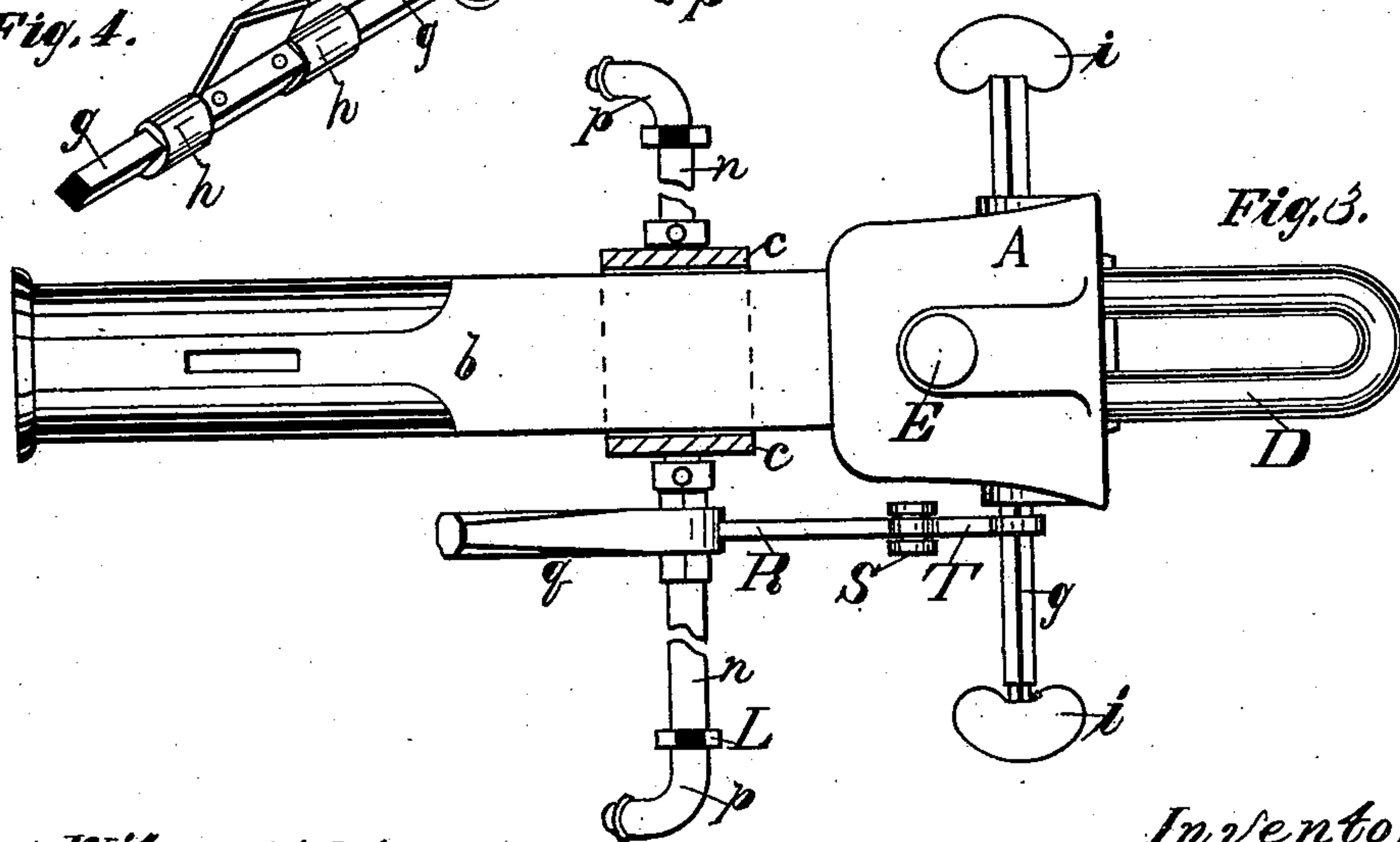
