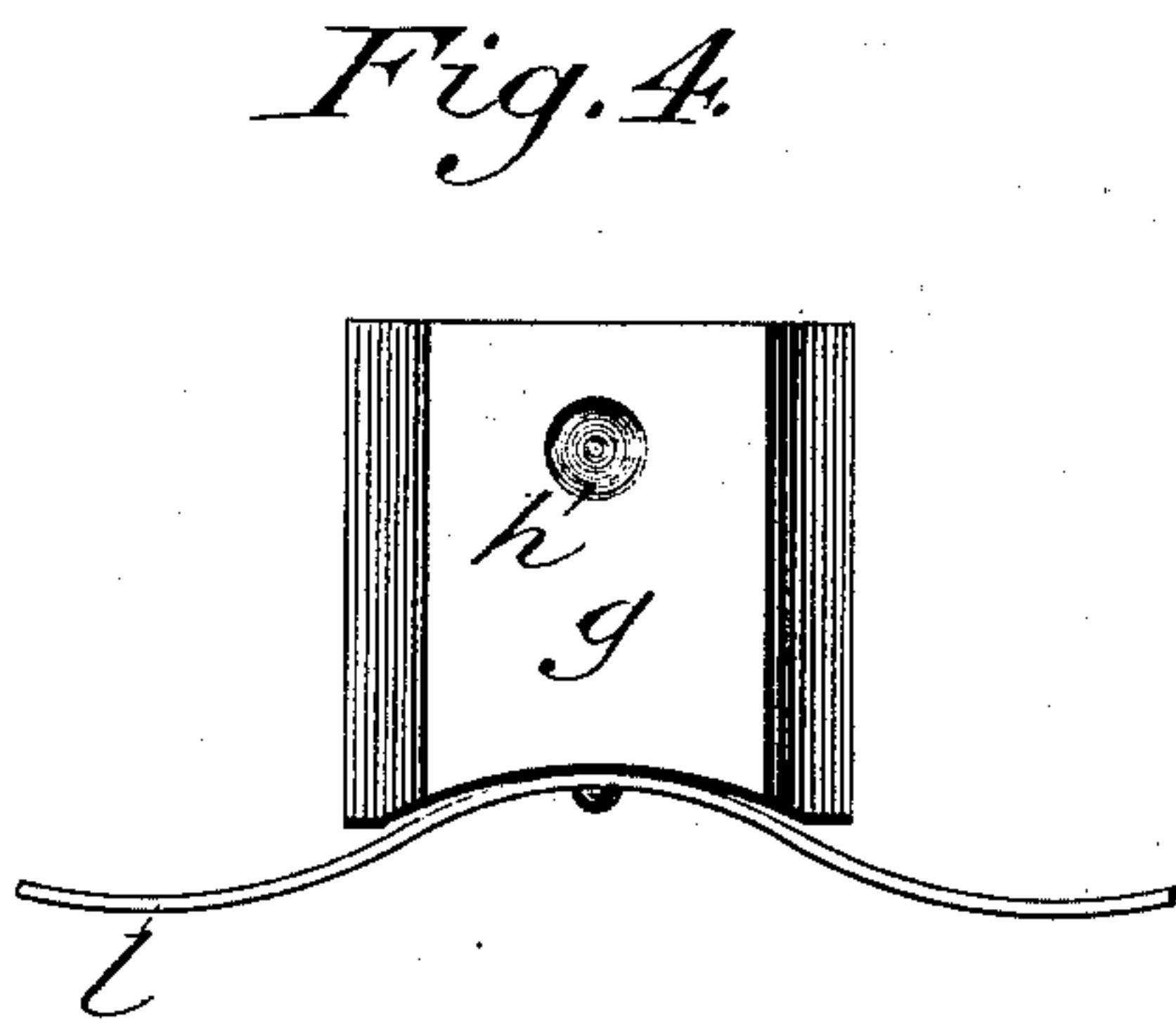
