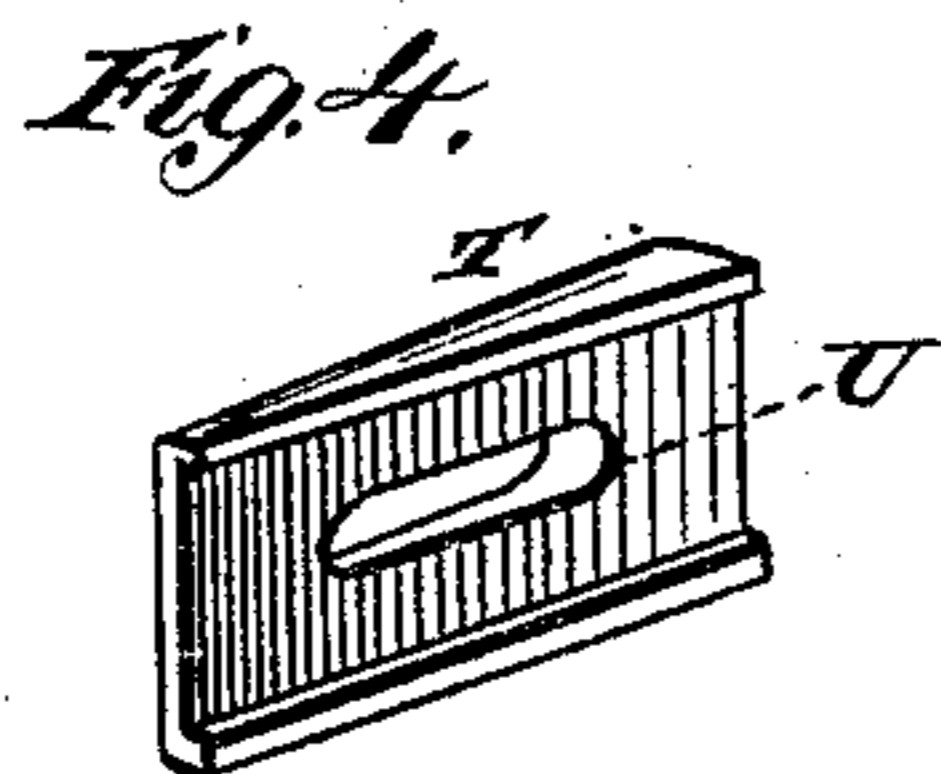
