

No. 661,665.

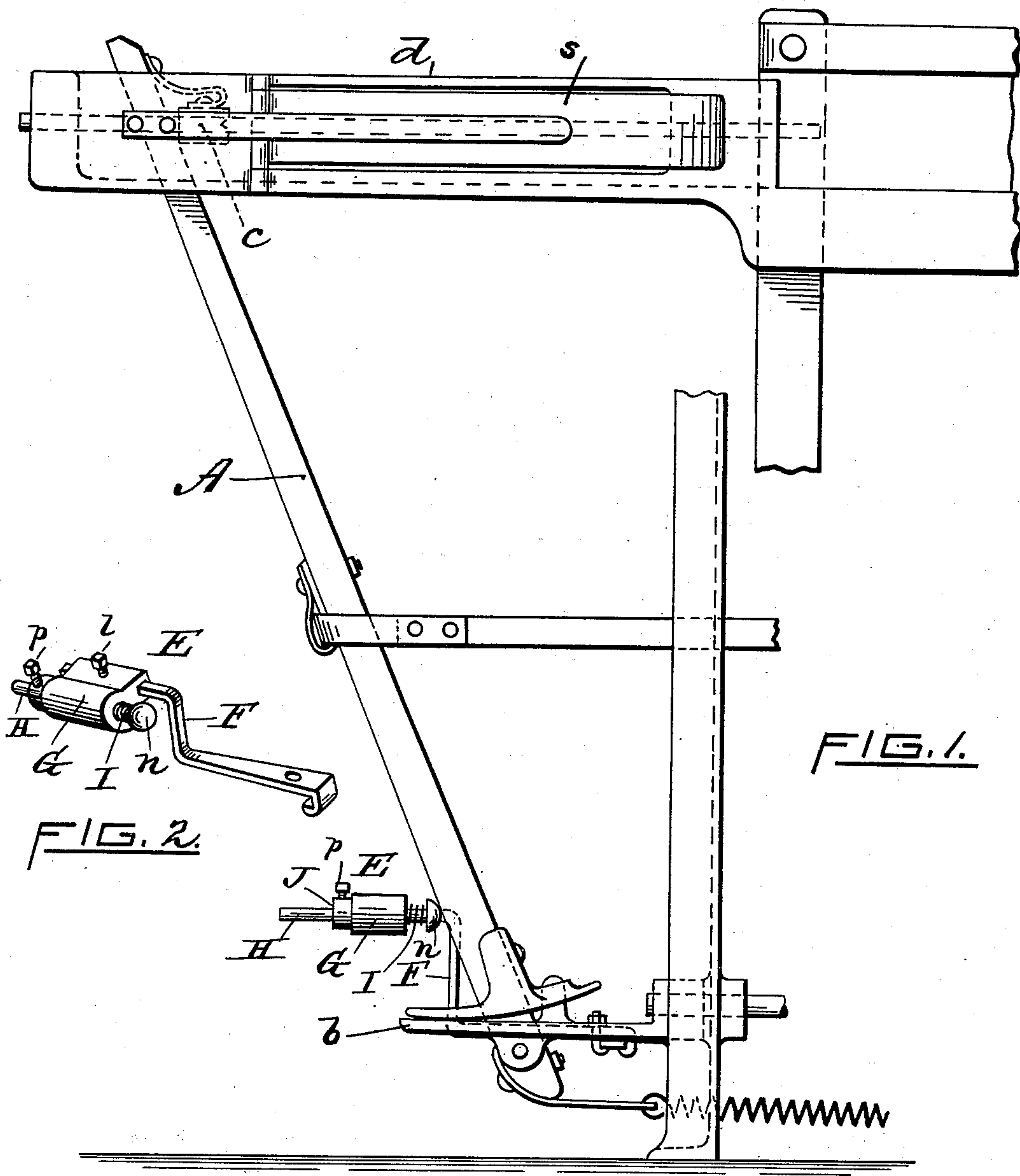
Patented Nov. 13, 1900.

