

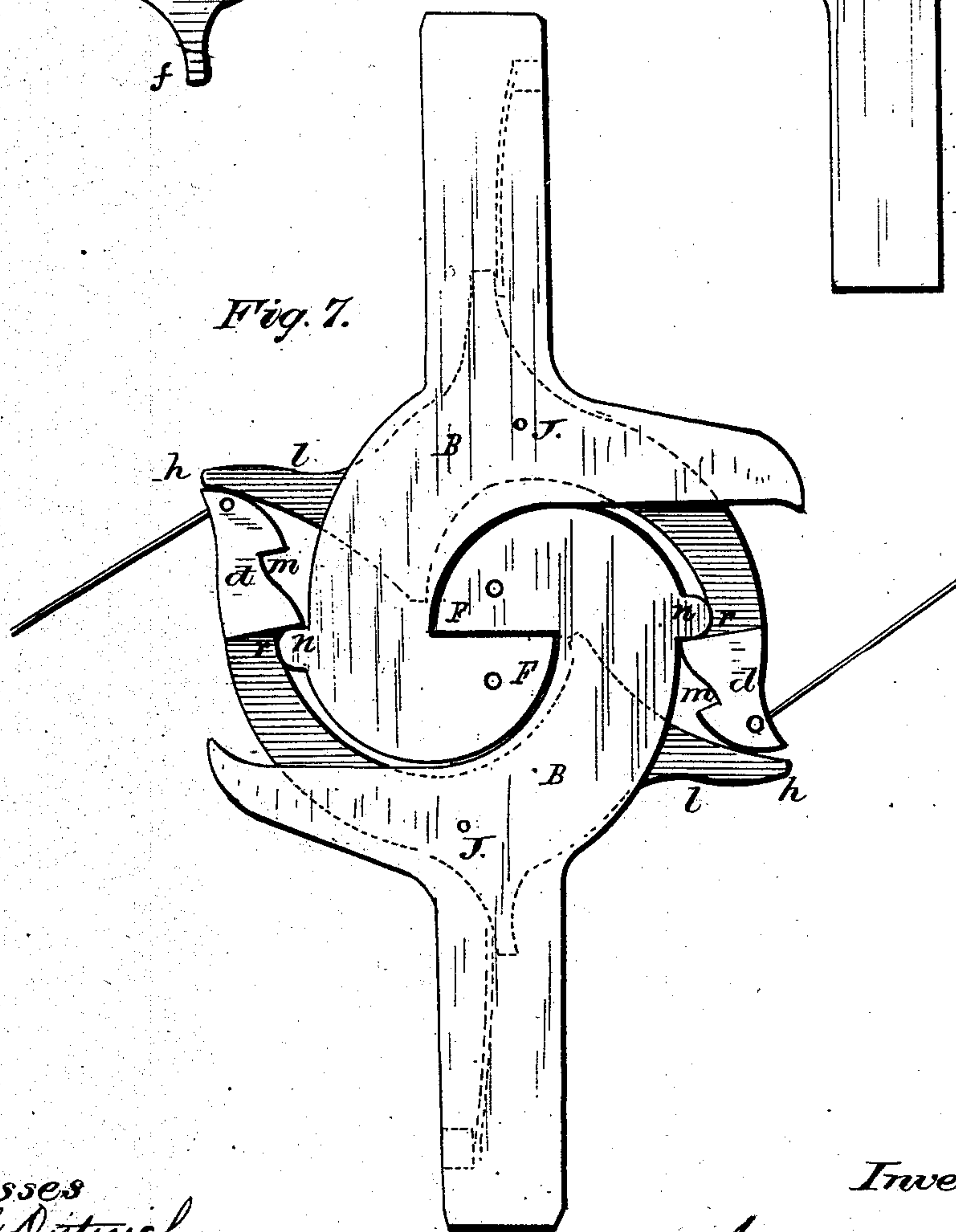