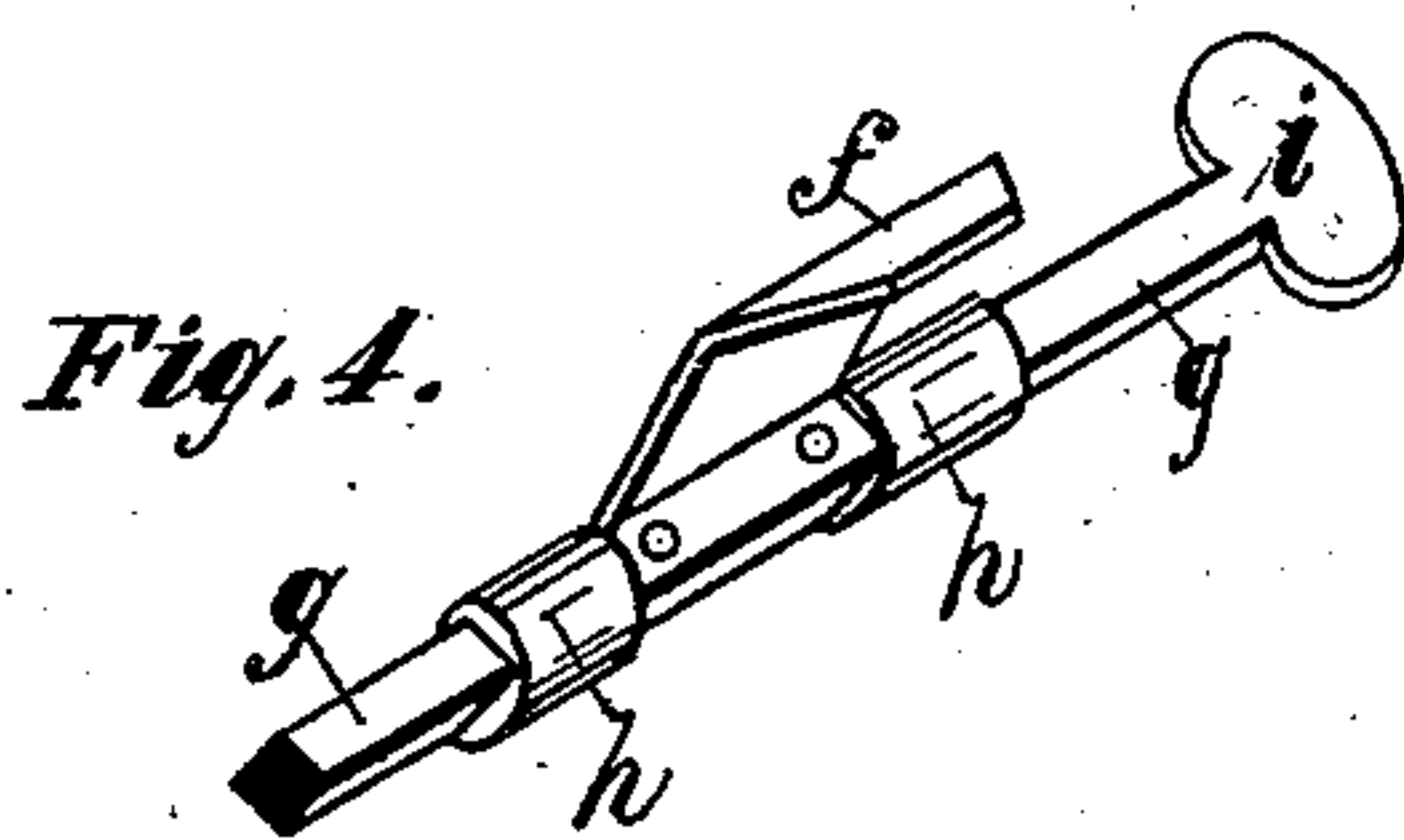
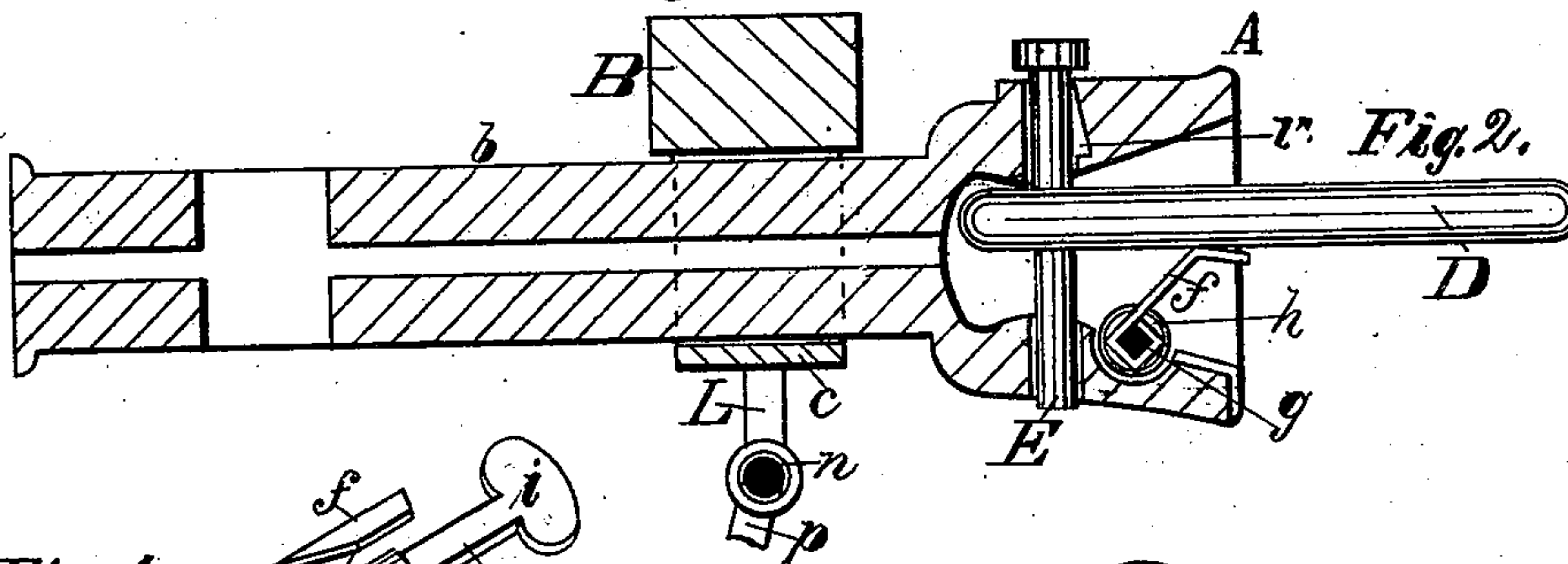
