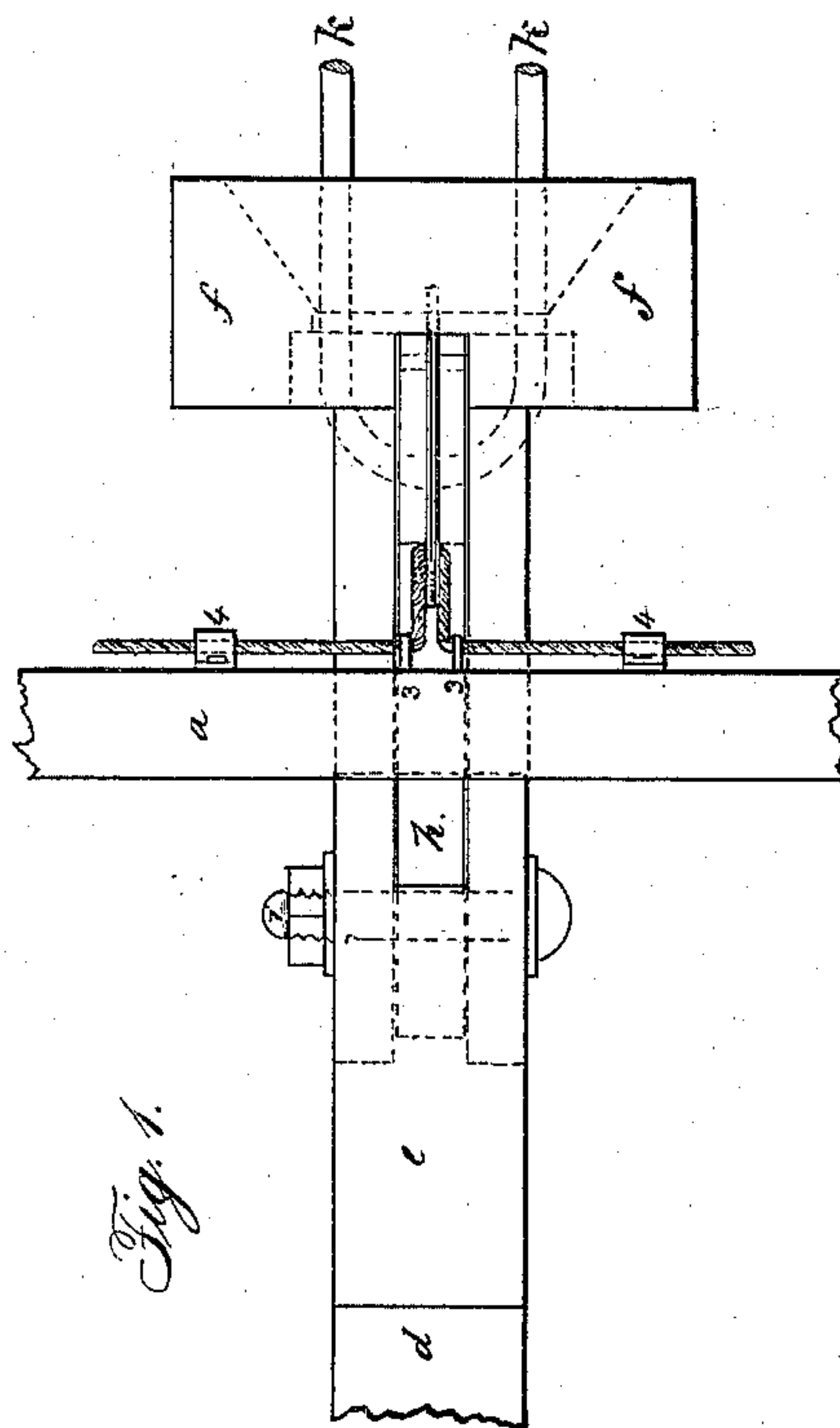
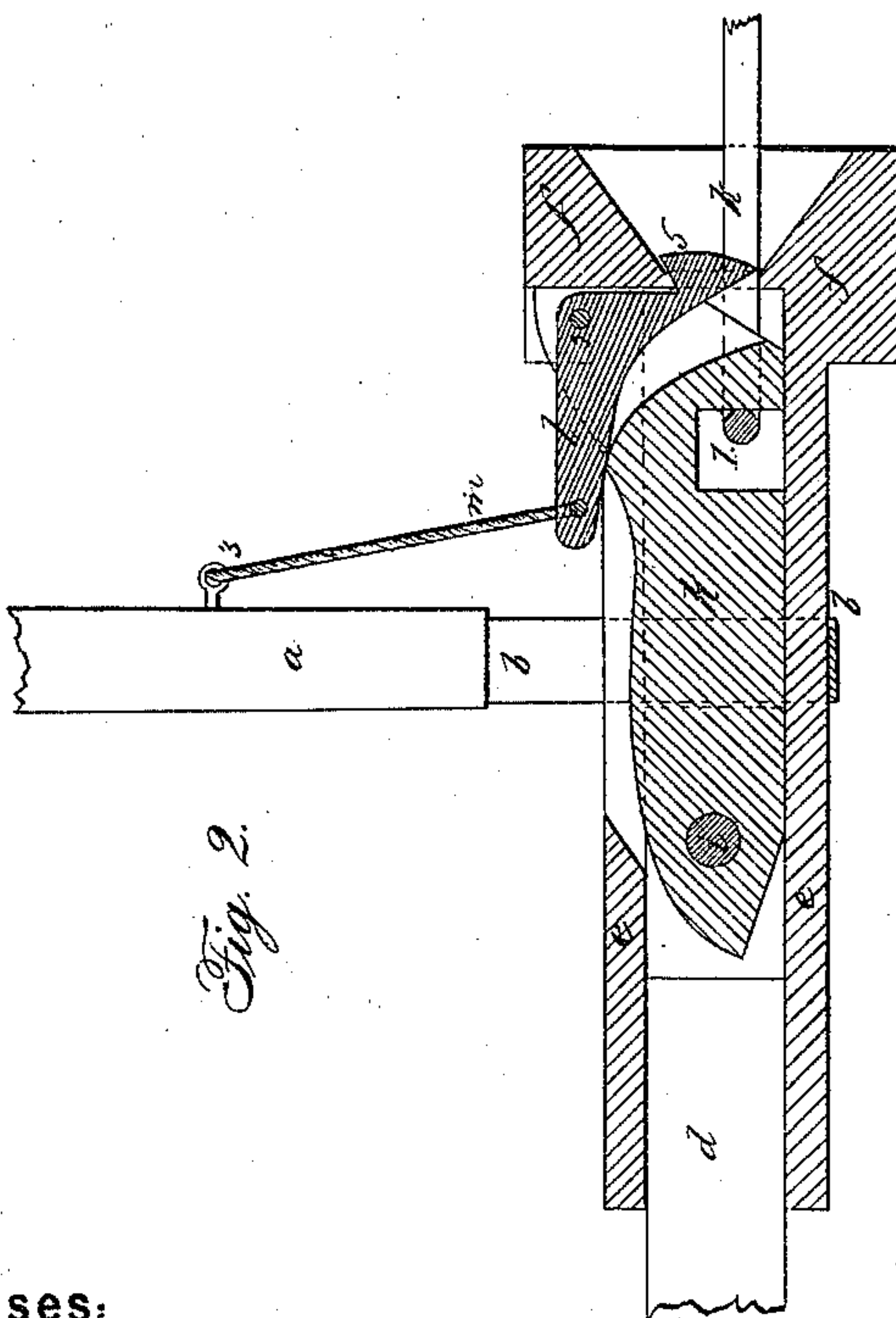
