

No. 775,890.

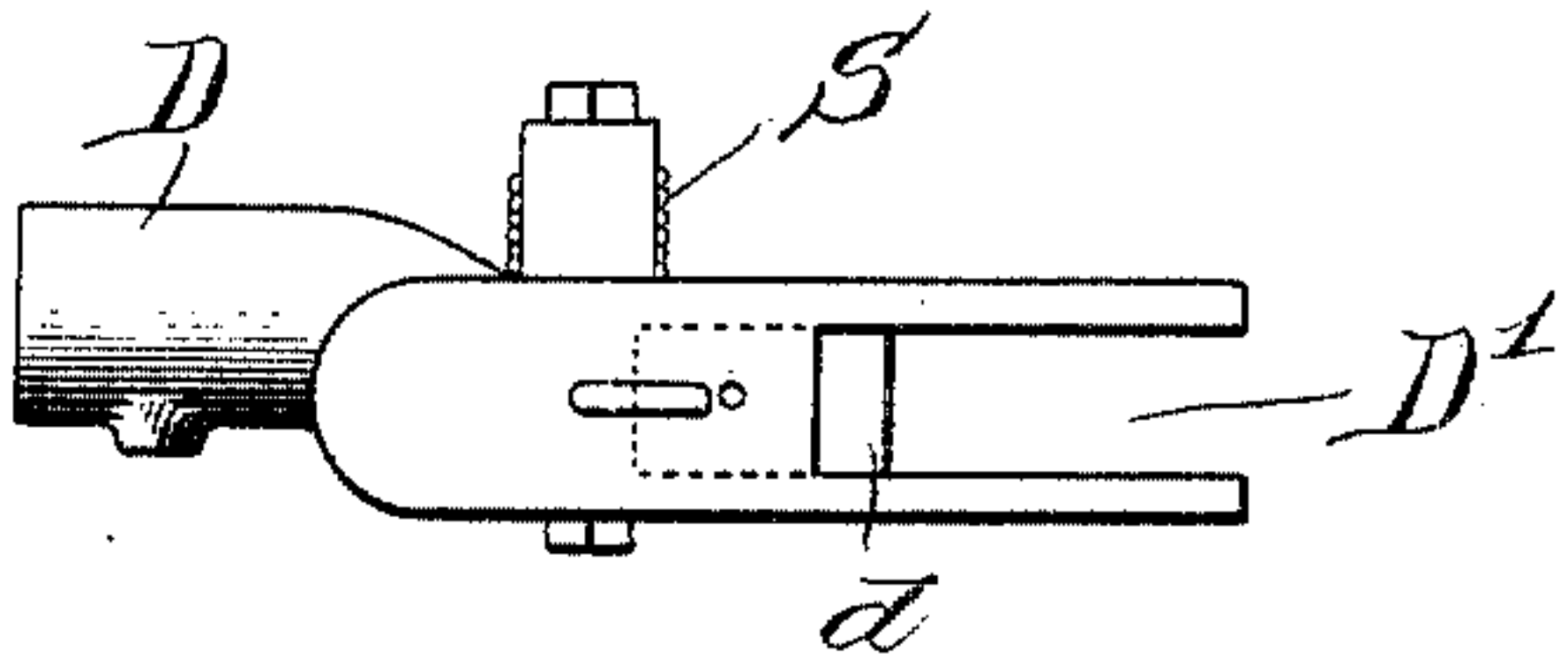
