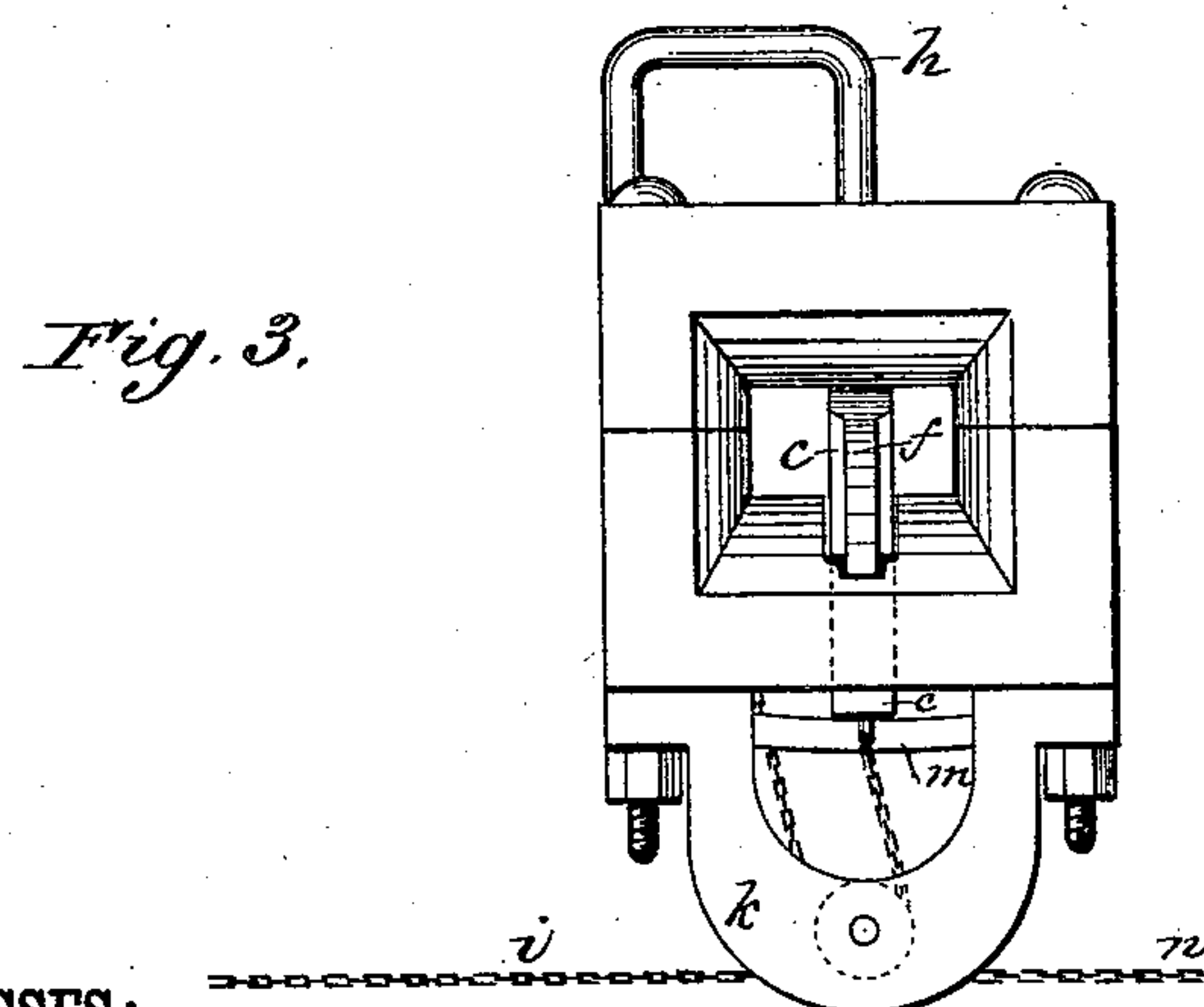
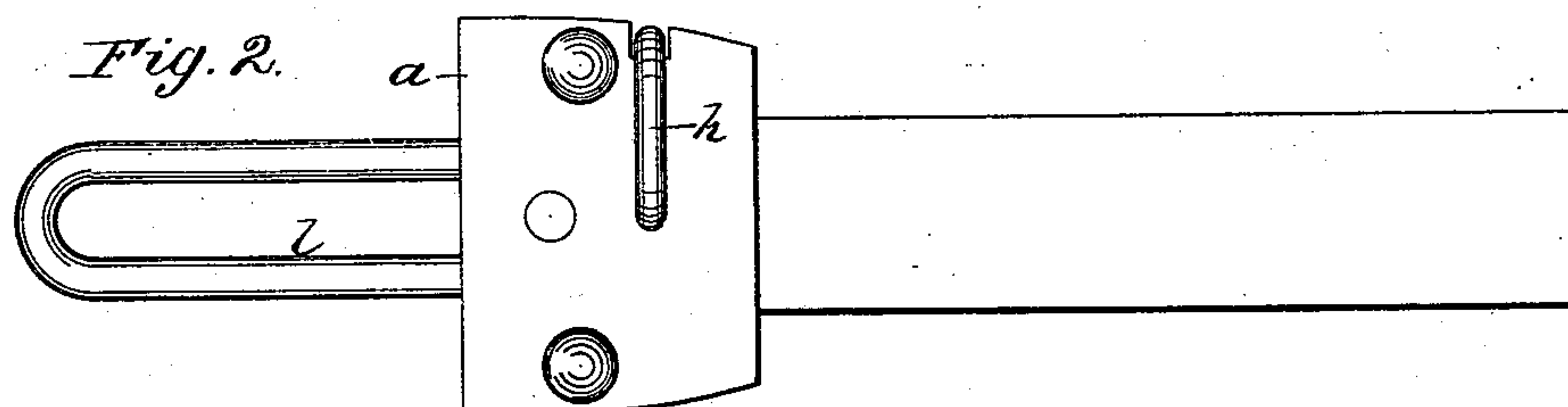