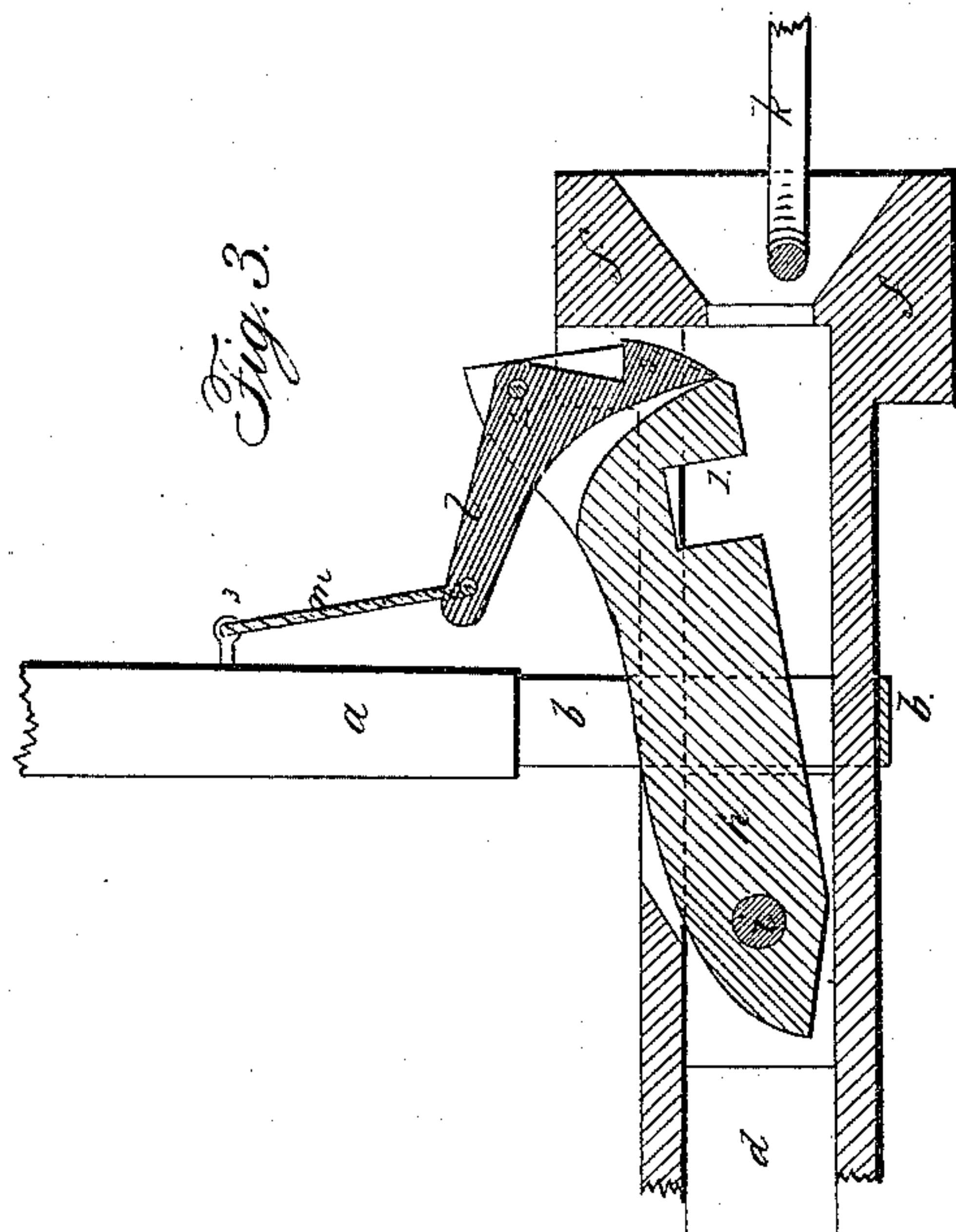