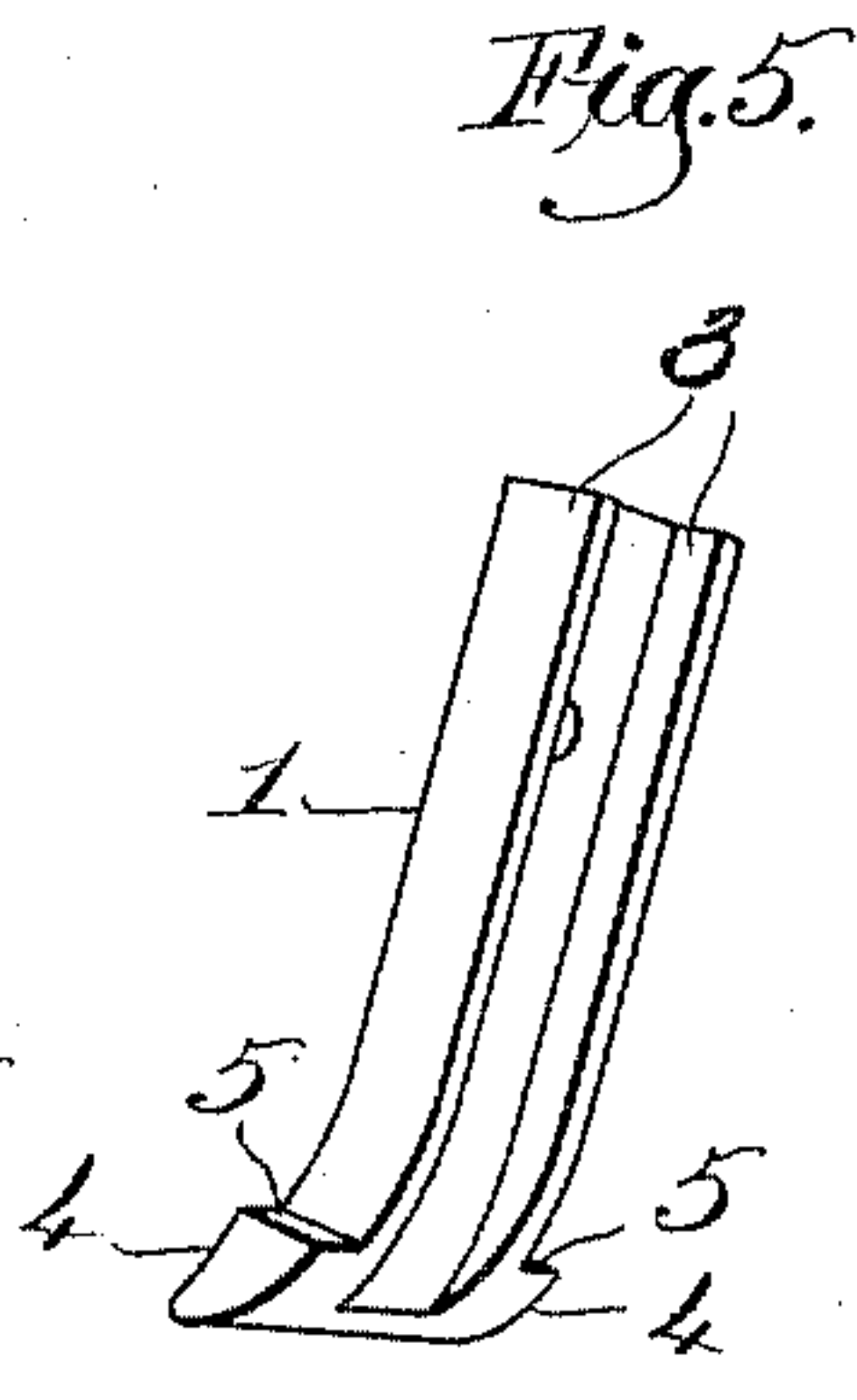
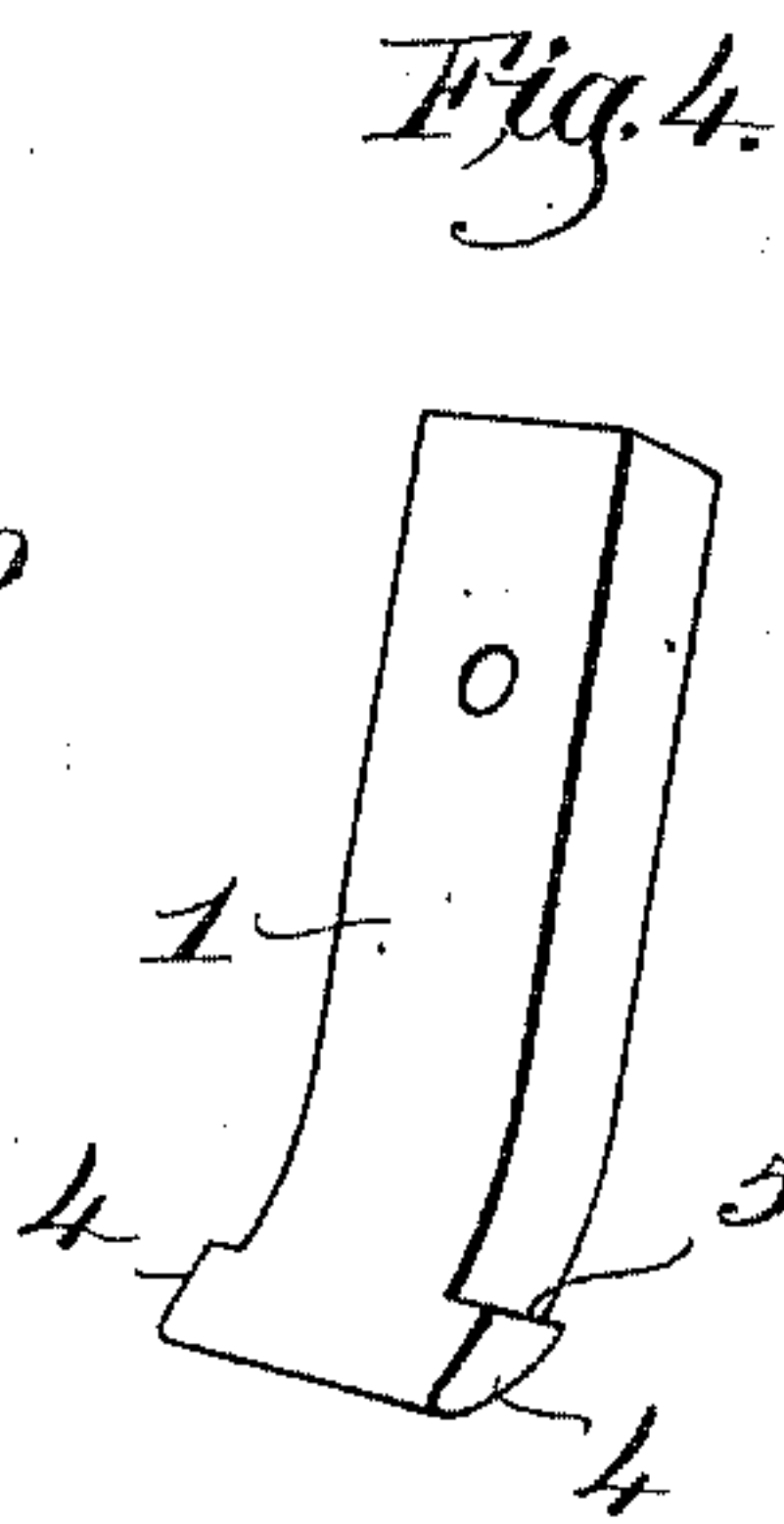
