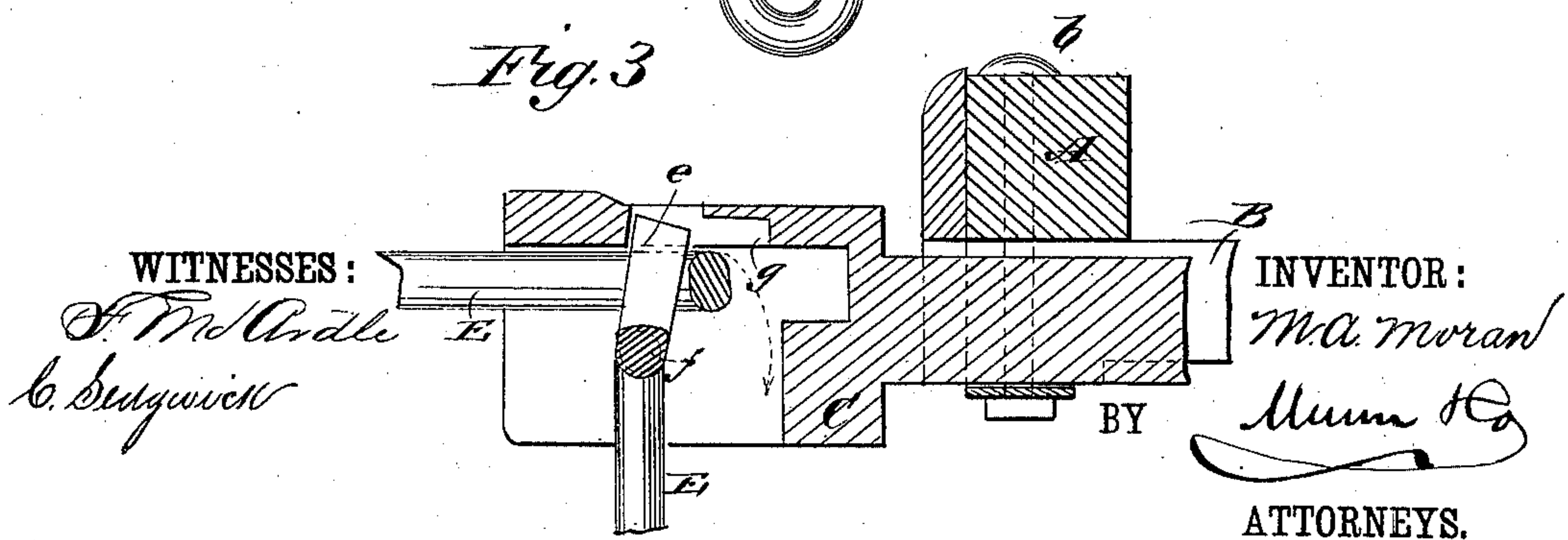
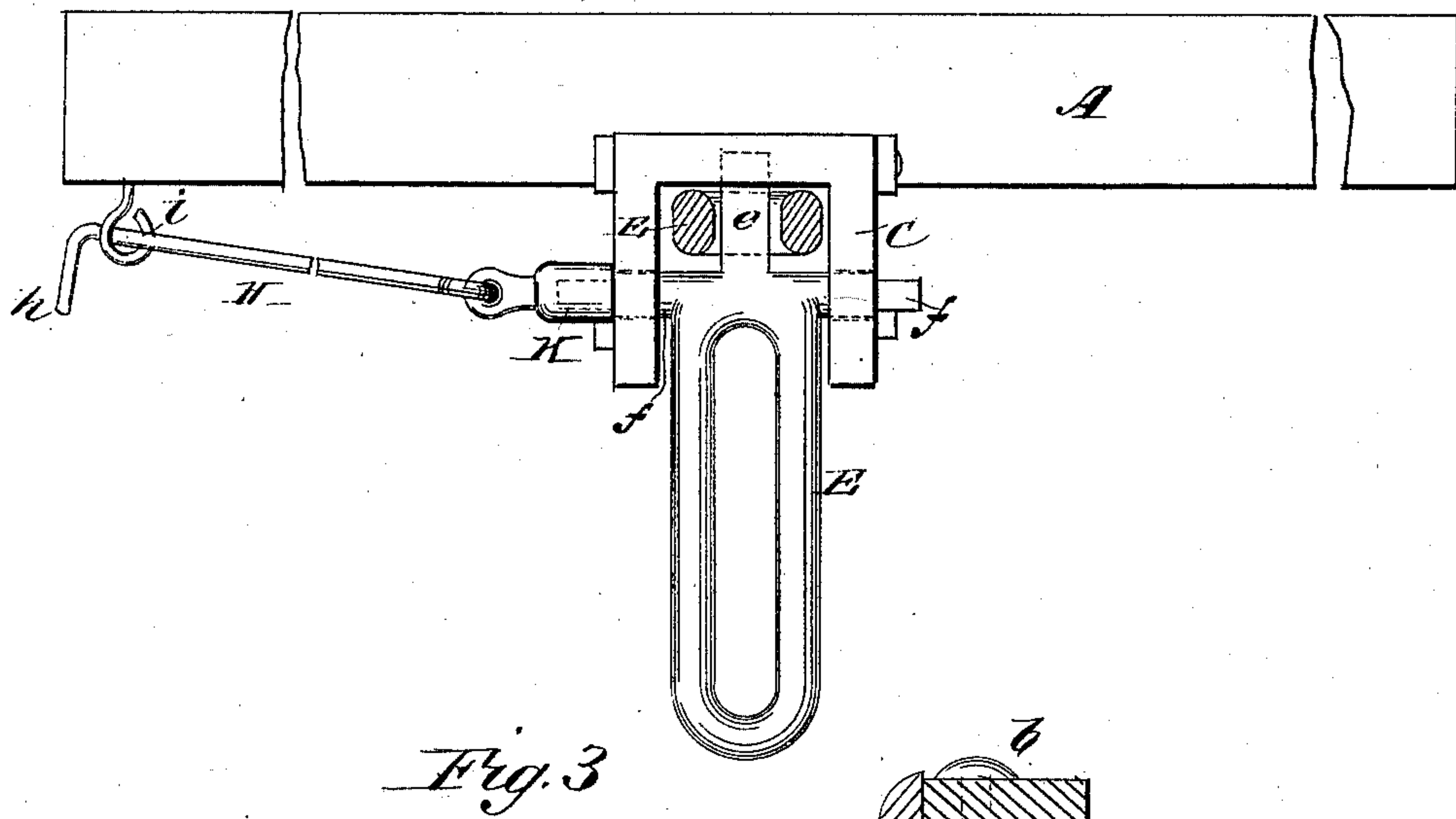
