

(No Model.)

E. BECK.
PIPE COUPLING.

No. 407,151.

Patented July 16, 1889.

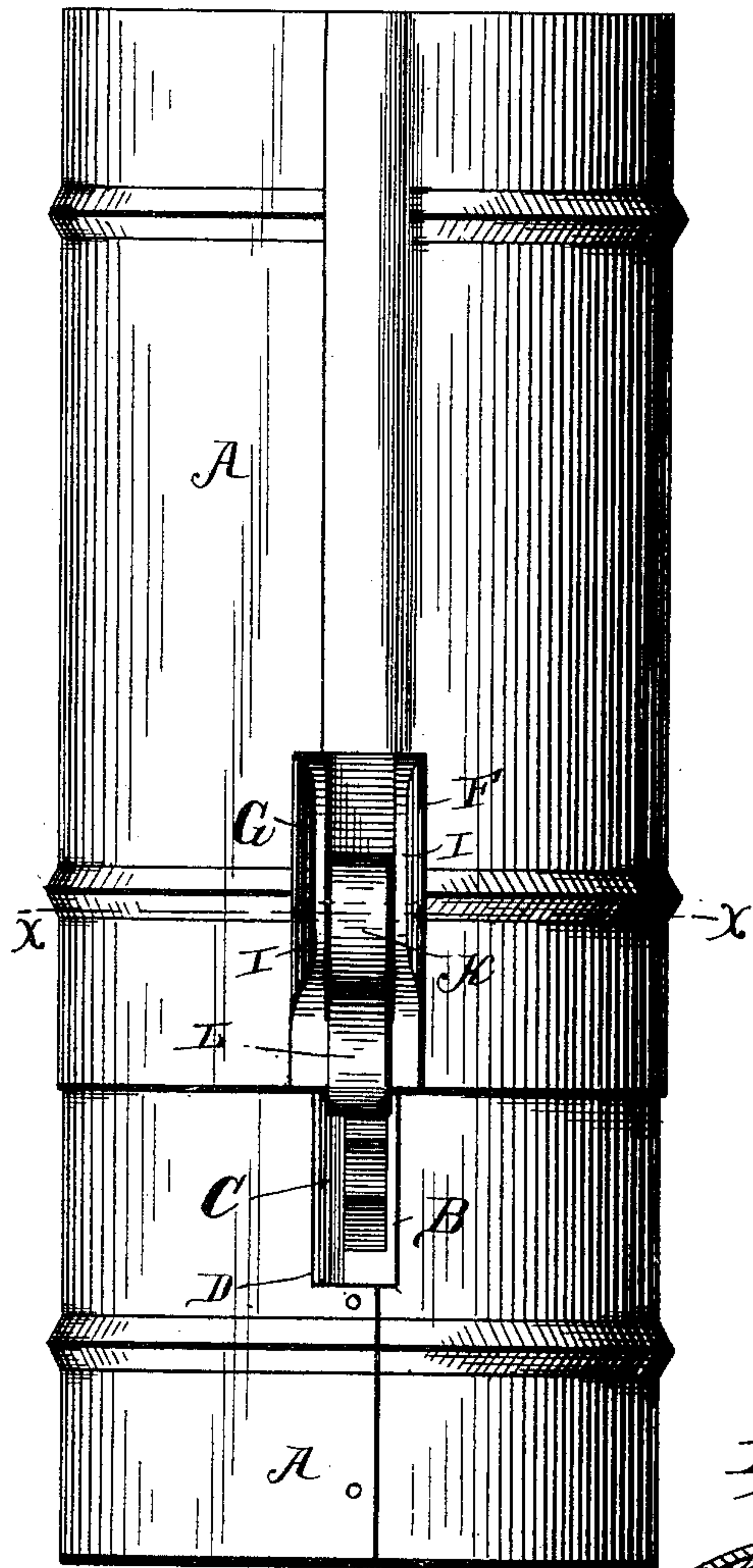


Fig. 1.