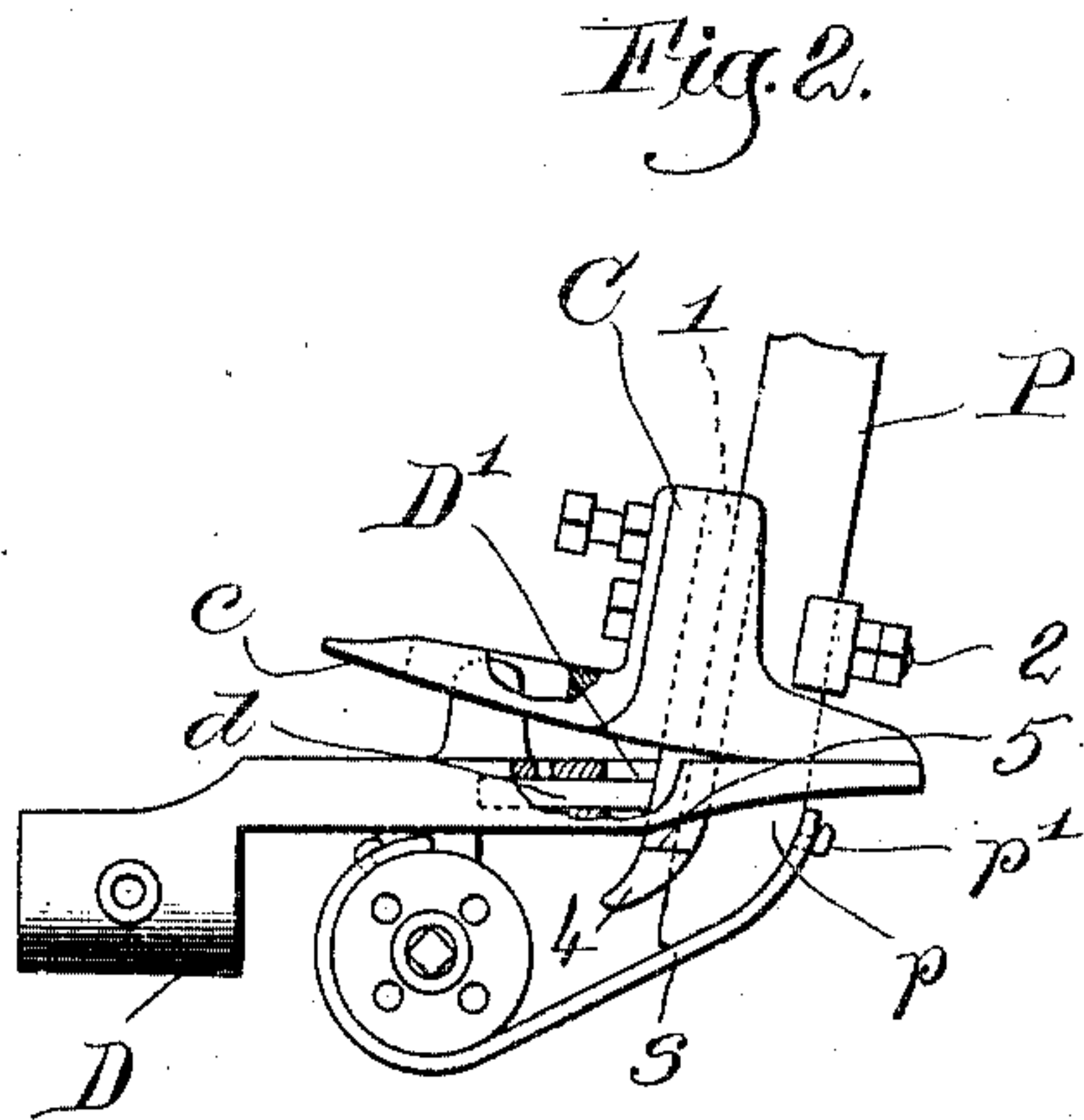