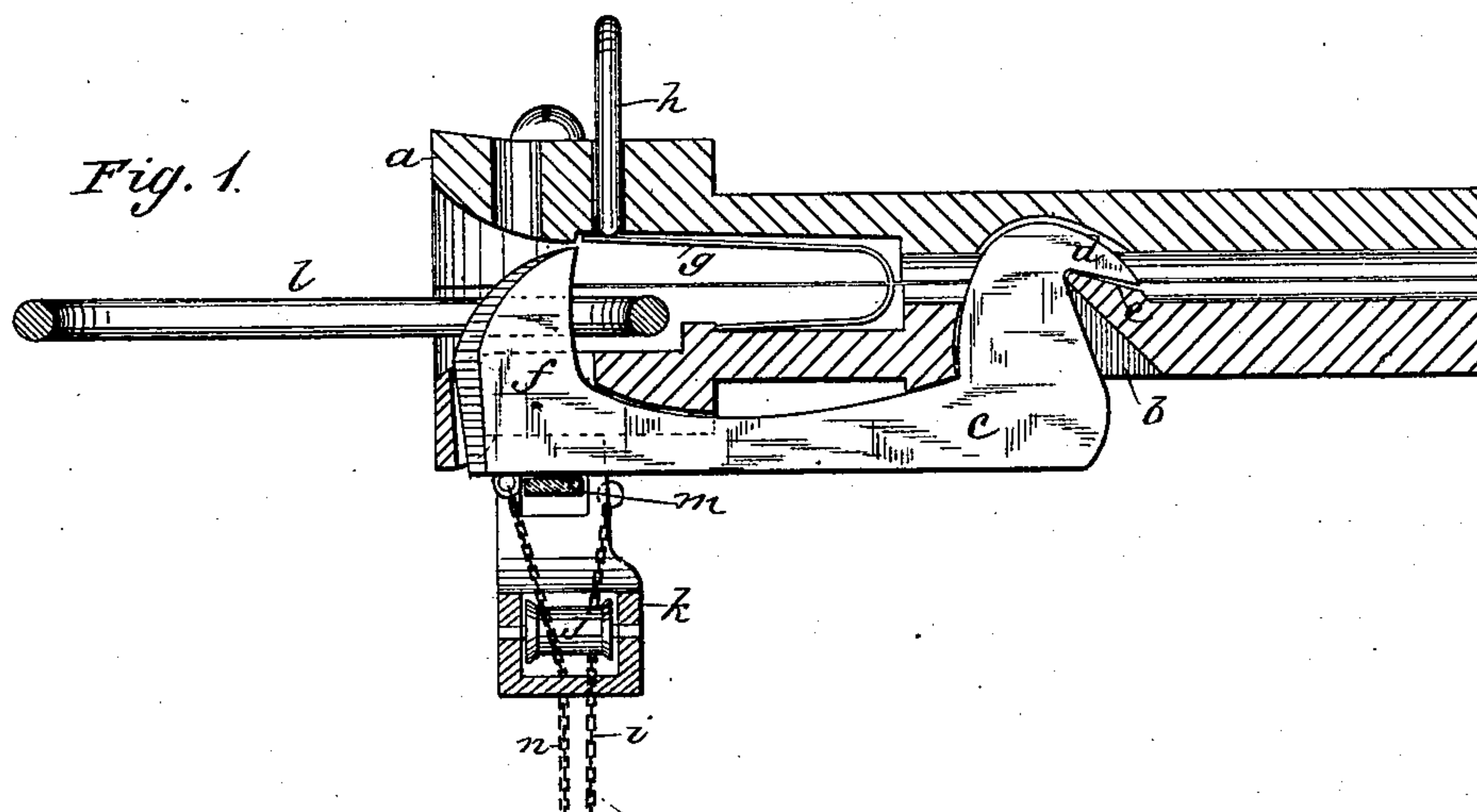


