

(No Model.)

M. SPELMAN.

CAR COUPLING.

No. 330,166.

Patented Nov. 10, 1885.

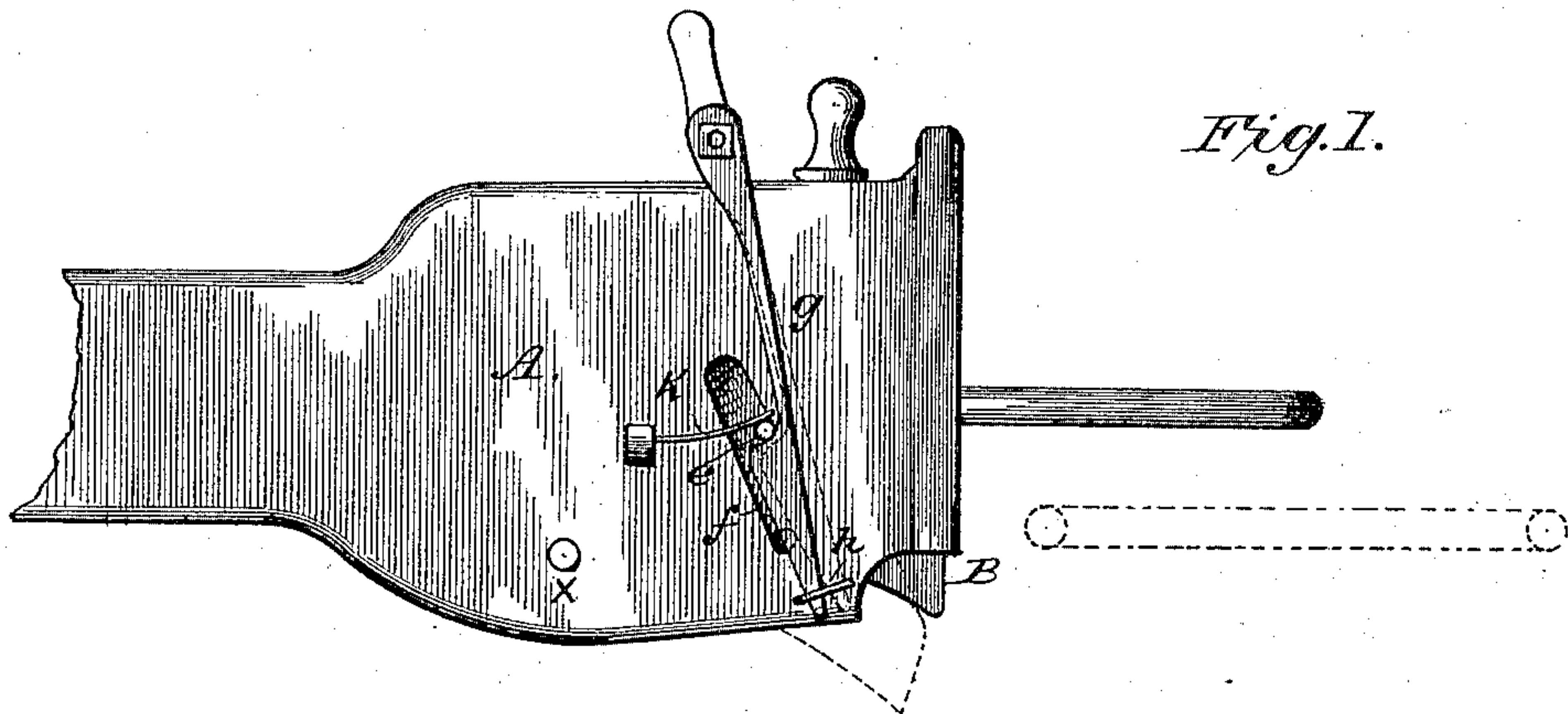


Fig. 1.

