

(No Model.)

I. KLING.
CAR COUPLING.

No. 285,758.

Patented Sept. 25, 1883.

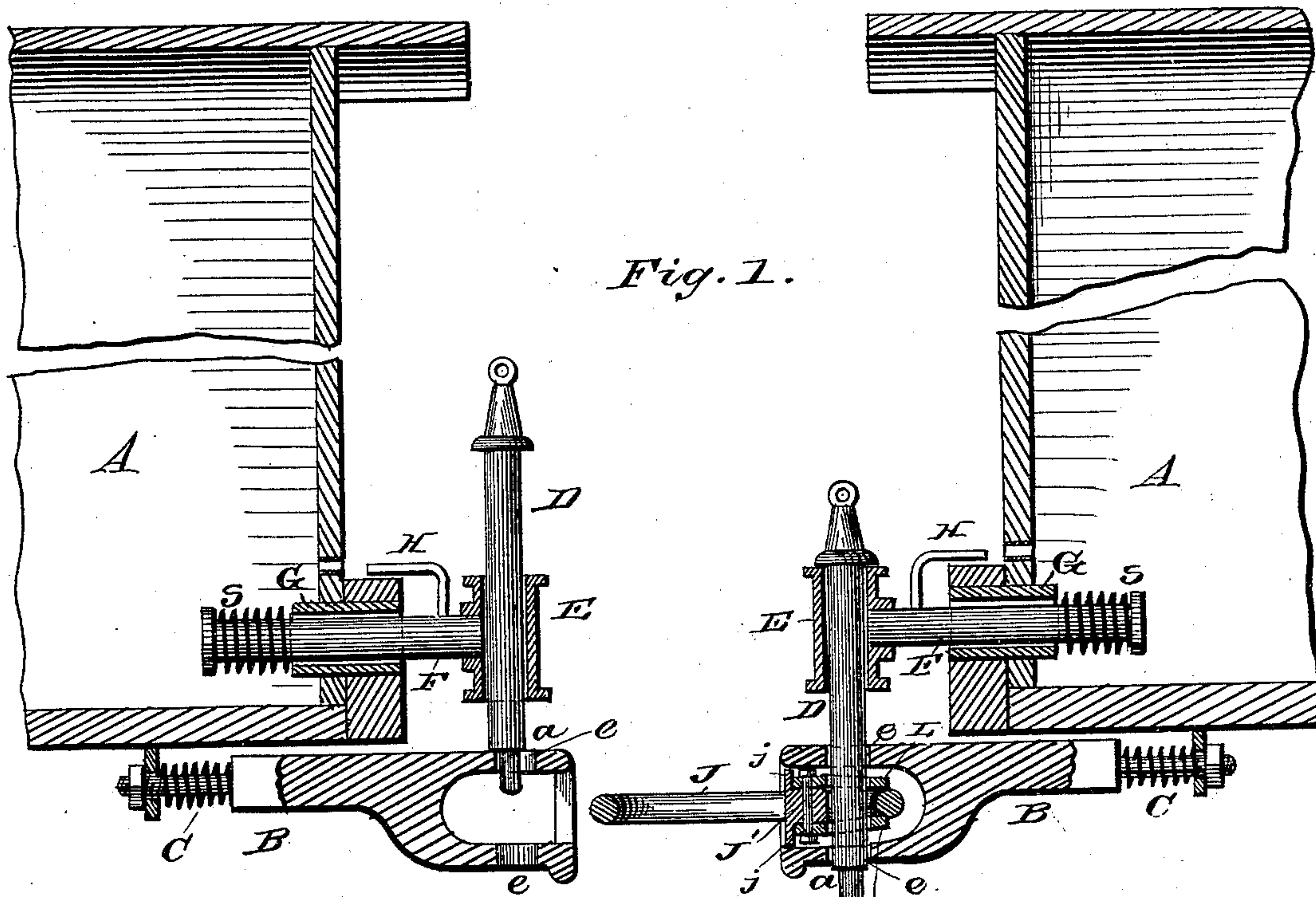


Fig. 1.