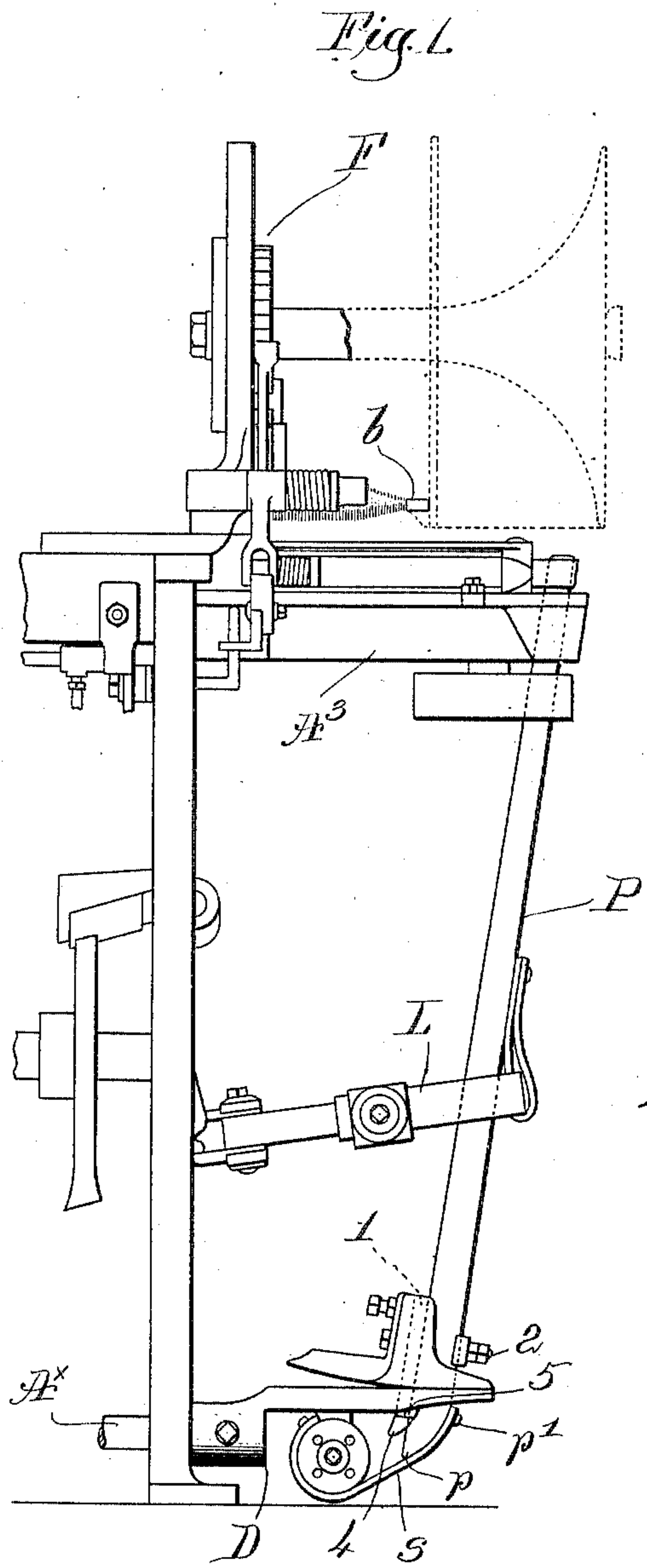
PATENTED NOV. 22, 1904.