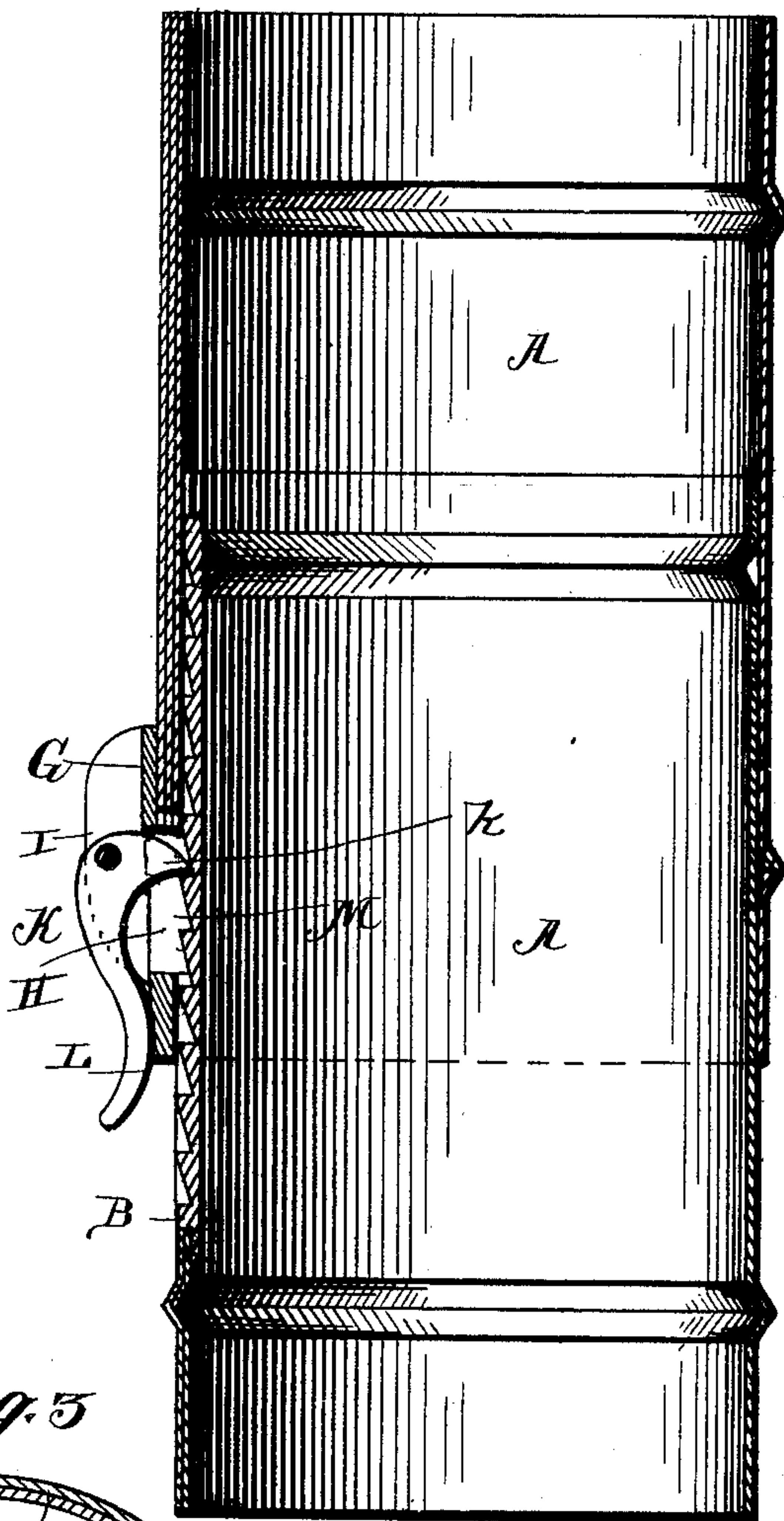