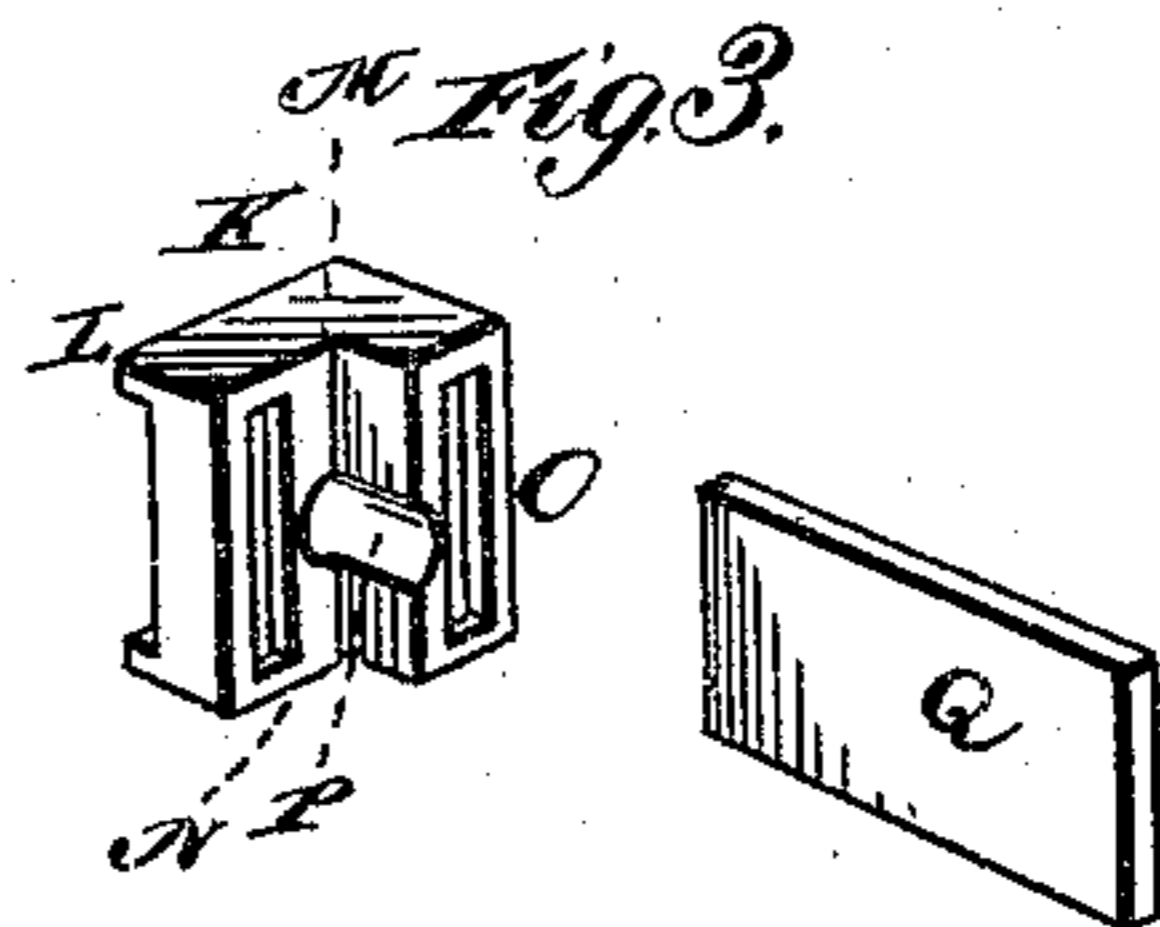
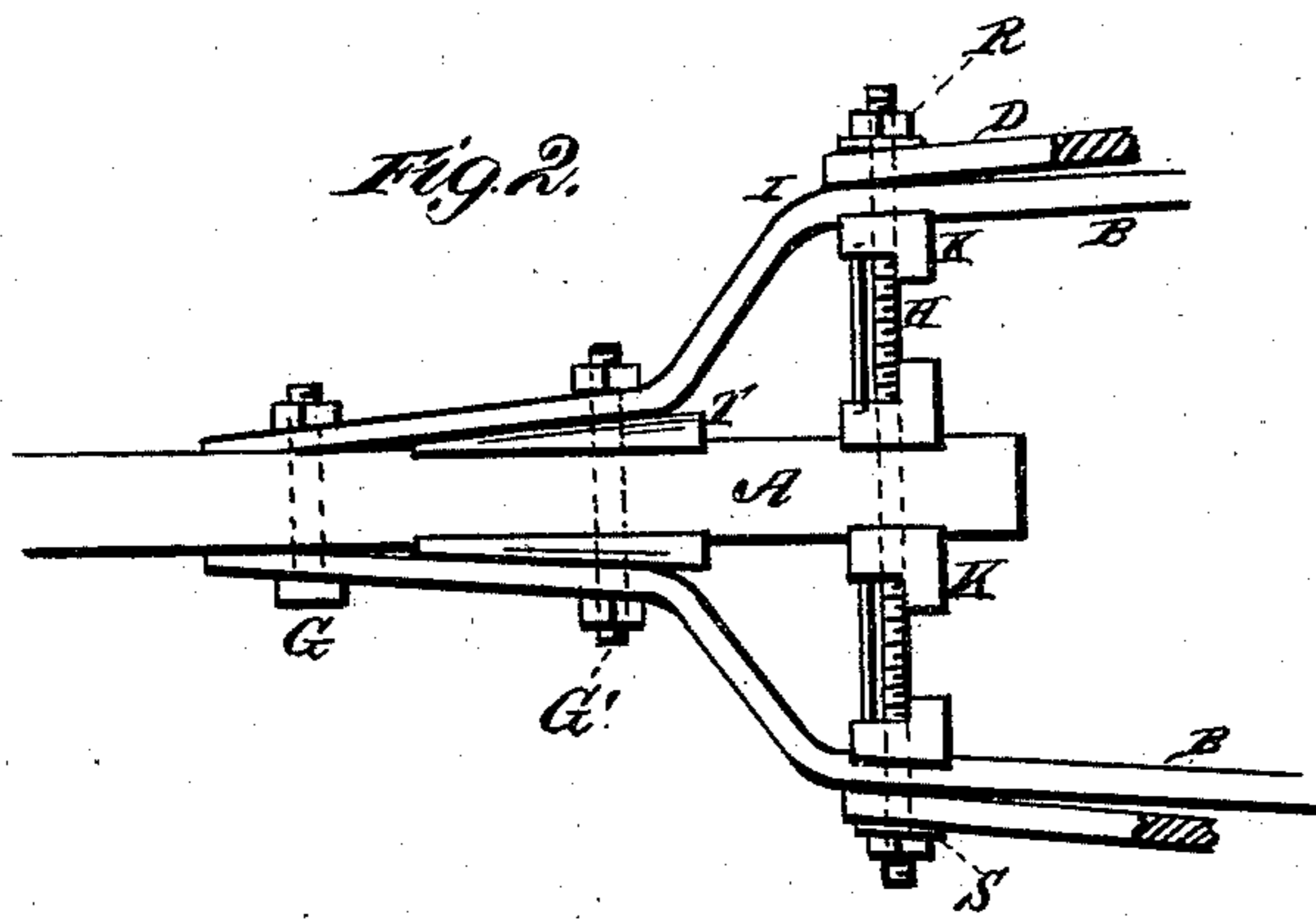