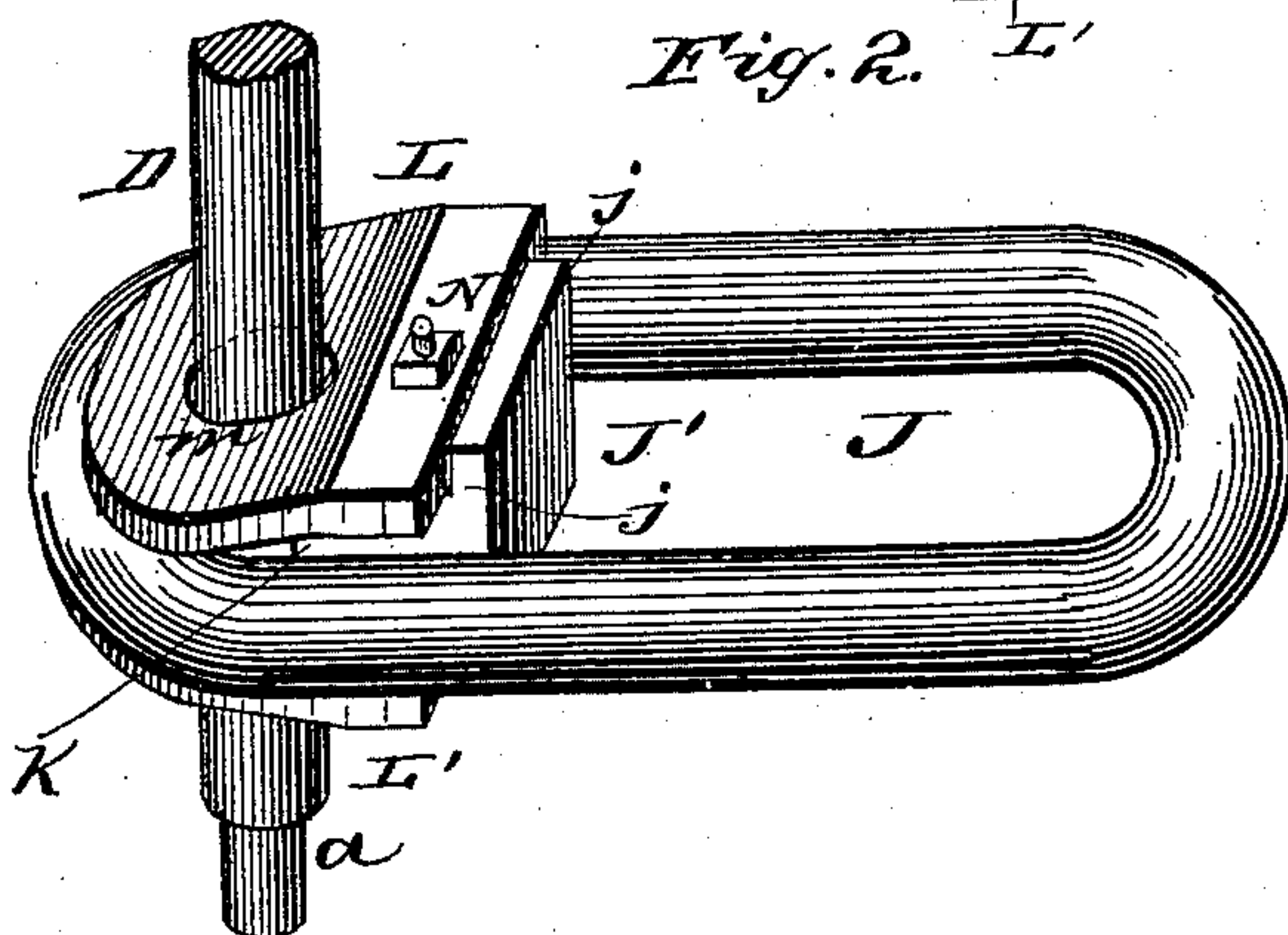


Fig. 2.