(No Model.)

N. BARR.
Car Coupling.

No. 243,486.

Patented June 28, 1881.



WITNESSES:

W. W. Hollingsworth
John A. Kemmer

INVENTOR:

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UNITED STATES PATENT OFFICE.

NICHOLAS BARR, OF CAYUTA, NEW YORK.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 243,486, dated June 28, 1881.

Application filed May 4, 1881. (No model.)

To all whom it may concern:

Be it known that I, NICHOLAS BARR, of Cayuta, in the county of Schuyler and State of New York, have invented a new and useful

Improvement in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical longitudinal section of my improved car-coupling. Fig. 2 is a plan view, and Fig. 3 a front view, of the same.

My invention relates to improvements in car-couplings; and it consists in the peculiar construction and arrangement of the parts, whereby all danger of accident in coupling and uncoupling cars is avoided, as hereinafter more fully set forth.

In the accompanying drawings, *a* represents a draw-head, provided with a slot, *b*, in its lower face, and an inclined plane, *e*, in the opening in the draw-head in rear of the end of the slot. The slot *b* is intended for the reception of the rear end of the coupling-bar *c*, provided with a hook at each end, the rear hook, *d*, being inserted in the slot *b* in the lower face of the draw-head, and then turned so that the lower face of the hook rests on the inclined plane *e*. By this construction the coupling-bar is pivoted to the draw-head without the use of the usual pivot-bolt, and can readily be removed or inserted.

The coupling-bar is provided with a rear hook, *d*, and a hook, *f*, at its forward end, adapted to engage with a link of the usual construction, the coupling-bar lying beneath the draw-head.

g represents a bent flat spring, the lower part of which rests in a recess in the lower face of the opening in the draw-head, the bent upper portion of the spring, in its normal position, lying in a recess in the upper face of the opening in the draw-head.

h represents a rod bent so as to conform to the shape of the draw-head, its upper end passing through a hole in the upper face of the draw-head, immediately over the end of the

spring *g*, the opposite lower end of the rod *h* having secured to it a cord or chain, *i*, passing around a pulley, *j*, in the frame *k*, bolted to the lower face of the draw-head, and provided with a spring, *m*, lying under the hooked coupling-bar *c*. By this construction the chain *i* can be operated or pulled without the operator coming between the cars, the rod brought downward to bear against the outer end of the spring *g*, which presses against the inner end of the link *l*, thus raising the outer end of the link to the desired elevated position for coupling two cars.

To the outer end of the coupling-bar *c*, beneath its hook, is secured a chain or cord, *n*, which passes thence around the pulley *j* in an opposite direction to that of the cord or chain *i*, whereby the coupling-hook can be pulled out of engagement with the link and the cars uncoupled. The link, when two cars are to be coupled, strikes the hooked end of the coupling-bar, depresses it, and allows the link to enter the opening in the draw-head, when the spring below the coupling-hook raises the latter into engagement with the link.

What I claim as my invention is—

1. The combination, with the draw-head *a*, provided with the slot *b*, and inclined plane *e* in rear of said slot, of the coupling-bar *c*, having hooks *d f*, substantially as described, and for the purpose set forth.

2. The combination, with the draw-head *a* and spring *g*, of the rod *h*, chain *i*, frame *k*, having pulley *j*, link *l*, and coupling-hook *c*, substantially as described, and for the purpose set forth.

3. The combination of the draw-head *a*, spring *g*, rod *h*, chain *i*, frame *k*, pulley *j*, spring *m*, link *l*, and coupling-hook *c*, having chain *n*, substantially as described, and for the purpose set forth.

The above specification of my invention signed by me this 20th day of April, 1881.

NICHOLAS BARR.

Witnesses:

SOLON C. KEMON,
CHAS. A. PETTIT.