G. BOISVERT.

PICKER STICK MOTION FOR LOOMS.

APPLICATION FILED JULY 1, 1904.

NO MODEL.



Witnesses.
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UNITED STATES PATENT OFFICE.

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PICKER-STICK MOTION FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 775,890, dated November 22, 1904.

Application filed July 1, 1904. Serial No. 214,853. (No model.)

To all whom it may concern:

Be it known that I, GIDEON BOISVERT, a citizen of the United States, and a resident of Manchester, county of Hillsboro, State of New Hampshire, have invented an Improvement in Picker-Stick Motions for Looms, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

The present invention relates to that portion of the picker-stick motion of a loom sometimes termed the "parallel" motion, referring to the flat stand or support and the segmental shoe which rocks thereupon and which is secured to the lower end of the picker-stick.

The spring connection between the stand and picker-stick sometimes breaks when the loom is running, and the picker-stick is then very apt to rise, and it may be thrown into the shuttle or into some part of the filling-replenishing mechanism of an automatic loom by the movement of the lay, causing breakage of parts.

The object of this invention is the production of simple and effective means to prevent such rising of the picker-stick when rupture of the spring connection occurs.

Figure 1 is a front elevation of the replenishing side of an automatic loom with my present invention applied thereto. Fig. 2 is an enlarged detail in front elevation and partly broken out of the parallel motion shown in Fig. 1 to more clearly illustrate the downhold for the picker-stick. Fig. 3 is a top or plan view of the shoe-supporting stand; and Figs. 4 and 5 are enlarged front and rear perspective views, respectively, of the downhold device detached.