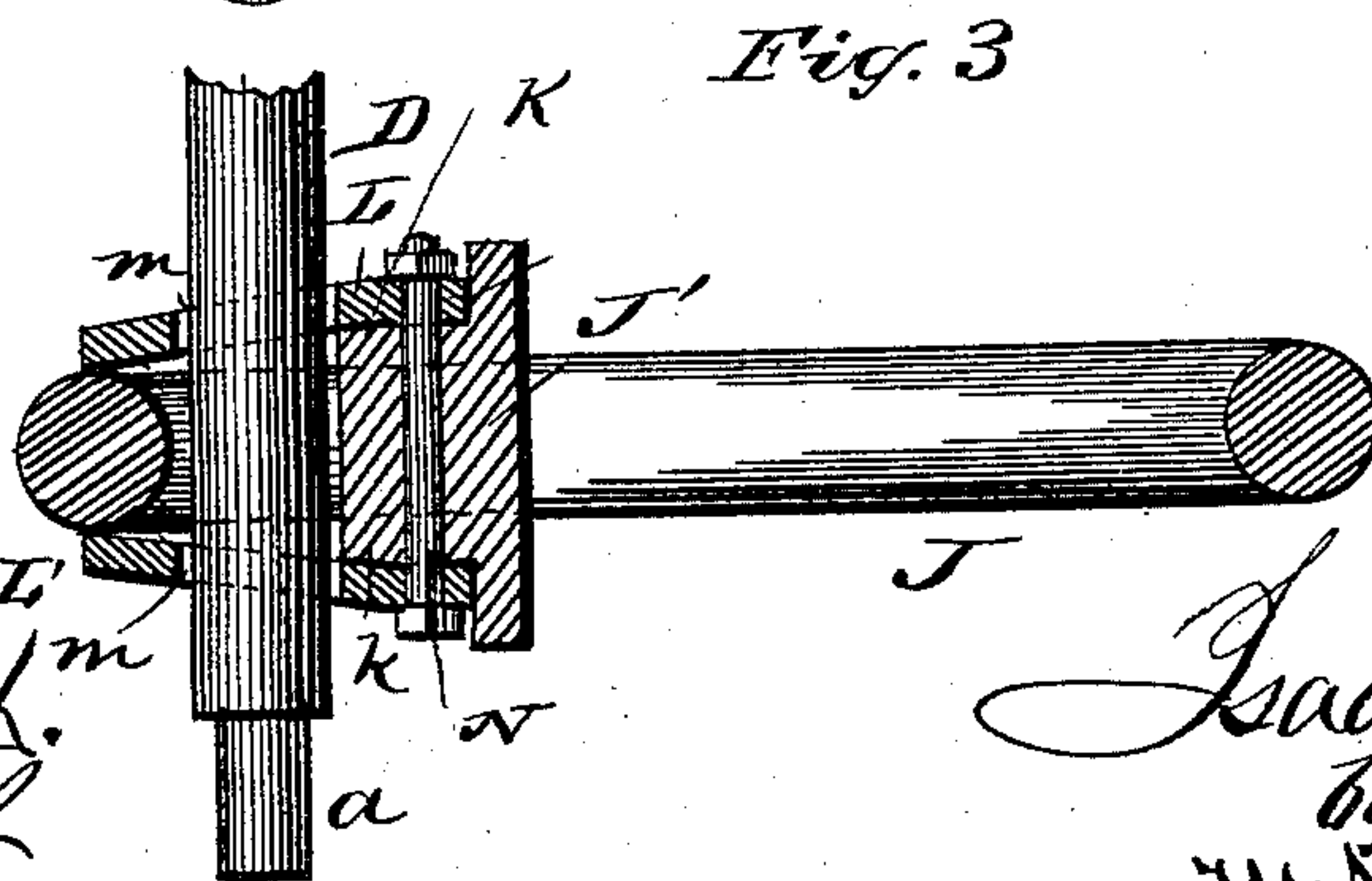


Fig. 3.

Witnesses:

Phil. Dietrich.
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UNITED STATES PATENT OFFICE.