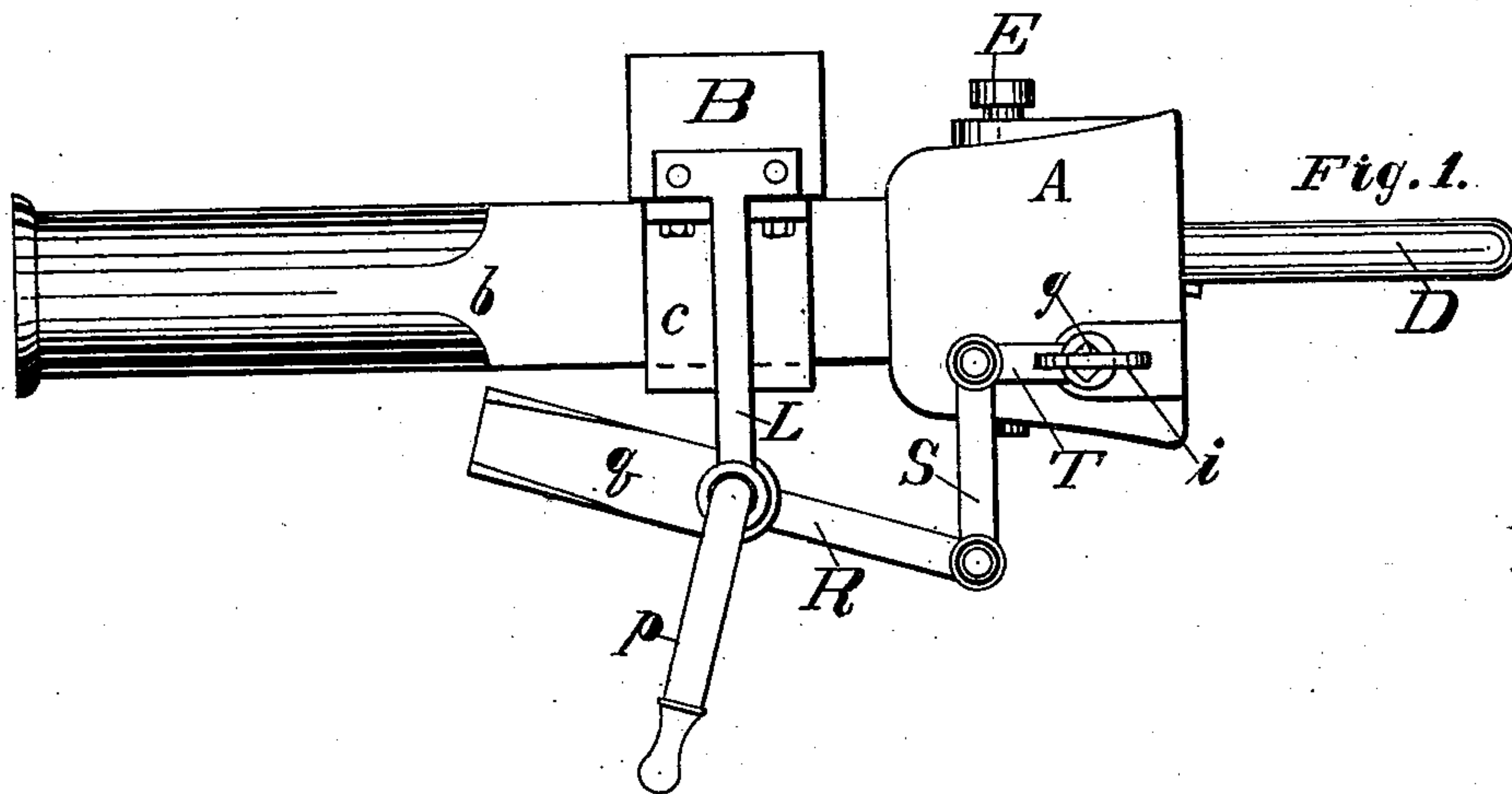