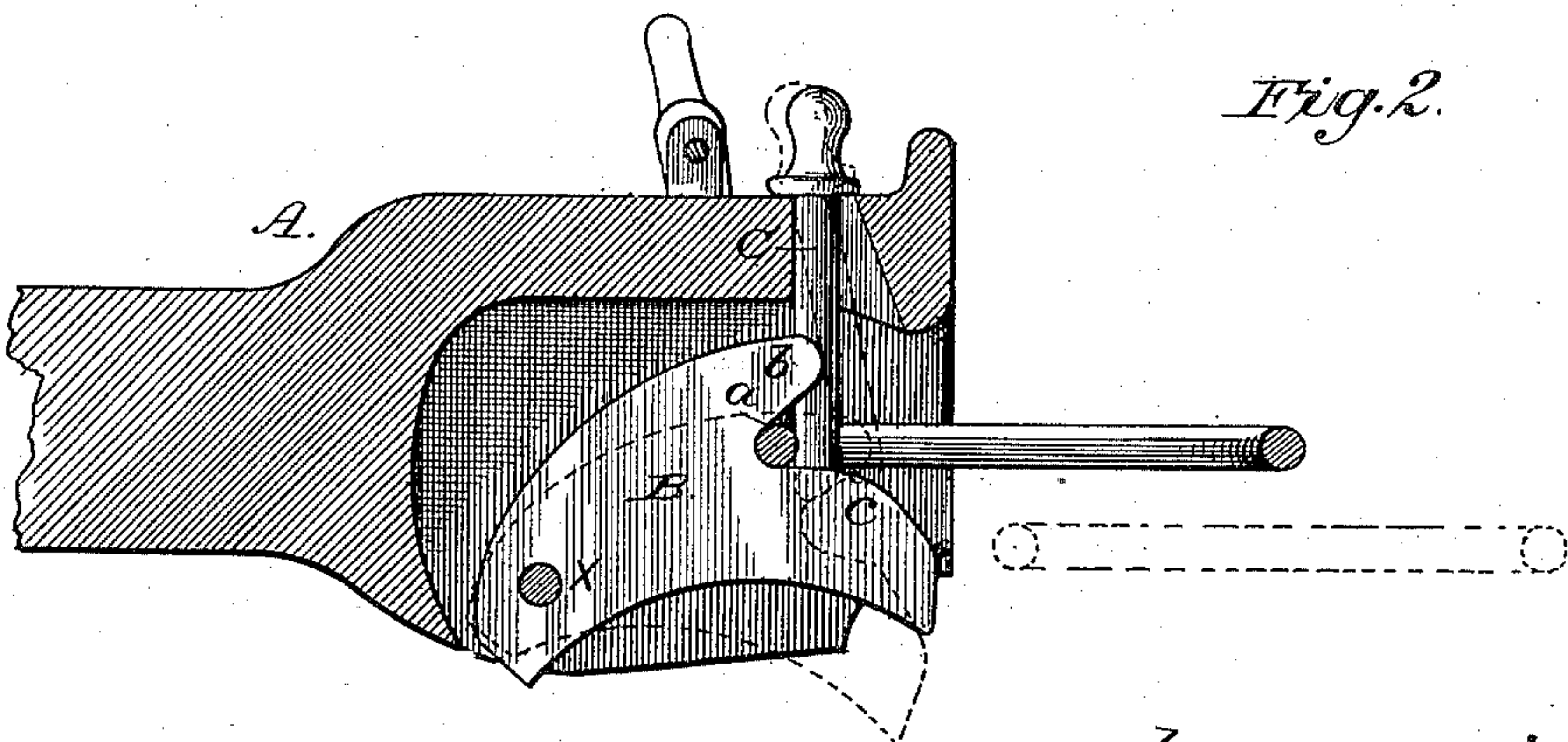


Fig. 2.