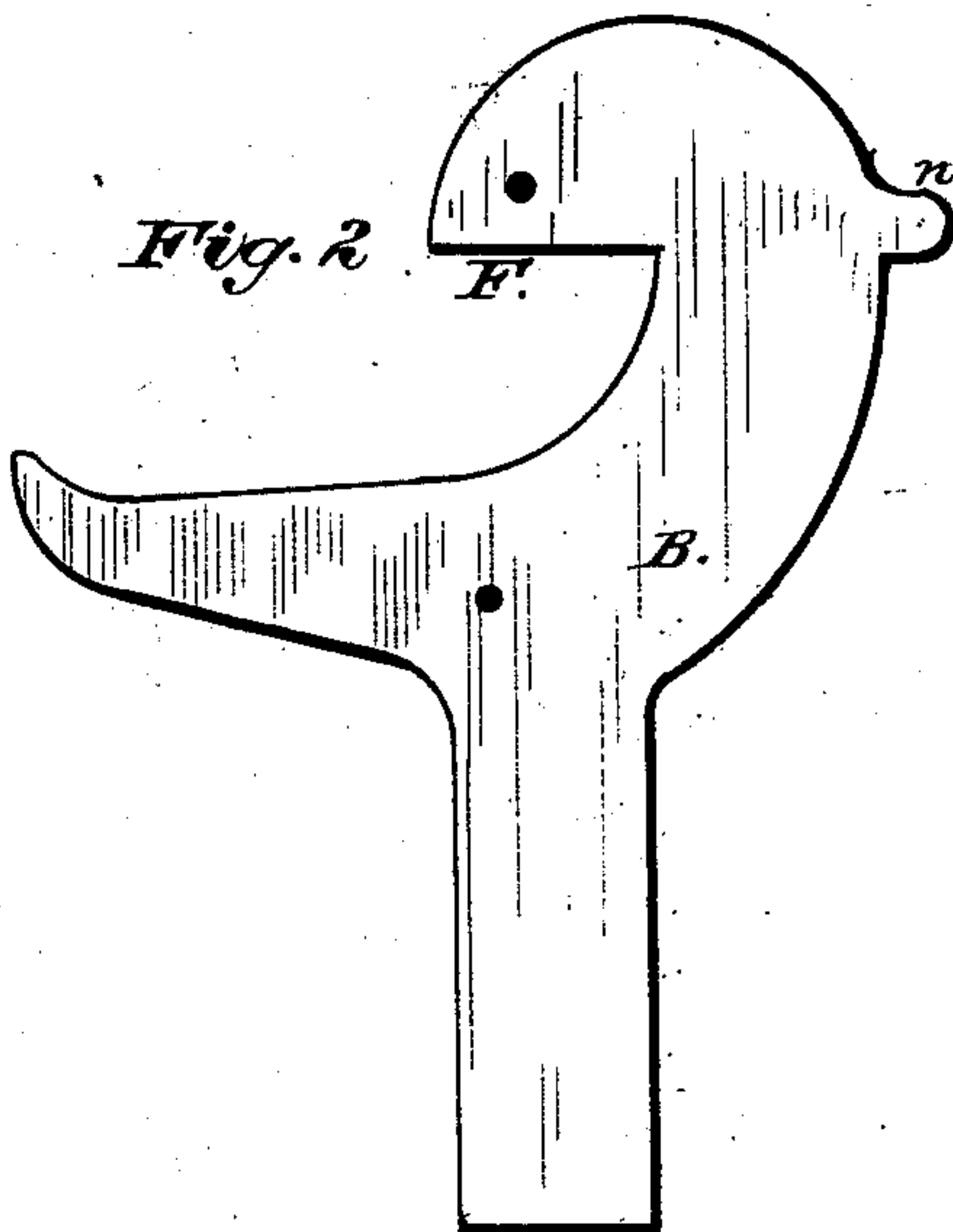