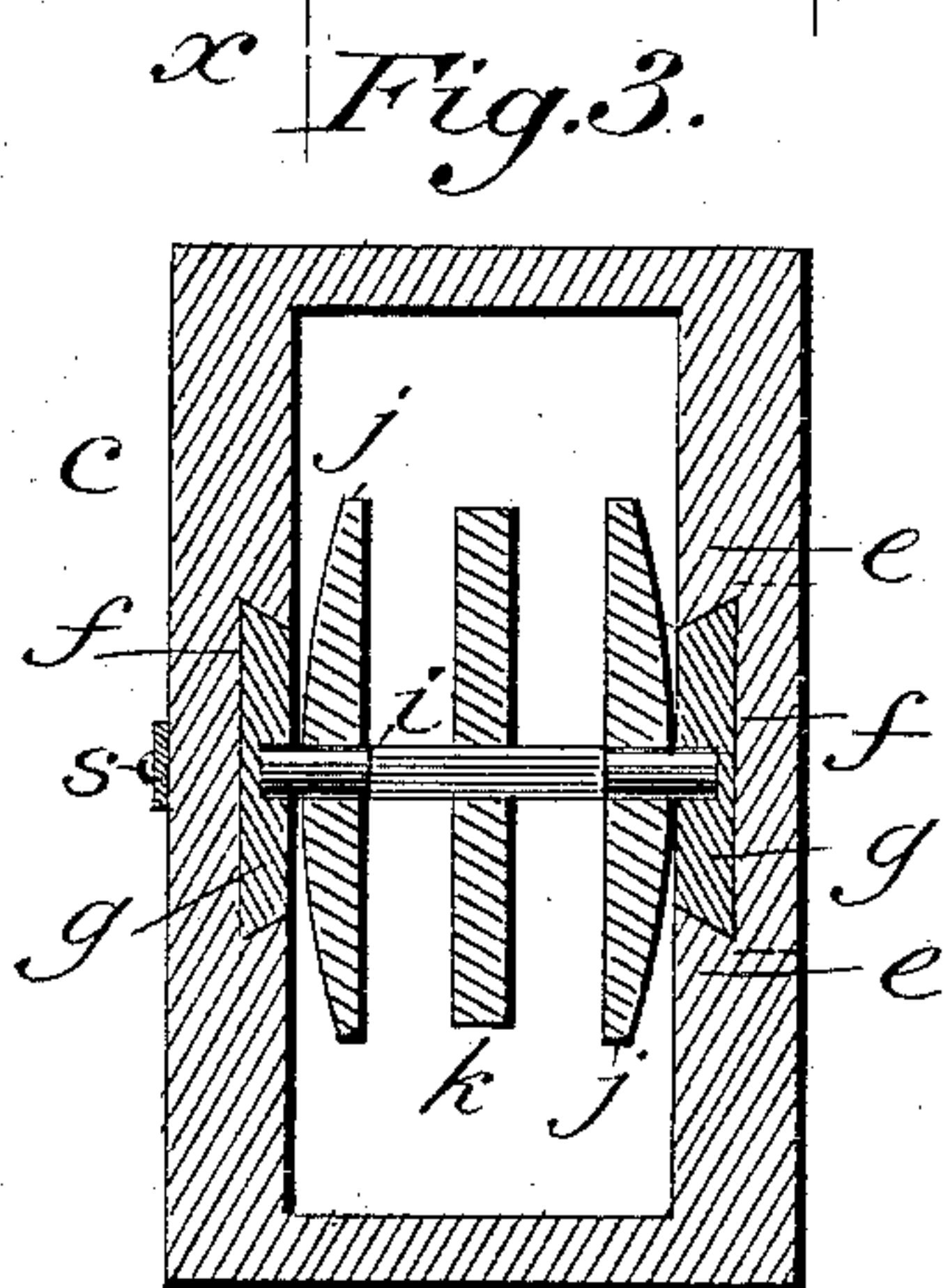
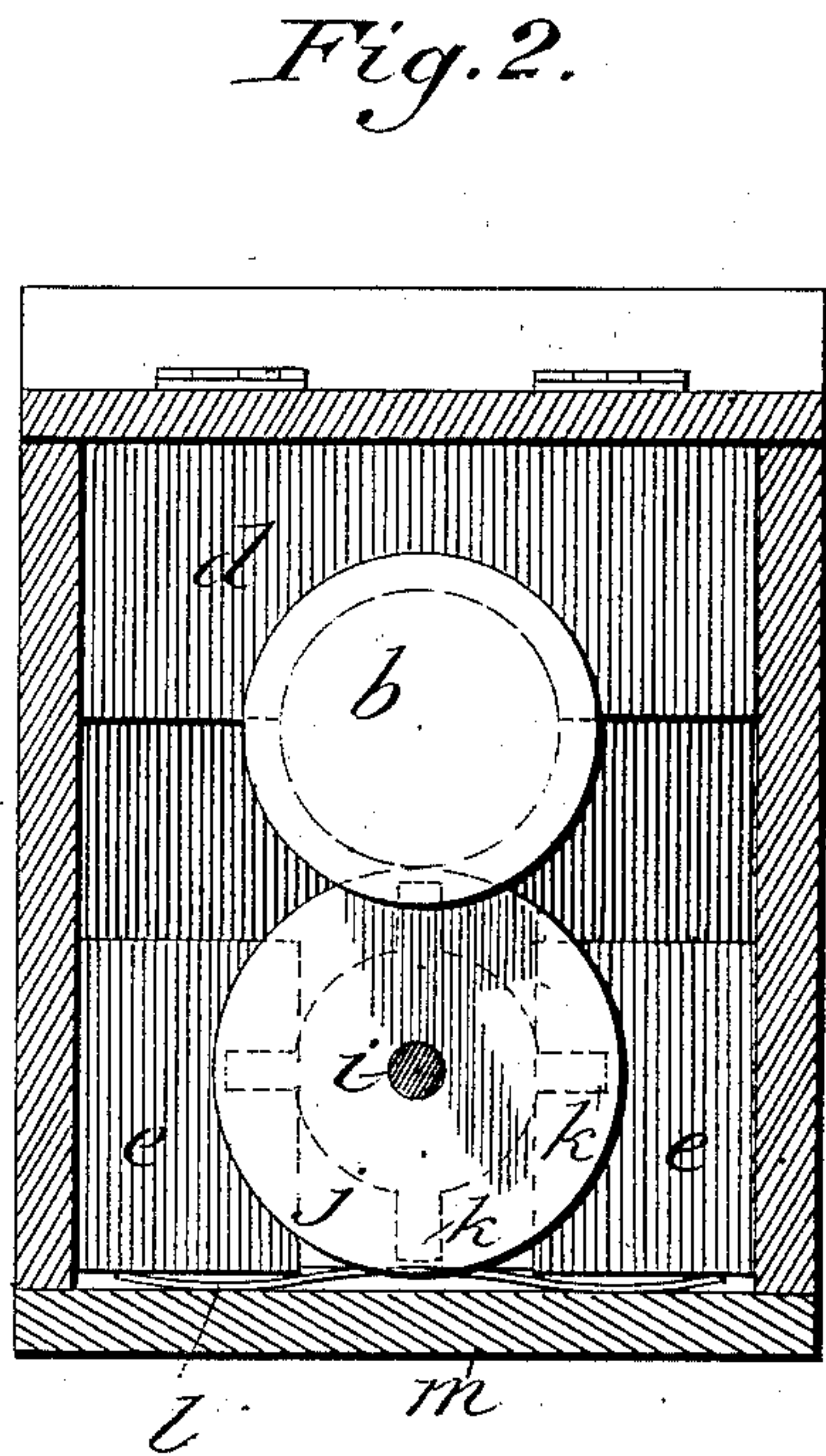