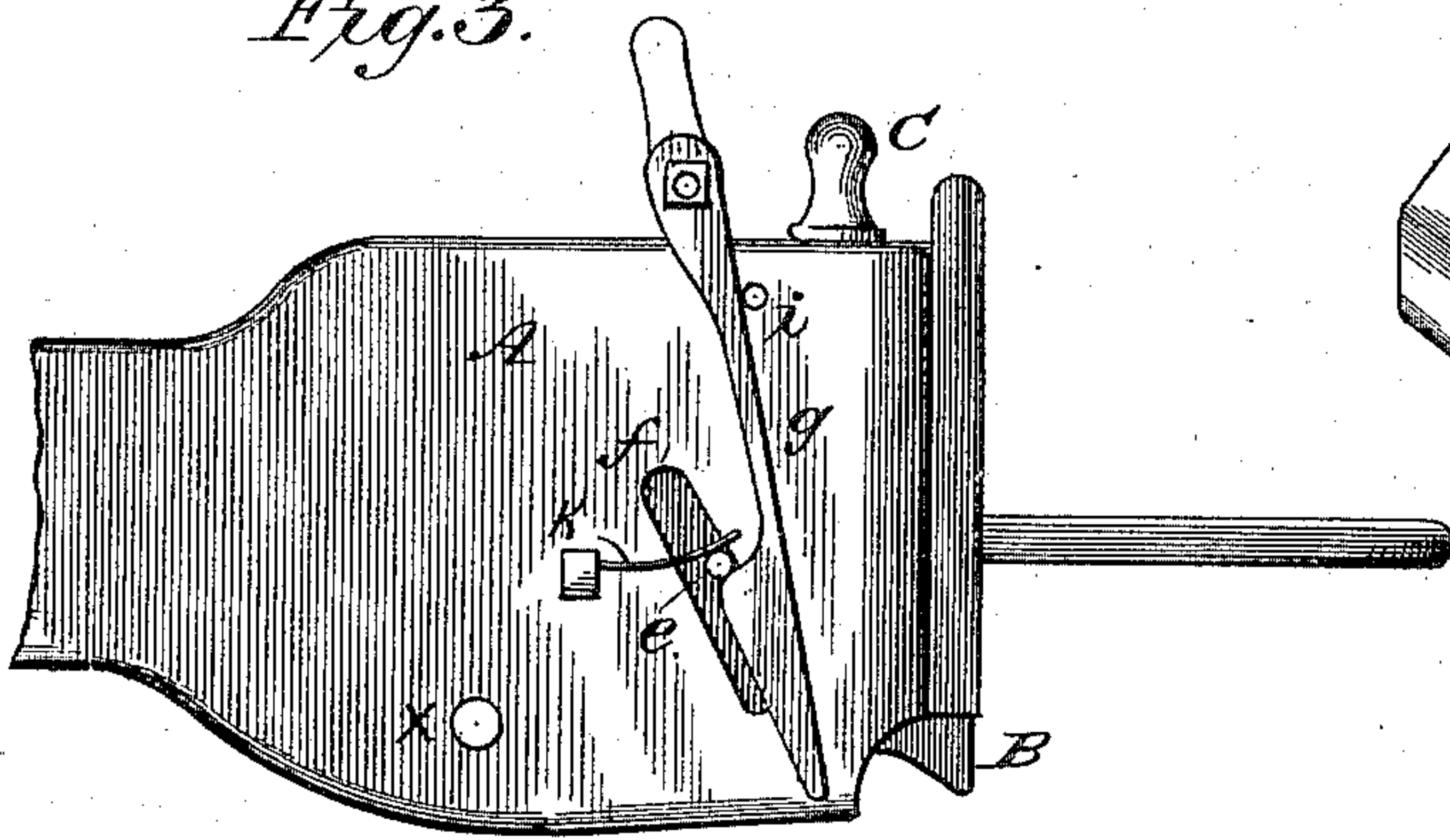


Fig. 3.