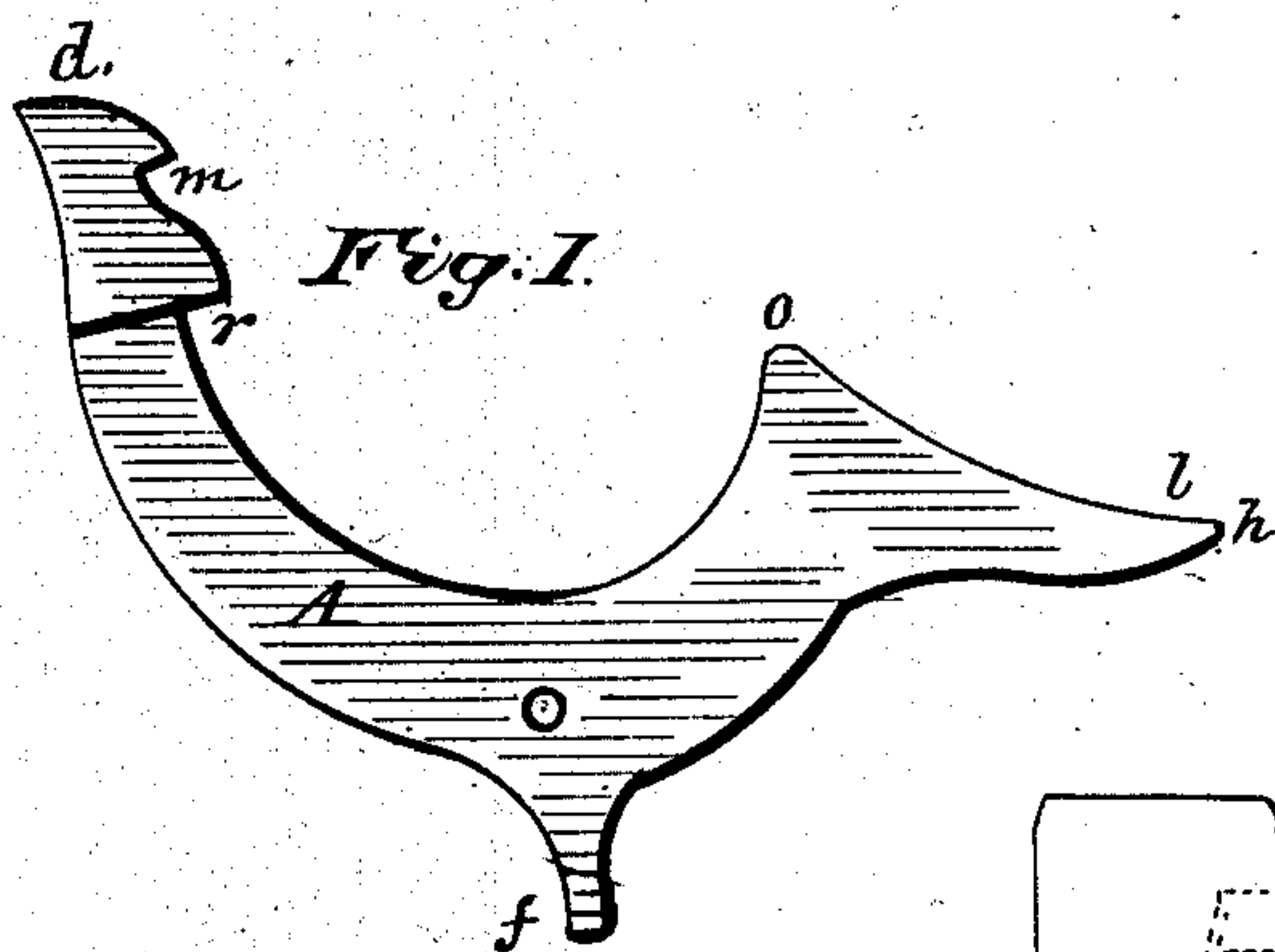
(No Model.)