F. G. ARTER & J. C. BLOCHER.
Car-Coupling.

No. 226,955.

Patented April 27, 1880.



Witnesses:

Geo. A. Frydew.
A. C. Eadel

Inventors:

Francis G. Arter
John C. Blocher
By their Atty
Chas B. Mann

UNITED STATES PATENT OFFICE.

FRANCIS G. ARTER AND JOHN C. BLOCHER, OF LIMA, OHIO.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 226,955, dated April 27, 1880.

Application filed February 12, 1880.

To all whom it may concern:

Be it known that we, FRANCIS G. ARTER and JOHN C. BLOCHER, of Lima, in the county of Allen and State of Ohio, have invented a
5 new and useful Improvement in Car-Couplings, of which the following is a specification.

Our invention relates to an improvement in car-couplings.

The construction and operation of a coupling embodying our improvement will first be described, and the invention will then be designated in the claims.

In the drawings hereto annexed, Figure 1 is a side elevation. Fig. 2 is a longitudinal
15 section. Fig. 3 is a plan or top view. Fig. 4 is a perspective of the link-adjuster.

The letter A designates the draw-head, and *b* its neck or shank, which connects with the car, or with the usual draw-bar. (Not shown.)

20 B designates the platform of the car, or a beam extending across the end of the car above the draw-head.

c is a suspension yoke or hanger, which supports the neck of the draw-head and permits
25 the latter to have a limited endwise-sliding movement.

An ordinary link, D, and pin E are used; but the draw-head is provided with a hinged or pivoted tongue, *f*, which serves to sustain
30 the link, as shown in Fig. 2, when it is desired to effect a coupling.

The tongue is secured to a rock-shaft, *g*, which in cross-section is square, and passes transversely through the lower part of the
35 draw-head.

On each side of the tongue is a ferrule, *h*, which, being round on the exterior, serves as a journal, enabling the shaft to be rocked. The shaft extends a short distance from each
40 side of the draw-head, and each end is provided with a suitable crank or hand-hold, *i*, by which the tongue may be raised; but as this requires a person to pass between the cars, we provide means for raising the tongue which
45 shall obviate that necessity.

The letter L designates a hanger attached to the car-body on each side, which supports a shaft, *n*, extending across from side to side below the draw-neck of the coupler.

50 At each end of the shaft a handle, *p*, is attached. At its central part the shaft is square in cross-section, or by other means is adapted for the attachment of a lever, R, one end of which is weighted, as shown at *q*, and the
55 other end is jointed to a link, S, which is

jointed to a crank-lever, T, on the shaft *g*, which extends through the draw-head.

By this arrangement of the lever R attached to the car-body, and the crank-lever T attached to the tongue-shaft in the draw-head, 60 with a link to connect these devices, the tongue or link-adjuster may be raised by a person standing upon the outer sides of the car, obviating the necessity of going between the cars, and without interfering in any degree 65 with the necessary endwise movement of the draw-head.

In order to support the pin E in proper position when about to effect a coupling, so that the concussion when the cars come together 70 will cause the pin to drop in its hole and pass through the link, we provide a notch, *u*, on one side of the hole. (Seen in Fig. 2.)

The pin being inserted in the hole, the lower end will set in the notch if the upper end be 75 leaned back toward the car-body. When the cars come together the concussion will straighten the pin to a vertical position, and the result will be it will drop in its hole.

We are aware that a tongue has heretofore 80 been pivoted in the draw-head of a car-coupler to support the coupling-link, and therefore our claim is to a certain construction of such devices and to certain means for operating the same. 85

Having described our invention, we claim and desire to secure by Letters Patent of the United States—

1. A car-coupling link-adjuster consisting of a rock-shaft square in cross-section, a tongue 90 secured to the shaft, and a ferrule having a round exterior, but adapted to slide on the square shaft on each side of the tongue, as shown and described.

2. In a car-coupling whose draw-head has 95 a limited endwise sliding movement, the combination, with a link-supporting tongue mounted on a shaft passed transversely through the draw-head, and a crank-lever attached to the shaft, of a rock-shaft, *n*, extending across from 100 side to side of the car, a lever, R, attached to the rock-shaft, and a link, S, connecting the crank-lever on the draw-head with the lever on the rock-shaft, as herein set forth.

In witness whereof we hereunto sign our 105 names.

FRANCIS G. ARTER.

Witnesses: JOHN C. BLOCHER.

E. D. GAMBLE,

S. M. ARTER.