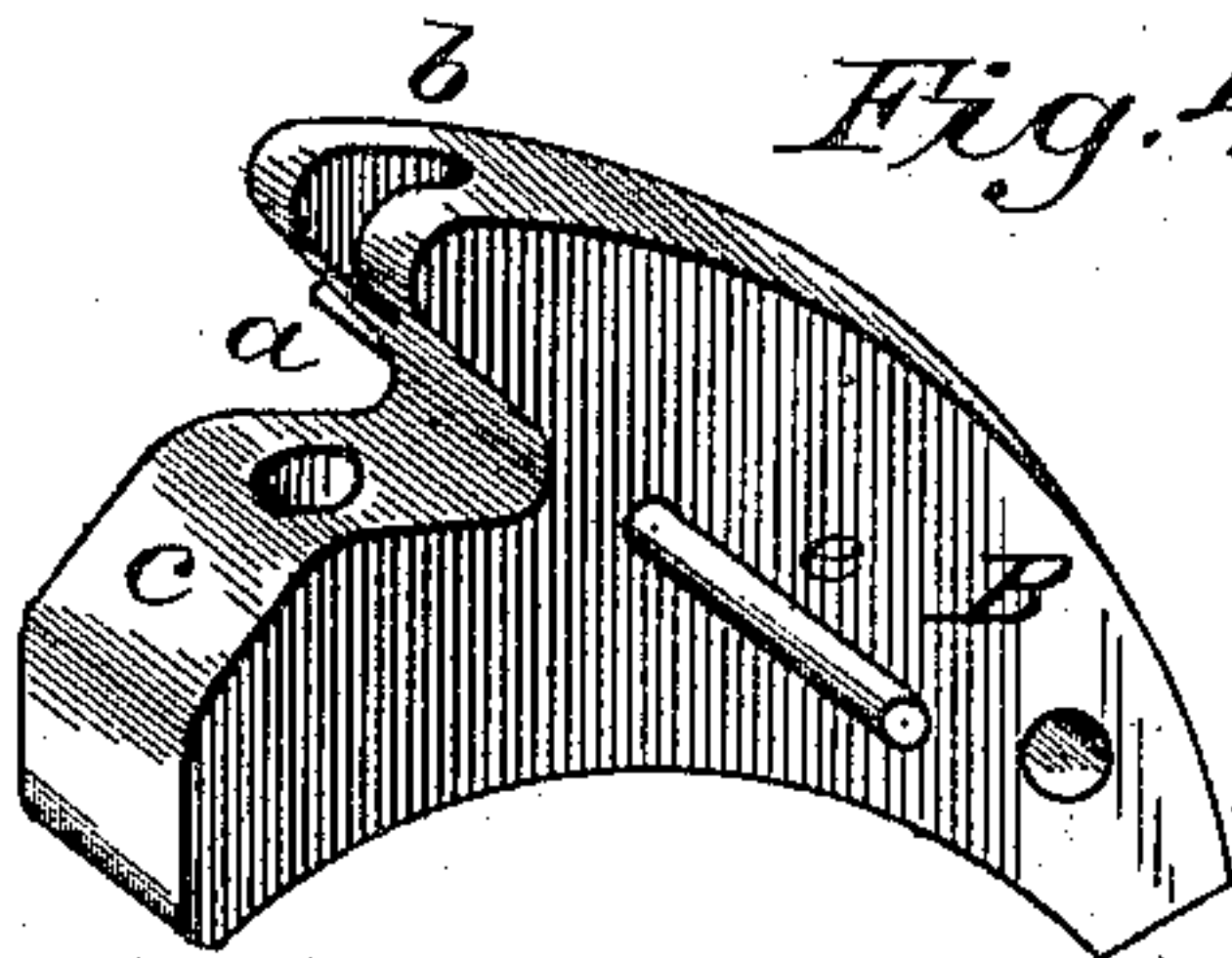


Fig. 4.

WITNESSES:

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 330,166, dated November 10, 1885.

Application filed April 23, 1885. Serial No. 163,189. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL SPELMAN, a citizen of the United States, residing at Shreveport, in the parish of Caddo and State of Louisiana, have invented certain new and useful Improvements in Car Couplings, of which the following is a description.