2 Sheets—Sheet 1.

J. A. BURNS.
Car Coupling.

No. 237,089.

Patented Feb. 1, 1881.



Witnesses
Fred. G. Dutrich
A. H. Krause

Inventor.
James A. Burns.
By *J. F. Johnston*
his attorney.

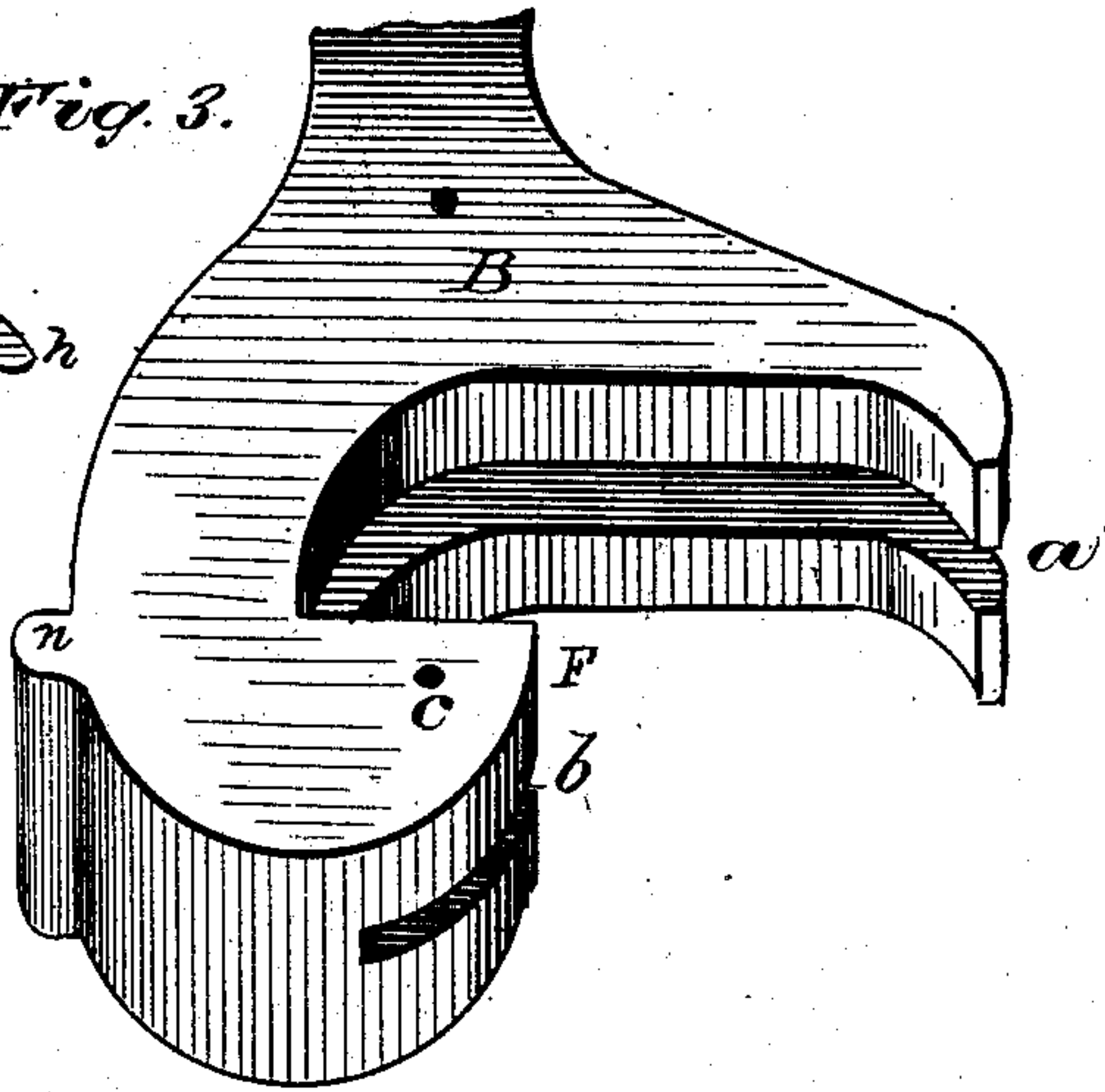