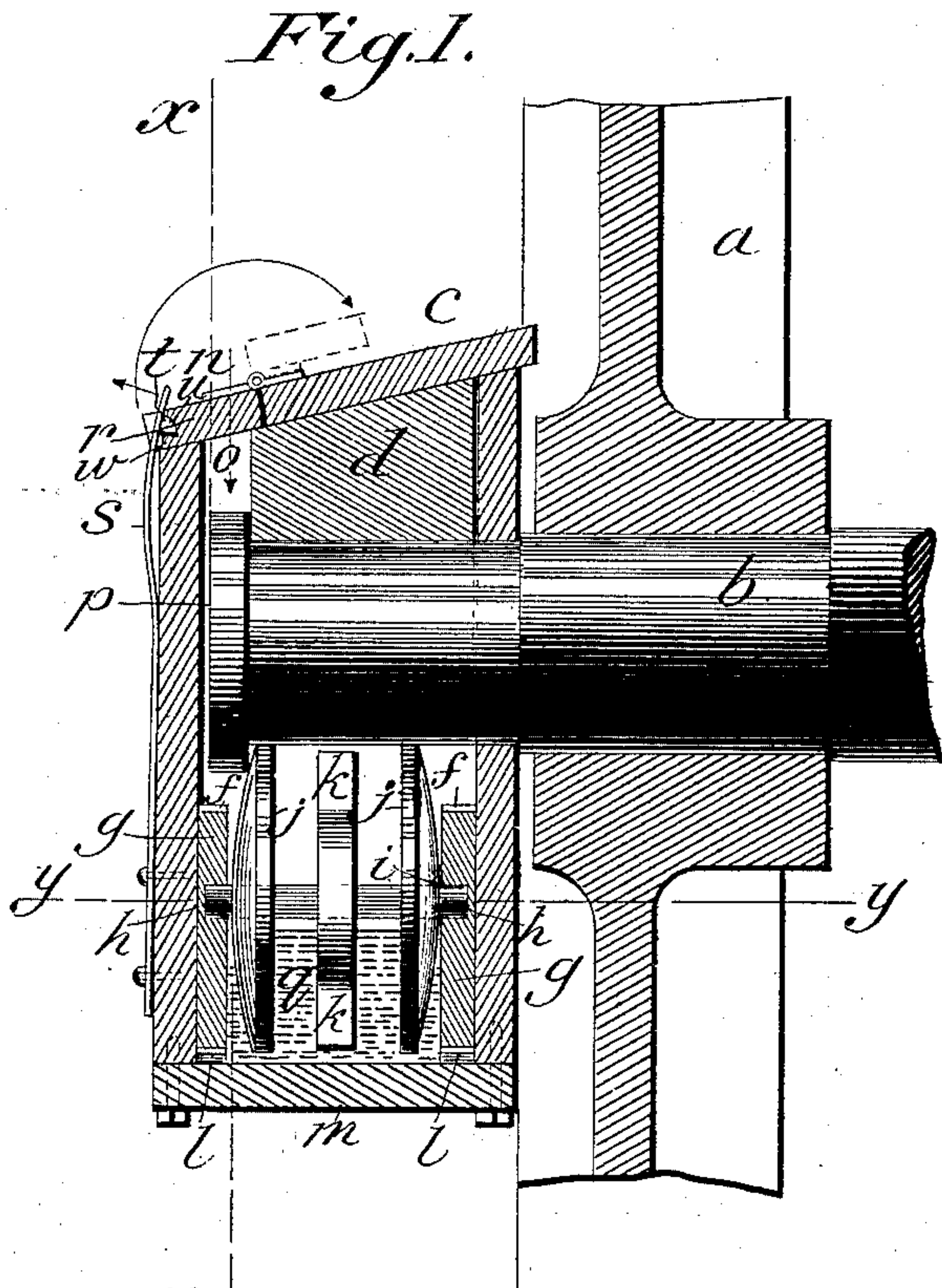
(No Model.)