J. P. MALONEY.
SHUTTLE CHECK FOR LOOMS.

(Application filed May 18, 1900.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES.

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FIG. 4.

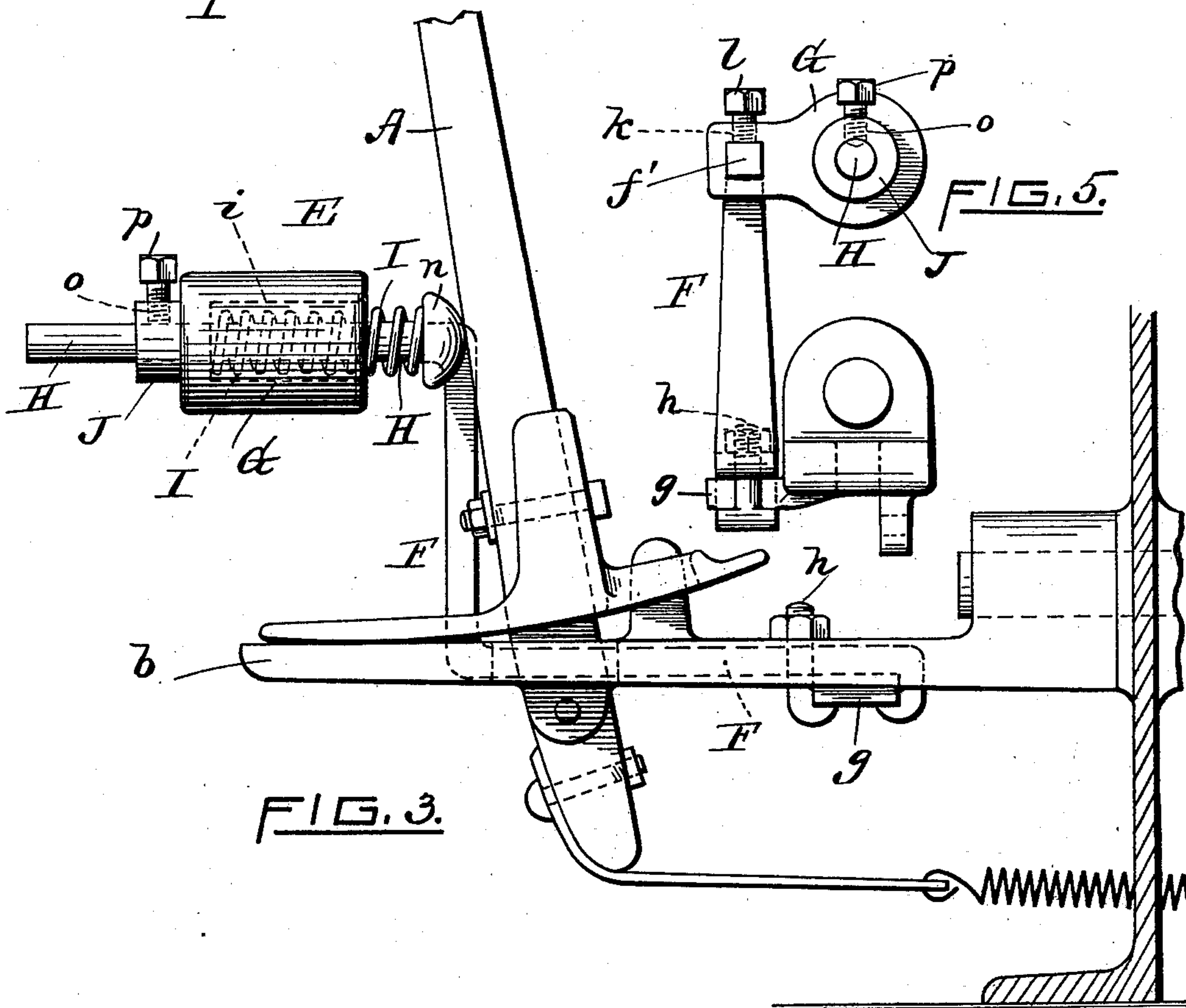
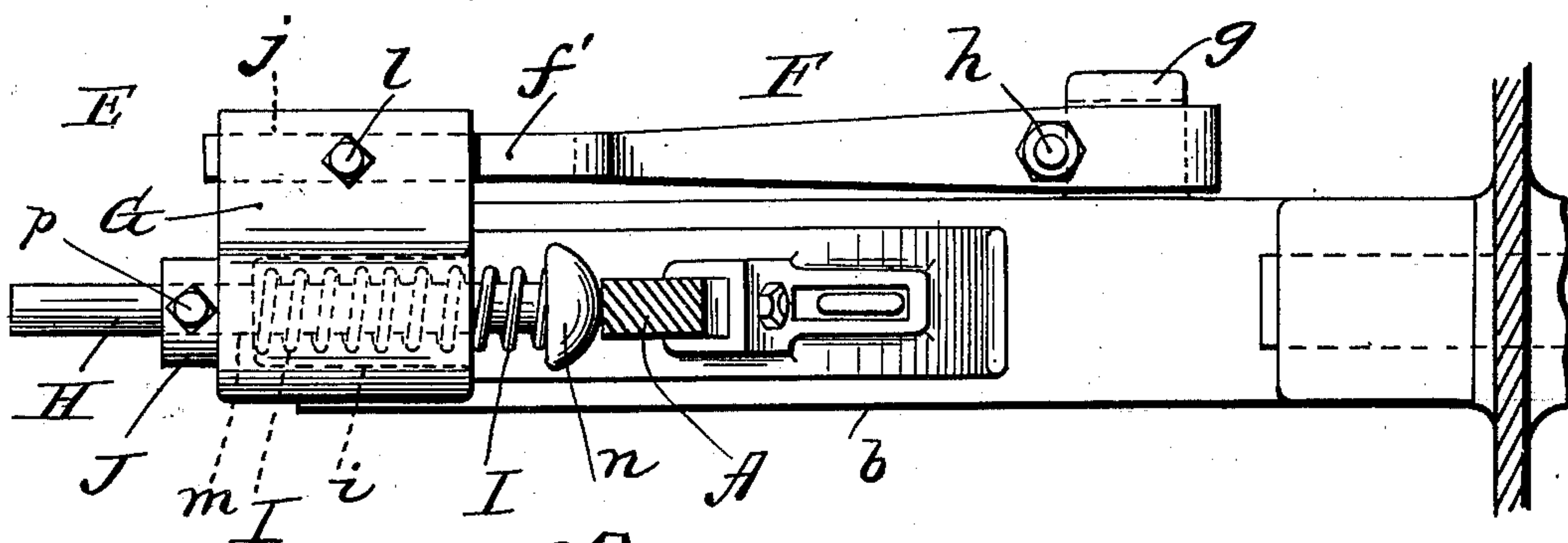