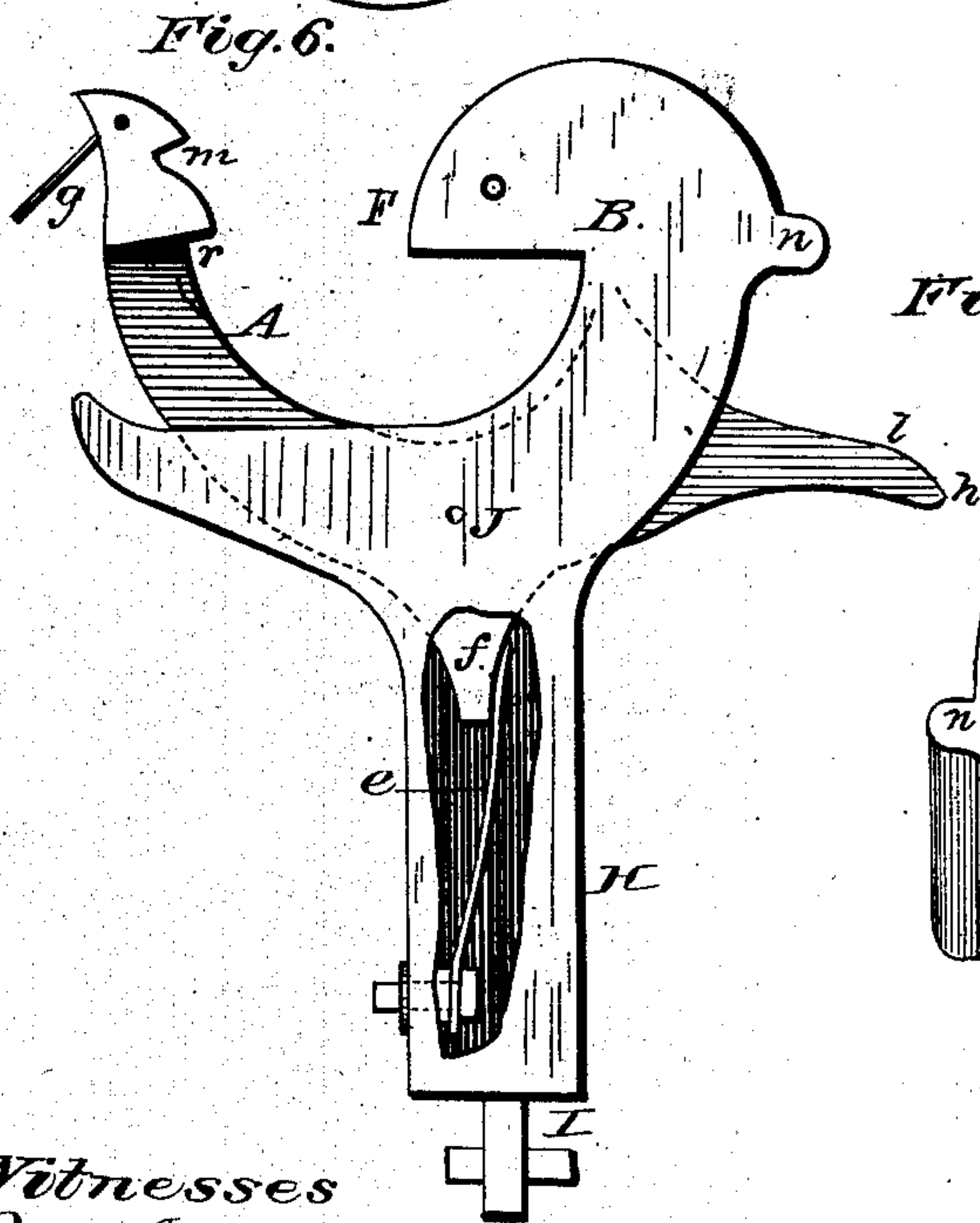
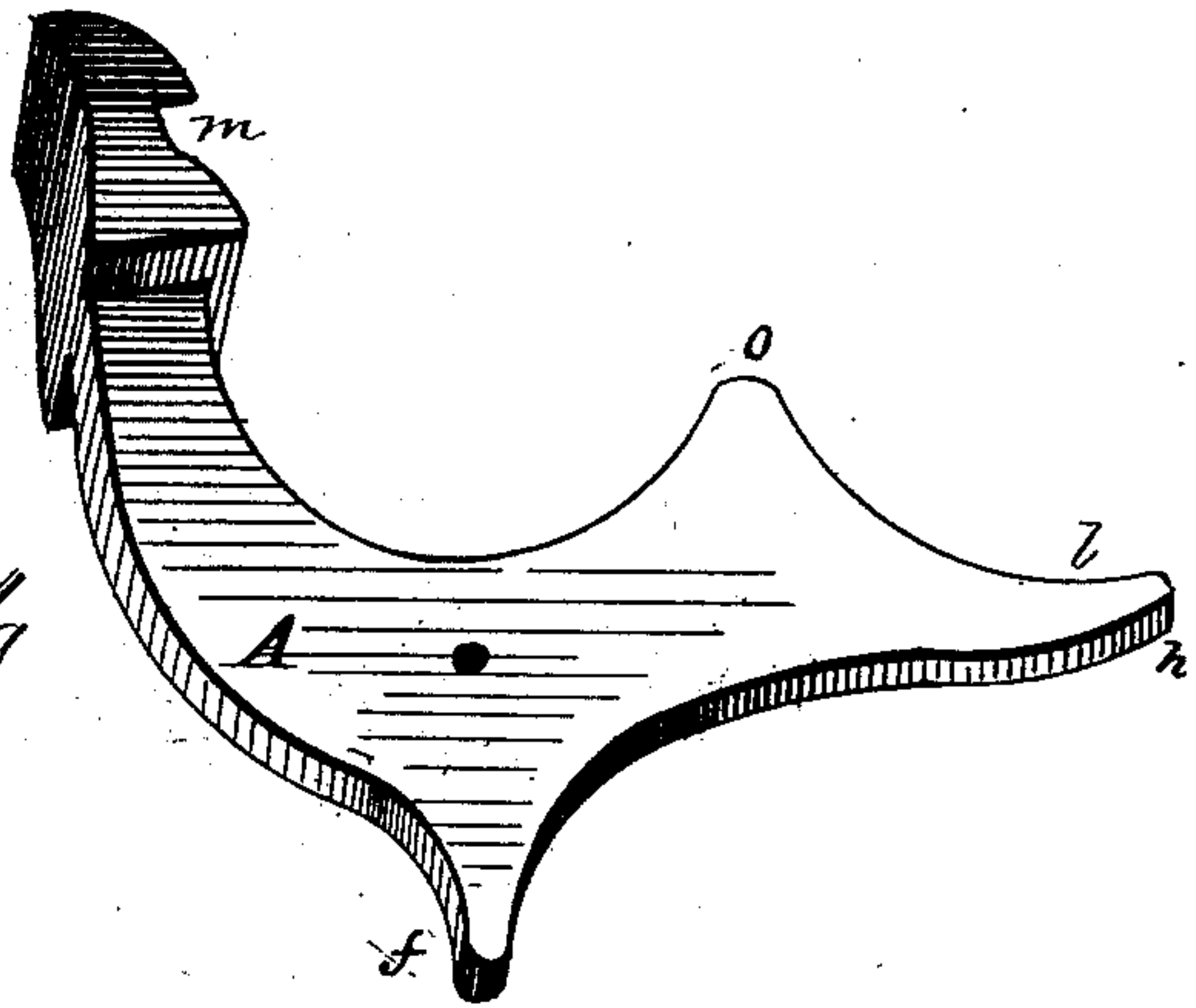