ISAAC KLING, OF LOUISVILLE, KENTUCKY.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 285,758, dated September 25, 1883.

Application filed June 18, 1883. (No model.)

To all whom it may concern:

Be it known that I, ISAAC KLING, of Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Car-Couplings; 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, which form part of this specification, in which—

Figure 1 is a section taken longitudinally and vertically through the ends of two freight-cars, showing my improved couplings applied, one of the coupling-pins of which is indicated up and the other down. Fig. 2 is a perspective view of my improved link with holder. Fig. 3 is a longitudinal section through the same.

This invention relates to railroad-car couplings wherein the well-known spring-actuated draw-bars are employed in connection with vertically-movable coupling-pins and coupling-links; and it consists, mainly, in an automatic coupling having a shouldered coupling-pin, which is applied to a T-head spring-actuated guide; also, in a coupling-link which is provided with a block of metal, rubber, or wood end filling and perforated clamping-plates, all of which will be fully understood from the following description, when taken in connection with the annexed drawings.

A A designate sections through the ends of two freight-cars, and B B are two draw-bars or buffers, which are guided beneath the beds of the cars and acted on by springs C C, in the usual well-known manner.

D D designate coupling-pins, which are constructed with reduced lower ends, forming at a a annular shoulders, also with flanged heads, through which are eyes, to which chains may be applied for lifting the pins. Each one of the coupling-pins D is guided by a sleeve, E, which is rigid on a rod, F, that passes freely through a tubular guide, G, and has a tension-spring, S, applied on it. When the pins are down, the flanged heads rest on the top of the sleeves or holders.

H indicates a guide, which is rigidly secured to the rod F. Its angular end, entering a tubular guide in the transverse beam of the

car-body, prevents the coupling-pin from vibrating laterally. This coupling-pin is thus held vertically, so that a coupling will always be effected when the cars come together. Holes e e are made through the top and bottom walls of the head of each draw-bar, adapted to receive the coupling-pin, and this pin is arranged in such relation to the said holes that when it is fully drawn up the tension-spring S will retract it and allow its shoulder a to rest upon the upper wall of the head of the draw-bar. It is obvious that when two cars come together and the draw-bars are compressed the coupling-pin which is up will be dropped by reason of its shoulder being released from its resting-place on the upper wall of the draw-head.

I construct my improved link as follows: J designates the well-known coupling-link; J', a block which is applied in one end of the link and fitted tightly therein, leaving a long space between it and the opposite end of the link to allow free play. This block J' is constructed with shoulders j j, and also with a bevel, k. L L' designate two clamping-plates, which are applied, one, L, on top, and the other, L', on the bottom of the link, and rigidly confined thereto by means of a bolt, N, which also confines the metal, rubber, or wood block in place, the ends of the plates L L' abutting against the shoulders j j. Holes m are made through the plates L L' beyond the outer end of the block, which afford passages for the coupling-pin. My object in thus constructing a link is that it shall hold itself in proper position for coupling without the necessity of using the hand for this purpose and endangering life and limb.

It will be seen that the holder or clasp is on one end only of the link, which end is put in the draw-bar before the cars are coupled together. The link will thus be held by the coupling pin and block in position for entering the draw-bar of another car. I have thus made a self car-coupling by simply blocking one end of a link.

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

1. The combination of the shouldered coupling-pin with a spring-actuated guide and a

key-pin for preventing oscillation of the said pin, all constructed and adapted to operate substantially in the manner and for the purposes described.

- 5 2. The combination of the perforated spring-actuated draw-bar, the vertically-movable annularly-shouldered coupling-pin, the endwise-movable spring-actuated guide for said pin, the bearing, and the key-pin therefor, all constructed and adapted to operate substantially
10 in the manner and for the purposes described.

3. A coupling-link having applied to one

end a filling-block and clamping-plates, the latter being perforated to receive the coupling-pin, all constructed and adapted to operate
15 substantially in the manner and for the purposes described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ISAAC KLING.

Witnesses:

MACE LIEBER,
W. P. LINCOLN.