H. M. WILLIAMS.

CAR AXLE BOX.

No. 371,156.

Patented Oct. 4, 1887.



Witnesses

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UNITED STATES PATENT OFFICE.

HARRY M. WILLIAMS, OF BLOOMINGTON, ILLINOIS, ASSIGNOR OF ONE-HALF TO DANIEL M. SILL, OF SAME PLACE.

CAR-AXLE BOX.

SPECIFICATION forming part of Letters Patent No. 371,156, dated October 4, 1887.

Application filed June 21, 1887. Serial No. 242,028. (No model.)

To all whom it may concern:

Be it known that I, HARRY M. WILLIAMS, of Bloomington, in the county of McLean and in the State of Illinois, have invented certain new and useful Improvements in Self-Lubricating Car-Boxes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

My invention relates to an improvement in car-axle boxes, the object of the same being to provide means whereby the journals will be kept constantly lubricated when in motion, and the necessity for the employment of packing avoided. A further object is to provide means of the above character which shall be simple and economical and durable and efficient in use; and with these ends in view my invention consists in the certain features of construction and combinations of parts, as will be hereinafter fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in elevation, with the side removed. Fig. 2 is a detail view on lines *x x*. Fig. 3 is a detail view on lines *y y* of Fig. 1, and Fig. 4 is a separate view of the roller-carrying plate and spring.

a represents the car-wheel, and *b* the journal thereof. The journal-box *c* is suitably secured upon the journal *b*, the weight being received upon the grooved plates *d*, resting upon the journal. The sides of the box, near the lower ends thereof, are provided with the blocks or projections *e*, which may be made separately and secured thereto, or formed integral therewith, as preferred. The dovetail slots *f*, formed between said blocks, are for the reception of the dovetail sliding plates *g*, which register therein. The plates *g* are provided with the annular recesses *h* upon their inner faces, near the upper edges thereof, in which are journaled the ends of the axle *i*, having the rollers *j* rigidly secured near the ends thereof. To the axle *i* are secured the arms *k*, in this

case four in number, which number may, however, be increased or decreased, as desired. The rollers *j* are kept in constant contact with the journal *b* by means of the band-springs *l*, centrally secured on the concaved lower edge of the plates *g*, the same being forced upward by means of the springs coming in contact with the bottom *m*.

The lubricant enters the box at the top *n*, through the aperture *o*, and passes through the channels *p* into the reservoir *q*. The aperture *o* is closed by means of the lid *r*, the same being locked by means of the spring *s*, having the lug *t*, adapted to engage the slot *u* in the depressed portion *w*.

It will be seen that when the journal *b* is in motion the rollers *j* revolve, carrying the arms *k* therewith, which, being of less diameter than the rollers and passing through the lubricant, will throw the same upon the journal, thereby keeping the same constantly oiled and preventing any possible heating of the journals.

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

1. In lubricators for car-axle boxes, the combination, with the box having the dovetail blocks secured to the sides thereof, of plates adapted to be secured in said slots, rollers mounted in the plates and in contact with the axle, and arms for distributing the lubricant to the axle, substantially as shown and described.

2. In lubricators for car axle boxes, the combination, with the box provided with dovetail slots on the lower insides thereof, and dovetail plates engaging said slots, of rollers journaled in said plates and arms actuated by said rollers, whereby the lubricant is supplied to the axle, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 13th day of June, 1887.

HARRY M. WILLIAMS.

Witnesses:

THOS. SLADE,
S. K. GRIFFITH.