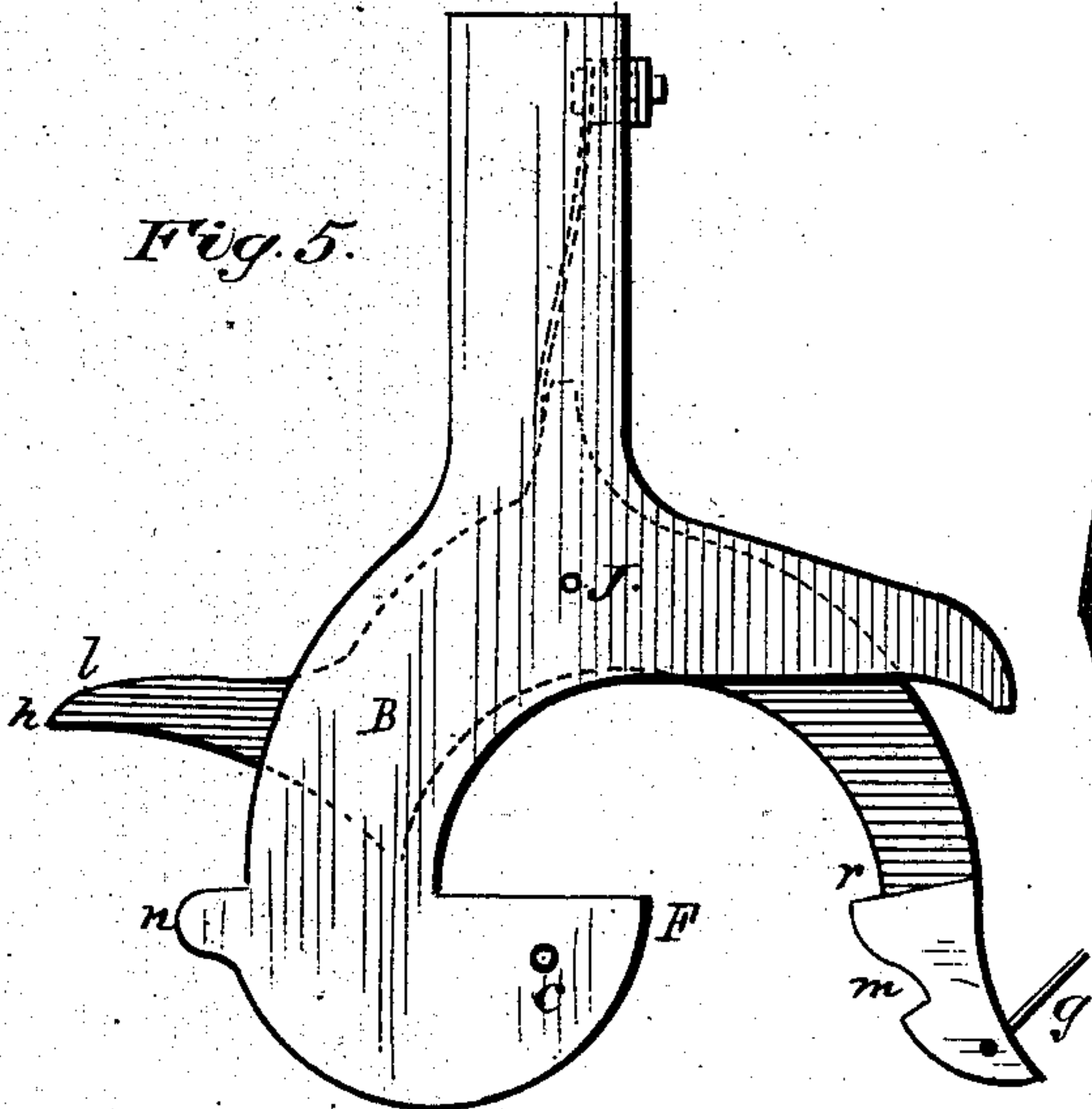
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2 Sheets—Sheet 2.