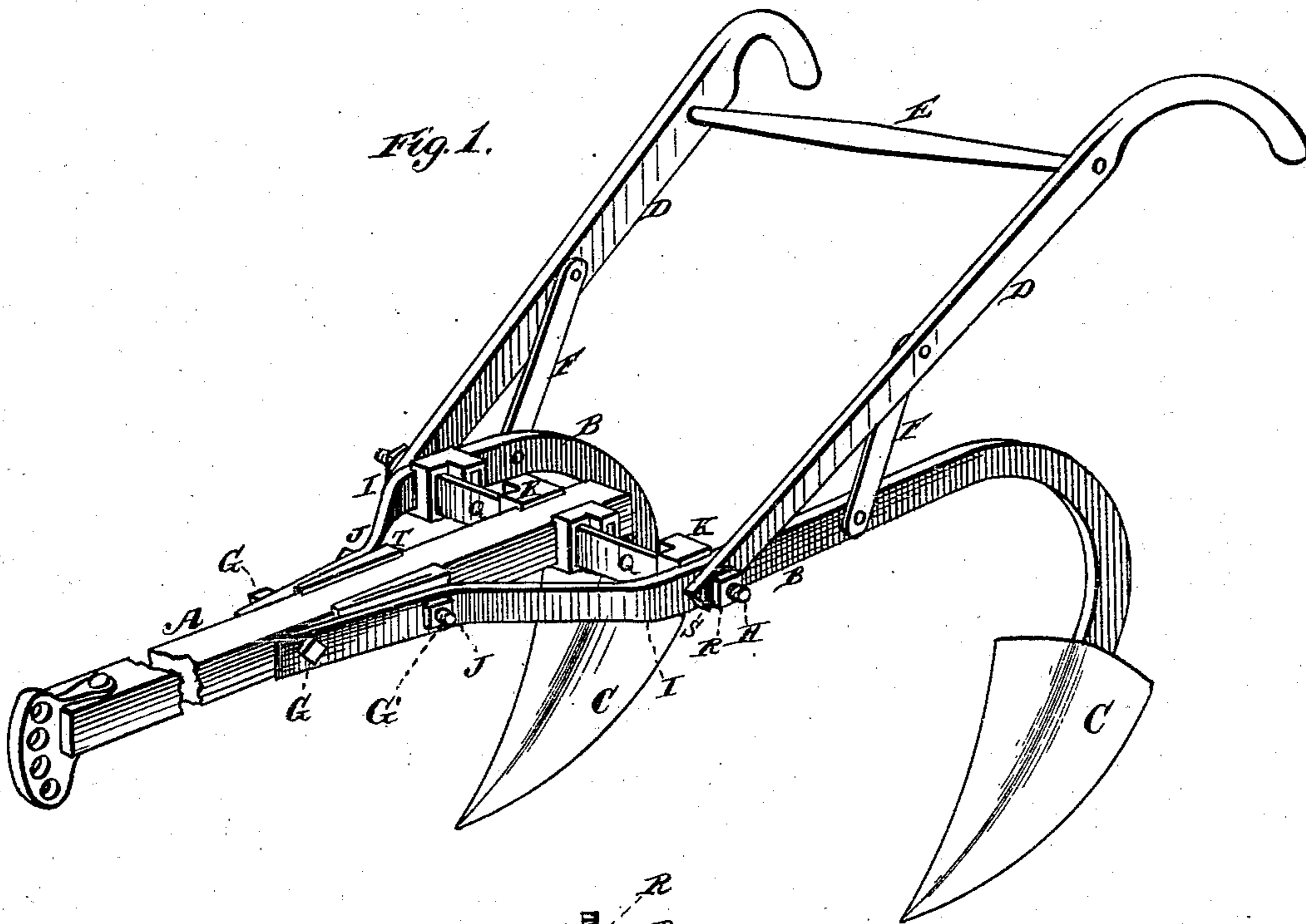