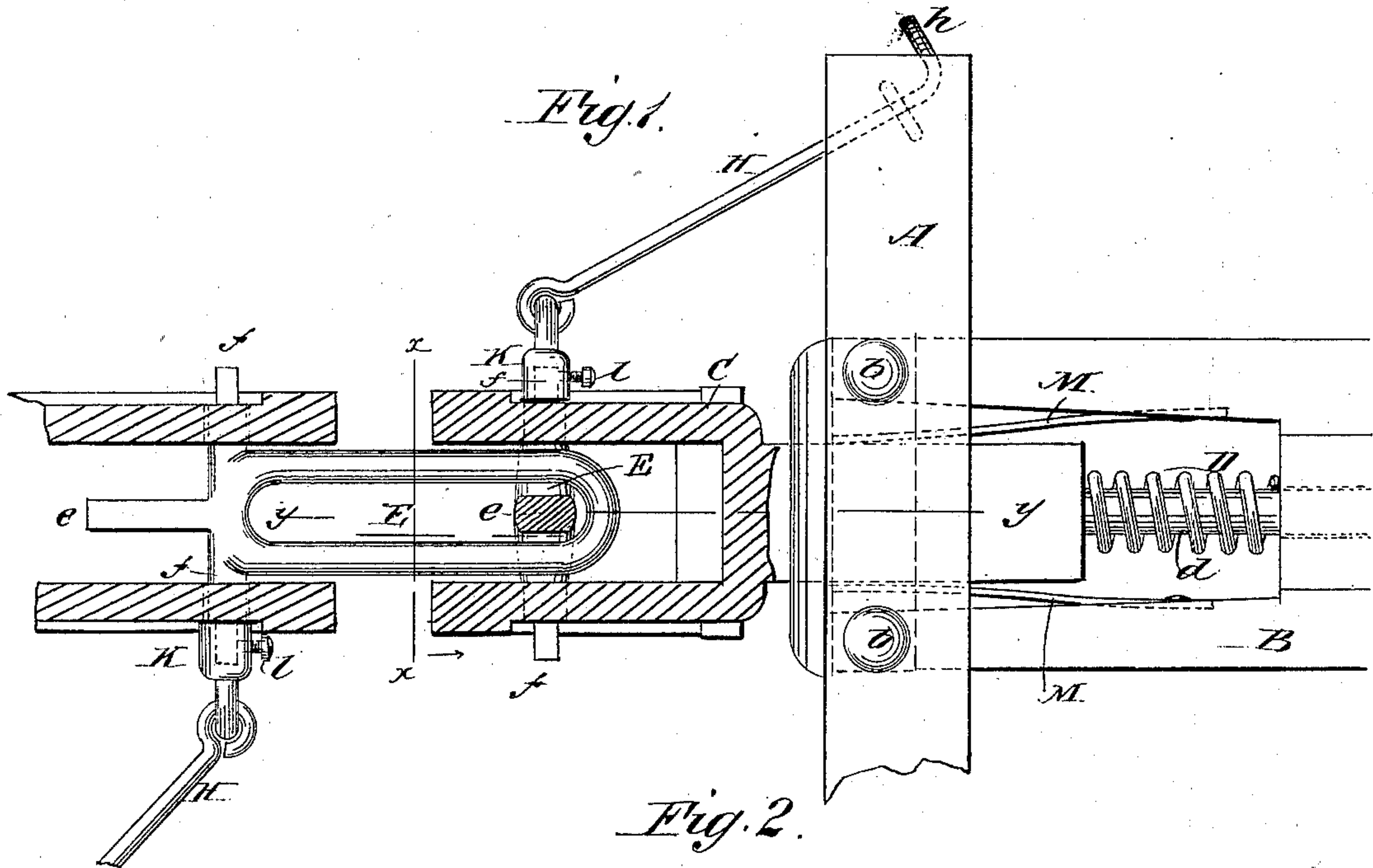