J. A. BURNS.
Car Coupling.

No. 237,089.

Patented Feb. 1, 1881.



Witnesses
Med. G. Dietrich
A. H. Krause.

Inventor:
James A. Burns.
By J. J. Johnston,
his attorney.

UNITED STATES PATENT OFFICE.

JAMES A. BURNS, OF SHARPSBURG, PENNSYLVANIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 237,089, dated February 1, 1881.

Application filed October 23, 1880. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. BURNS, of Sharpsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement 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.

My invention relates to an improvement in car-couplings; and it consists in making a car-coupling in two main parts, which, when duplicated, form a coupling for coupling together two cars, said two parts of the coupling, when duplicated, operating with relation to each other in the manner hereinafter described.

To enable others skilled in the art with which my invention is most nearly connected to make and use it, I will proceed to describe its construction and operation.

In the accompanying drawings, which form part of this specification, Figures 1 and 2 are top views or plans of the two main parts of my improvement in car-couplings. Figs. 3 and 4 are perspective views of the same. Figs. 5 and 6 are top views or plans of the two parts represented in Figs. 1, 2, 3, and 4 when said parts are pivoted together and duplicated for the purpose of coupling two cars together. Fig. 7 is a top view or plan of the duplicated parts when locked into each other, showing the relative position of said parts when two cars are coupled together.

The two main parts A and B may be constructed by the casting or forging processes, and when made in the forms shown in Figs. 1, 2, 3, and 4 the part A is pivoted in the part B, as indicated at J in Figs. 5, 6, and 7. The part B is furnished with recesses *a* *b*, and a pin-opening, *c*, for the reception of the ordinary coupling-pin, the opening *c* and recess *b* being employed for coupling with the ordinary coupling link and pin, the link entering the recess *b*, and the coupling-pin entering the opening *c*. The recess *a* in the part B is for the reception of the part A. The shank H of the part B is provided with the usual bolt I, for attaching the part B to the

car or to the platform of the car. The part B is also furnished with a spring, *e*, the forward end of which presses against the projection *f* of the part A, for holding the parts A in a locked condition with relation to parts B when said parts are duplicated, as shown in Figs. 5, 6, and 7.

In Fig. 6 part of the shank A is broken away for the purpose of showing said spring and projection. To the limb *d* of the part A is attached a chain, *g*, which may be attached to any of the known hand-levers now used in connection with brakes, for the purpose of manipulating them. Said chain may be, if desired, attached to other parts of the part A, for example—at *h* of the limb *l*, or to the projection *f*. I leave the point of attachment of the chain *g* and manner of its attachment to the hand-lever to the judgment of the mechanic.

Having the parts A and B constructed, united, and pivoted together, as hereinbefore described, and secured to the car or its platform, when the ends of two cars are approaching for the purpose of being coupled the parts A and B, thus duplicated, will be in relative position to each other, as shown in Figs. 5 and 6, and when brought together will be in the position shown in Fig. 7, the buffer-heads F F of the parts B engaging with each other, and the points *n* of the parts B engaging with the recesses *r* of the limbs *d* of the parts A, thereby perfectly and securely coupling the cars together.

When the operator desires to uncouple the cars he draws on the chain *g*, which will cause the limb *l* to press on the limb *d* and the point *o* on the side of the buffer-head F of the part B (of the duplicated parts) until the points *h* drop into the recesses *m* of the limbs *d*, and thereby hold the parts A and B spread, as shown in Figs. 5 and 6, in which position the cars will be uncoupled.

Having thus described my improvement, what I claim as of my invention is—

1. A car-coupling consisting of the parts A and B, constructed substantially as shown in the accompanying drawings, the part B having a spring, *e*, which acts upon the part A, causing the two parts of the coupling to

lock together, as shown in Fig. 7, in the manner herein specified, and for the purpose set forth.

2. A car-coupling composed of the parts A, having the points *h o* and limbs *d*, with recesses *m r*, and the parts B connected to said parts A, and having buffer-heads F and points

n, all constructed and operating substantially in the manner as and for the purpose herein shown and described.

JAMES A. BURNS.

Witnesses:

A. C. JOHNSTON,

J. J. JOHNSTON.