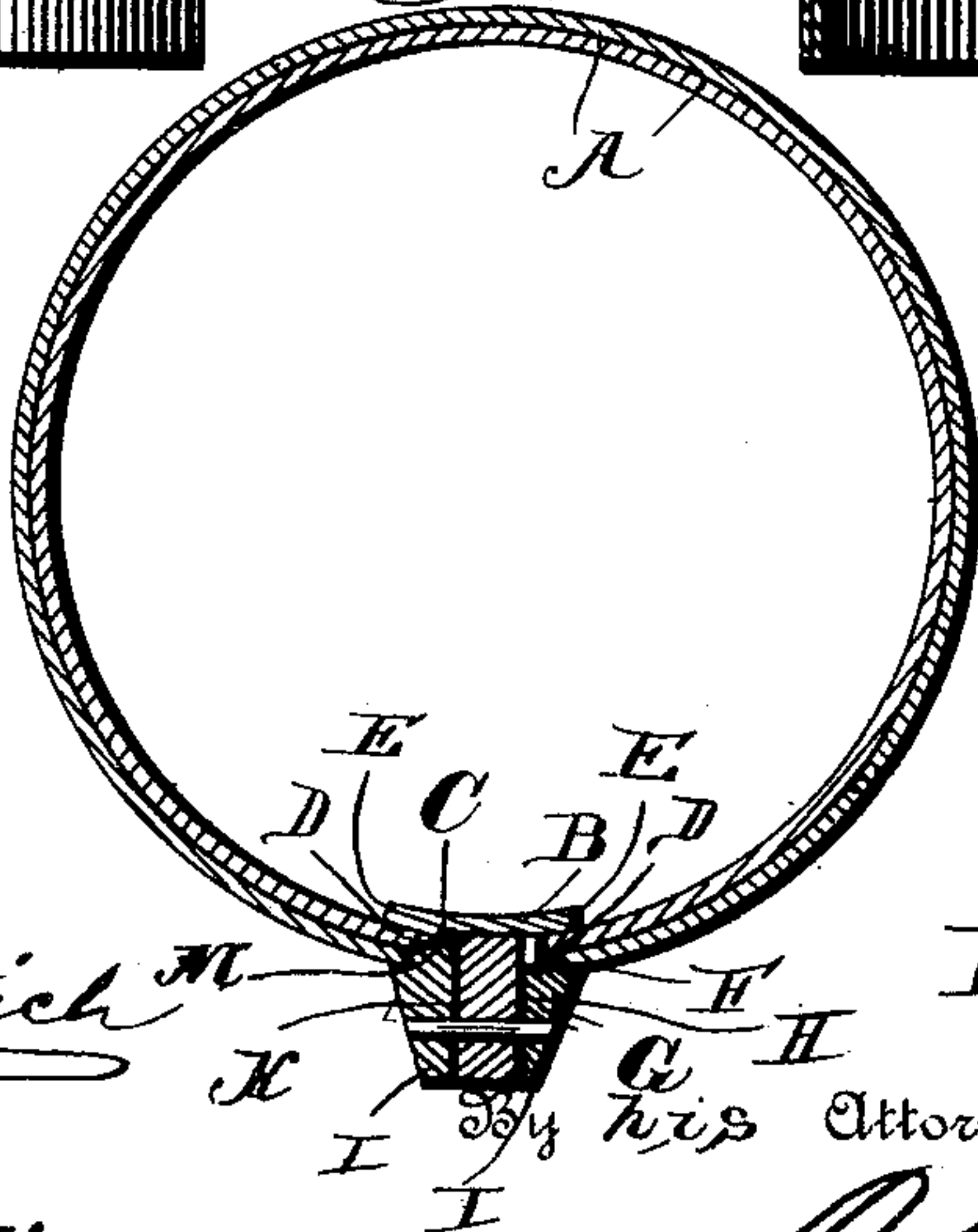