FIG. 3.

FIG. 5.

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UNITED STATES PATENT OFFICE.

JOHN P. MALONEY, OF WOONSOCKET, RHODE ISLAND.

SHUTTLE-CHECK FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 661,665, dated November 13, 1900.

Application filed May 18, 1900. Serial No. 17,164. (No model.)

To all whom it may concern:

Be it known that I, JOHN P. MALONEY, a citizen of the United States of America, residing at No. 21 Hope street, in the city of Woonsocket, county of Providence, and State of Rhode Island, have invented certain new and useful Improvements in Shuttle-Checks for Looms, of which the following is a specification.

10 This invention relates to an improvement in shuttle-checks for looms; and the object of my invention is to check the force of the shuttle gradually as it strikes against the picker in the box, thereby preventing the cop or bobbin from breaking.

15 It consists in the arrangement of parts adapted to be applied to the lower portion of the picker-stick, as hereinafter fully described and claimed.

20 Figure 1 of the accompanying drawings is a partial front elevation of one end of a loom, showing the position of my device as secured to the step of the picker-stick. Fig. 2 is a perspective view of the attachment. Fig. 3 is an enlarged side elevation of my device and showing that portion of the picker-stick to which it is applied. Fig. 4 is a top plan view of the same. Fig. 5 is a rear end view of my device as secured to the step of the picker-stick.

30 Like letters of reference indicate like parts.

A designates the picker-stick, which swings upon the step *b*, *c* the picker secured to the picker-stick, and *d* the lay or shuttle box.

35 All these parts are of the usual construction.

E indicates my improved checking device, which operates in conjunction with the picker-stick. This checking device comprises an angle-rod *F*, which is bent as shown and having one end mounted and secured upon an outward extension *g*, integral with the step *b*, by a bolt *h*, (see Fig. 4,) said angle-rod having a longitudinal rear portion *f'*, square-shaped in cross-section, as shown in Fig. 5.

45 *G* indicates a socket-piece having a circular recess *i* longitudinally disposed and also provided with an opening *j*, arranged longitudinally through from each end thereof, said socket-piece adapted to be mounted upon the rear portion *f'* of said angle-rod through said opening *j*, with a vertical screw-tapped aper-

ture *k* in said socket-piece to receive a set-screw *l*.

H indicates a pin which passes through a circular opening *m* in the socket-piece and 55 formed centrally with the circular recess *i* of the same, said pin having an enlarged semi-spherical head *n* integral therewith at one end thereof.

I indicates a coil-spring placed in the circular recess *i* of the socket-piece and surrounding the pin *H* and is designed to impinge against the head *n* of the same.

J indicates a collar mounted upon the projecting end portion of the pin *H* and provided 65 with a screw-threaded aperture *o* to receive a set-screw *p*, adapted to hold the said pin in position to which it is moved.

In practice the socket-piece *G* assumes a longitudinal position at the lower rear portion of the picker-stick, with the axis of the pin *H* in alinement with the vertical center of the picker-stick.

In the operation of box-loom it frequently happens that when the shuttle comes in contact with the swell *s* in the box the force of the shuttle causes the cop or bobbin to break and making waste of the filling or bobbin for use again. I obviate this difficulty, as with my device the pressure of the swell in the box is 80 made comparatively loose, so that when the shuttle strikes against the same the force is lessened until the shuttle reaches the picker, when the picker-stick will swing rearwardly and gradually stop the movement in the 85 stroke of the shuttle. With my tension device as applied to the lower portion of the picker-stick I have not only the advantage of obtaining a ready adjustment of tension upon the picker-stick, but also an increase of leverage in the throw of the picker, and thereby giving a softer check to the shuttle.

Having described my invention, what I claim is—

In combination with the picker-stick of a 95 box-loom, of the angle-rod *F* having one end mounted and secured at the side of the step of the picker-stick and bent as shown, the socket-piece *G* adjustably mounted on said angle-rod and provided with a circular recess 100 longitudinally disposed, the pin *H* having an enlarged head *n* integral therewith at one end

thereof, said pin adapted to pass through the
said socket-piece and longitudinally central
with the circular recess thereof, the spring I
in the recess of said socket-piece and sur-
5 rounding said pin, adapted to press said pin
against the picker-stick, with the collar J
mounted upon the opposite end of the socket-
piece, said collar provided with a screw-
threaded aperture to receive a set-screw p

adapted to hold said pin in position to which it
is moved, substantially as described.

Signed by me at Providence, Rhode Island,
this 15th day of May, 1900.

JOHN P. MALONEY.

Witnesses:

CHARLES F. STEARNS,
VICTOR DE LA BARRE.