While my invention is shown in Fig. 1 in connection with an automatic loom as particularly applicable thereto, it is not restricted to looms of the automatic type.

The lay A^3 , picker-stick P , and lug-strap L , connecting the stick with the pick-motion, may be all of usual construction, and in Fig. 1 a filling feeder or hopper F is shown to contain filling-carriers b , to be transferred one

by one to the shuttle, substantially as in United States Patent No. 529,940.

The stand D , secured to the lay rocker-shaft A^x , has its outer end bifurcated to present an open slot D' , (see Fig. 3,) recessed at its inner end to receive a bearing-plug d , usually of wood, to resist the pull of the lug-strap, and a shoe C , having a curved sole c , rests upon and rocks on the flat top of the stand D , the lower end p of the picker-stick extending below the shoe and passing through the slot D' , all substantially as in United States Patent No. 741,170, dated October 13, 1903. As in said patent, a usual spring S is mounted on the stand D , and its free end is attached by a strap s to a hook p' on the depending part p of the picker-stick.

In my present invention a tongue 1, Figs. 4 and 5, is interposed between the inner edge of the picker-stick and the shoe and clamped thereto by a bolt 2, the tongue having parallel longitudinal ribs or flanges 3 on its outer face to receive between them the front and back faces of the picker-stick. The lower end of the tongue extends through the slot D' of the stand between the bearing d and the part p of the picker-stick and is provided with integral lateral lugs 4, which extend beneath the bottom of the stand, the upper faces 5 of the lugs being inclined to avoid interference with the free rocking movement of the picker-stick.

The lugs 4 constitute downholds for the picker-stick, for should the strap s on the spring S break or the spring connection between the picker-stick and the stand be ruptured in any way the downholds 4 will then cooperate with the bottom of the slotted portion of the stand D and effectually prevent the picker-stick from rising and doing any damage either to the shuttle or the filling-feeder and adjacent parts.

It will be observed that by making the downholds integral with the tongue 1 simplicity is attained with cheapness of construction and inherent strength of parts.

The particular form of spring connection herein shown and the particular arrangement

and construction of the stand are not essential to nor of the essence of my invention, as it will be manifest that other connections and other forms of stands may be used with the
5 downhold without departing from the spirit and scope of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

- 10 1. In a device of the class described, a picker-stick and its attached shoe, a stand on which the latter rocks, a spring connection between the stand and picker-stick, and a tongue
15 clamped between the shoe and the picker-stick and having lateral lugs independent of the picker-stick and extended beneath and to cooperate with the bottom of the stand upon rupture of the spring connection and prevent lifting of the picker-stick.
- 20 2. In a device of the class described, a picker-stick and its attached shoe, a stand on which the latter rocks, the stand having an opening through which the lower end of the picker-stick extends, a bearing at the inner end of
25 said opening, a spring connection between the stand and picker-stick, and a tongue movable with the latter and interposed between it and the bearing, said tongue having lateral downholds below the stand to cooperate therewith
30 and prevent lifting of the picker-stick upon breakage of the spring connection.

3. In a device of the class described, a picker-stick and its attached shoe, a stand on which the latter rocks, a spring connection between the stand and picker-stick, and a tongue
35 clamped between the shoe and the picker-stick and having longitudinal flanges to embrace the front and back faces thereof, said tongue having integral, lateral lugs at the lower ends of the flanges extended beneath the stand to co-
40 operate with the bottom thereof upon rupture of the spring connection and prevent lifting of the picker-stick.

4. In a device of the class described, a picker-stick and its attached shoe, a stand on which
45 the latter rocks, a spring connection between the stand and picker-stick and a tongue bolted to the shoe and extended downward along the inner edge of the picker-stick and having its lower end widened to present lateral down-
50 holds which extend beneath the stand and cooperate with the bottom thereof to prevent lifting of the picker-stick upon breakage of the spring connection.

In testimony whereof I have signed my name
55 to this specification in the presence of two subscribing witnesses.

GIDEON BOISVERT.

Witnesses:

W. H. HEATH,
J. A. BOIVIN.