Fig. 2.



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UNITED STATES PATENT OFFICE.

EDWARD BECK, OF CHICAGO, ILLINOIS.

PIPE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 407,151, dated July 16, 1889.

Application filed July 25, 1888. Serial No. 280,995. (No model.)

To all whom it may concern:

Be it known that I, EDWARD BECK, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have
5 invented new and useful Improvements in Pipe-Couplings, of which the following is a specification.

My invention relates to stove-pipe couplings; and it has for its object to provide improved means for locking two sections of pipe
10 together at any desired extension, whereby the necessity for half and other fractional sections is obviated, the said locking means being so disposed as to prevent the sections
15 from telescoping.

With this object in view the invention consists in a certain novel construction and arrangement of devices, fully set forth hereinafter in connection with the accompanying
20 drawings, wherein—

Figure 1 is a side view of two sections of pipe connected by the improved coupling. Fig. 2 is a vertical central sectional view. Fig. 3 is a horizontal sectional view on the line *xx*
25 of Fig. 1.

Referring to the drawings, A A represent the sections of pipe. The lower section is provided with the vertical ratchet-bar B, having a vertical groove C parallel with its side
30 edge, the said bar being preferably fitted in a vertical slot D in the side of the pipe and provided with lateral flanges E, which are secured to the pipe on opposite sides of the slot. The upper section is provided with an aperture F, over which is secured the casting G, having the vertical slot H and the outstanding ears I I. A gravity-pawl K is mounted
35 between the ears I, with its engaging end or tip *k* projecting through the slot H and the aperture in the side of the pipe and engaging the ratchet. The handle L of the pawl is arranged outside of the pipe, its weight normally holding the engaging end of the pawl in engagement with the ratchet. When in its normal position, the handle of the pawl bears against the
40 lower end of the casting, thereby preventing the engaging end of the pawl from swinging upward and allowing the upper section to slide downward.

50 The under side of the casting is provided with the rib M, which fits and slides in the

groove C in the ratchet-bar, thereby guiding the pipes and preventing independent rotation thereof.

The manner of operating the device will be
55 evident. The upper pipe may be raised to the desired height, but cannot be lowered without previously raising the pawl, and thus disengaging it from the ratchet. When the upper section is raised, the handle of the
60 pawl may be swung outward, thereby drawing the engaging end or tip of the pawl downward out of range of the teeth of the ratchet. When the pawl is in this position, it is obvious that the sections of pipe are capable of
65 free relative movement; but when the pawl is released its handle swings downward, thereby throwing the engaging end or tip into position to engage the ratchet.

It will be seen that the weight of the upper
70 section is sustained by the pawl when the latter is in engagement with the ratchet, and therefore the handle is pressed firmly against the side of the pipe, and when it is desired to disengage the pawl to adjust the sections
75 relatively it is necessary to raise the upper section slightly, and thereby allow the tip of the pawl to clear the tooth with which it is engaged.

Heretofore various devices for coupling in-
80 dependently-movable sections of stove-pipe have been used, and a gravity-pawl engaging a ratchet has also been frequently employed; but they have been subject to various objections—namely, they are cumbersome and
85 awkward, they necessitate a special formation or preparation of the pipe, &c.

In applying the improved coupling to a stove-pipe the latter must simply be cut to
90 form slots to receive the ratchet-bar and casting, and therefore the above-mentioned disadvantages are obviated.

Having thus described my invention, I claim—

1. In a pipe-coupling, the lower pipe-section
95 provided with a vertical slot, the ratchet-bar arranged in the said slot and provided with lateral flanges secured to the pipe on opposite sides of the slot, combined with the upper
100 pipe-section surrounding the lower section and sliding thereon, the casting G, secured to the upper section and provided with a verti-

cal rib M, operating in a longitudinal groove C in the ratchet-bar to prevent independent rotary movement of the pipe-sections, and the gravity-pawl K, pivoted between outstanding ears on the casting and engaging the ratchet-bar, substantially as specified.

2. In a pipe-coupling, the vertical ratchet-bar secured to the lower pipe-section and provided with a longitudinal groove C, combined with the casting secured to the upper pipe-section and provided with a rib M, operating in the groove C, and the gravity-pawl pivoted on the casting and engaging the ratchet-bar,

the pivot of the said pawl being arranged above the engaging-tip of the pawl, whereby the latter may swing downward, when the upper pipe-section is raised, substantially as specified.

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

EDWARD BECK.

Witnesses:

J. FRANK BICHMOND,
ANDREW MARSHALL.