(No Model.)

M. A. MORAN.
CAR COUPLING.

No. 257,363.

Patented May 2, 1882.



UNITED STATES PATENT OFFICE.

MAGGIE A. MORAN, OF FORT WAYNE, INDIANA, ASSIGNOR TO HERSELF
AND FREDERICK ROGERS, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 257,363, dated May 2, 1882.

Application filed March 10, 1882. (No model.)

To all whom it may concern:

Be it known that I, MAGGIE A. MORAN, of Fort Wayne, in the county of Allen and State of Indiana, have invented a new and useful
5 Improvement in Car-Couplings, of which the following is a full, clear, and exact description.

My invention consists essentially in a link having a longitudinal projection at one end, midway of its width, and two lateral projec-
10 tions near said end, forming trunnions, the said longitudinal projection and trunnions being integral with the link, whereby the same device serves both as a link and a pin; and also, in the combination, with one of the trunnions
15 of the said link, of a key detachably secured thereon, and connected by a hook-and-eye joint to a rod extending to the side of the car, as hereinafter described, and pointed out in the claims.

20 Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a top view of my invention, partly
25 in horizontal section, showing the position when coupled. Fig. 2 is an end view, with one of the links in transverse vertical section, as indicated by the line *x x* of Fig. 1. Fig. 3 is a longitudinal vertical section taken in the line *y y* of
30 Fig. 1.

A represents the platform of a car.

B is a bifurcated bar, attached to the platform by bolts *b*.

35 C is the draw-head, provided with a shank, *d*, sliding and secured in the bifurcated bar and surrounded by a spring, D.

E represents my improved link, which is provided at one end with a longitudinal projection, *e*, and two lateral projections or trunnions, *f f*, at right angles to said projection *e*.
40 The trunnions *f f* work in bearings in the sides of the mouth of the draw-head, so that when at rest the link portion hangs down of its own weight, and the projection *e* extends upward into a recess, *g*, in the top of the mouth of the
45 draw-head, as in Fig. 3.

In coupling the cars the end of the approaching link strikes the projection *e* and pushes it backward until the end of the link has passed
50 the end of the projection, when said projection

immediately rises between the sides of the link and engages with it, as shown particularly in Fig. 3, and thus acts as a coupling-pin, its forward motion being arrested by the front side of the recess *g*. The bottom of the mouth of
55 the draw-head is open sufficiently to allow the link portion to hang down and the pin portion to describe the motion indicated by the dotted curved arrow in Fig. 3.

The coupling-pin thus formed may be used
60 in connection with a link of the ordinary description; but it is intended that both of the cars to be coupled shall be provided with my improvement, in which case it is necessary that one of the links shall be held in a horizontal
65 position when coupling. To accomplish this without the necessity for going between the cars, the devices shown in Figs. 1 and 2 are employed. A rod, H, has its outer end passed through an eye or other suitable bearing, *i*,
70 near the side of the platform A, and bent to form a handle, *h*. The inner end of the rod is connected by a hook-and-eye joint with the shank of a key, K, the barrel of which and the projecting end of the trunnion *f* are squared
75 and fit each other. The barrel is also provided with a set-screw, *l*, to secure it in place on the trunnion. By turning the handle *h* the link belonging to the trunnion engaged by the key is raised and held in a horizontal position, so
80 as to allow the end of the link carried by one car to strike the vertical projection or pin on the link carried by the other car. The same devices are used in uncoupling by turning the vertical link to a horizontal position, so as to
85 free its projection or pin *e* from the other link.

To the inner sides of the branches of the forked bar B are attached the inner ends of two flat springs, M M, the free ends of which bear against the two opposite sides of the
90 draw-head. By this means the draw-head is held in proper position in line with the line of draft, but is allowed to oscillate laterally when the train is on a curve.

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

1. As an improved article of manufacture, a coupling-link, E, provided with a longitudinally-extending projection, *e*, and two later-
100 ally-extending projections or trunnions, *f f*, the

said projection and trunnions being integral with the link, whereby said link serves as both link and pin, substantially as herein described.

5 2. In a car-coupling, the combination, with the link E, provided with the trunnions *f*, integral therewith and having square ends, of the detachable key K and the rod H, con-

nected by a hook-and-eye joint to the said key and provided with the handle *h*, substantially as and for the purpose set forth. 10

MAGGIE A. MORAN.

Witnesses:

ALLEN ZALLERS,
THOS. J. LOGAN.