My invention is an improvement in the class of automatic couplings in which the draw-head is provided with a device for guiding the link into the cavity to enable it to engage with the coupling-pin.

My improvement consists in the construction and arrangement of a device which serves as a link guide and supporter, and in the combination therewith of devices employed for holding it in either of the two positions required for fulfilling its double functions.

In accompanying drawings, Figure 1 is a side view of a draw-head to which my improvements are applied. Fig. 2 is a lengthwise section of the draw-head. Fig. 3 is a side view of the draw-head, representing a modification. Fig. 4 is a perspective view of the link guide and supporter.

The chamber or cavity of the draw-head A is open at the bottom. Within it is pivoted the device B, which performs the functions of a link-guide and link-supporter. It consists of an elongated metal block having a bifurcation or V-shaped recess, *a*, in its front end. It is supported horizontally (by means of devices that will be presently described) and pivoted at the rear end at a point, X, below the middle plane or angle of the bifurcation. The upper jaw, *b*, forming one side of the latter, is notched to accommodate the pin C. The lower jaw, *c*, is longer than the upper one, and extends forward and downward at an angle of about forty-five degrees, to adapt it to serve as a guide for the link of an opposite draw-head—that is to say, if the other draw-head be lower or higher than that shown, its link, striking the surface of the jaw *c*, will slide upward thereon into the angle of the jaws, which being above the pivotal point X, the device B is tilted upward until the pin C passes through the link and enters a hole in the lower jaw, *c*, thus effecting the coupling automatically.

The downward movement of the front end of device B is limited by its lateral arms *e e*, that project through the oblique slots *f*, formed in the sides of the draw-head. When thrown down or inclined, as shown by dotted lines in Fig. 1, it is held steady by friction of the arms *e e* with springs *g g*, arranged on the sides of the draw-head in nearly vertical position. These springs are secured at the top, and as shown in Fig. 1 their lower ends slide free in loop-guides *h h*; but as shown in Fig. 3 these guides are dispensed with and pins *i* placed in front of the springs a short distance below their upper ends.

When the device B is raised to its normal horizontal position, the arms *e* slide up over the inclines or beveled shoulders formed on the springs *g g* and rest thereon, as shown in Figs. 1 and 3, so that said device is supported until again forced down into the inclined position. When thus horizontal, the device B will hold a link extended, as shown in Fig. 2, in readiness to enter an opposite draw-head.

Plate-springs *k* are arranged to press downward on arms *e e* when the device is in its normal position, for the purpose of holding it steady as practicable.

It will be noted that the springs *g* are extended above the draw-head *x*. Rods or any other suitable device may be attached to such extensions for the purpose of operating the springs from the top or side of a car, they being in such case converted into levers, of which the rod that connects them is the fulcrum. By pulling on the rod attached to the extensions the lower ends of the levers are thrown forward, thus allowing the device B to drop into the position shown in dotted lines.

Any suitable device may be employed to raise the pin C for the purpose of uncoupling, or it may be raised by hand in the usual way.

What I claim is—

1. The combination of the following elements, to wit: the draw-head A, having the cavity specified, the device B, having a bifurcation in its front end, the lower jaw, *c*, of which is extended forward beyond the upper one and curved or inclined downward on its upper side, and means for supporting said de-

vice so that the angle of its bifurcation is above the pivot, as shown and described, to operate as specified.

2. The combination, with recessed draw-head, of the block B, pivoted within it and provided with a recess in its front end, arms projecting laterally from the block, and springs arranged for acting on said arms, substantially as shown and described.

10 3. The springs *g*, having inclines or beveled shoulders, as specified, in combination with the recessed and pivoted block B and

the arms *e e*, projecting laterally through slots in the draw-head, as shown and described.

4. The combination of the draw-head, the 15 device B, pivoted and having lateral arms projecting through the sides of the latter, and the springs *g g*, extended above their fulcrum, as and for the purpose specified.

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Witnesses:

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