C. M. RADCLIFF.

Car Coupling.

No. 42,400.

Patented Apr. 19, 1864.



Witnesses:

*Samuel W. Lowell*  
*John C. Harwell*

Inventor:

*C. M. Radcliff*

# UNITED STATES PATENT OFFICE.

CORNELIUS M. RADCLIFF, OF PIERMONT, NEW YORK.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 42,400, dated April 19, 1864.

*To all whom it may concern:*

Be it known that I, CORNELIUS M. RADCLIFF, of Piermont, in the county of Rockland and State of New York, have invented, made, and applied to use a certain new and useful Improvement in Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description of my said invention, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is a plan of my said coupling. Fig. 2 is a section of the same as in position for retaining the connecting-link, and Fig. 3 is a section as in position for disconnecting said link.

Similar marks of reference denote the same parts.

Couplings have heretofore been made self-acting, so as to be pressed up by the end of the connecting-link, and then fall and firmly retain said link until the coupling was raised. The vibration of the cars and the varying angle of the link to the draft-head sometimes causes such couplings to become disconnected while in use.

The nature of my said invention consists in a compound latch, one portion of which takes the link and the other portion prevents the main latch from raising, and to disconnect the coupling the secondary latch is first raised, that allows the main coupling-latch to be raised, and the link disconnected.

In the drawings, *a* represents a portion of the end of the car-platform. *b* is the yoke beneath the platform, receiving the draft-head and coupling.

*d* is a portion of the draft-bar that connects with the spring, as usual; and *e e* are the straps of the draft-head *f*, which draft-head is made with a flaring mouth, as usual.

*h* is a latch attached by the bolt *i* and fitted to rise in a mortise through one of the straps *e*, and provided with a notch at 1, taking the link *k*, as shown in Fig. 2. The head of this latch *h* sets against the rear of the draft-head *f*.

*l* is a secondary latch within a slot in the latch *h*, which secondary latch is on a center,

2, and has a catch, 5, within the opening in the draft-head, as shown in Fig. 2, that effectually holds the end of the latch *h* down in place, so that the same cannot be worked up by the action of the link *k*, because said latch *l*, if any effort were made to lift it by raising the latch *h* and center 2, would catch at 5 against the under side of the draft-head in the opening, and this latch *l* would have to break before the coupling-latch *h* could be lifted.

From the horizontal arm of the latch *l* a chain, rope, or rod, *m*, passes up to a convenient position, where the attendant can lift upon the same when the cars are to be uncoupled. This operation first swings the latch *l*, clearing the catch 5 from the head *f*, and then the further movement lifts the end of the coupling-latch *h* and allows the link *k* to escape, as shown in Fig. 3.

When the cars are run together for the purpose of coupling, the end of the link *k*, taking against the part 5 of the latch, presses that back, and, coming against the incline at the end of *h*, causes said coupling to lift and then to drop with the link within the notch 1.

To facilitate the uncoupling of the cars from the side of the platform, I make use of a chain, running off horizontally through the eyes 3 and 4 to the corner of the platform, or sufficiently near thereto to allow an attendant to draw thereon and raise the coupling-latches without getting between the cars.

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

1. The compound coupling formed of the latches *h* and *l*, constructed and acting substantially as set forth.

2. The chain or rope *m*, passing from the latch *l* through the eye 3 and along the front edge of the platform, in combination with the said compound coupling, for lifting the same, as set forth.

In witness whereof I have hereunto set my signature this 25th day of February, A. D. 1864.

C. M. RADCLIFF.

Witnesses:

LEMUEL W. SERRELL,  
THOS. GEO. HAROLD.