(No Model.)

W. P. BROWN.  
Plow.

No. 232,450.

Patented Sept. 21, 1880.



WITNESSES  
*Robert Everett*  
*James J. Sheehy*

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By *his Attorney* *J. Clement Smith*

# UNITED STATES PATENT OFFICE.

WILLIAM P. BROWN, OF ZANESVILLE, OHIO.

## PLOW.

SPECIFICATION forming part of Letters Patent No. 232,450, dated September 21, 1880.

Application filed August 11, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM P. BROWN, a citizen of the United States, resident at Zanesville, in the county of Muskingum and State of Ohio, have invented certain new and useful Improvements in Plows; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention has relation to plows; and it consists in the improvements in the construction of the same hereinafter fully described and particularly pointed out in the claims.

Figure 1 is a view, in perspective, of a plow embodying the improvements in my invention. Fig. 2 is a sectional plan view. Fig. 3 is a detail view of one of the cups and one of the cross-bars, and Fig. 4 is a perspective of one of the slotted wedges.

Referring by letter to the drawings, A designates the wooden portion, and B B the iron portions, of the plow-beam of a double-shovel plow. The iron portions B B of the beam are curved downward, rearward, and then forward to form the standards and plow-feet, to which the plowshares C C are secured in any well-known way.

D D designate wooden plow-handles, connected near their upper ends by the usual round E, and connected to the iron portions B B of the plow-beam by braces F F.

The forward ends of the iron portions B B of the plow-beam are connected to the wooden portion A by bolts and nuts G G'.

A rod, H, is passed through the wooden portion A of the beam, near its rear end, and extended through holes in the iron portions B B, made slightly in the rear of the bends I I in said iron portions. The portions B B are also bent at J J near their forward ends, the two bends I and J giving the conformation shown in the drawings, which is necessary to hold the plows far enough apart.

Four cups, K, cast with outer flanges, L, shoulders M, steps N and O, and perforation P, are slipped upon the rod H between the outer faces of the wooden portion A of the beam and the inner faces of the portions B B

of the beam, and are braced apart by flat cross-bars Q, placed in opposed steps in said cups K.

Nuts and washers R and S are employed to secure the lower ends of the plow-handles upon the ends of the rod H to hold the beams, cups, and bars firmly together when desired, and to permit the iron portions B B of the plow-beam to be adjusted on the rod H to carry the plows nearer to or farther from each other, as may be desired in operating the plow.

Slotted wedges T T are interposed between the forward ends of the portions B B and the portion A of the plow-beam, to fill the spaces between said portions caused by the adjustment of the portions B B.

The bolt G' passes through the slots U of the wedges to prevent their loss and hold them always in readiness for use.

The cups K revolve upon the rod H when the nuts R are slackened, and they may be turned to bring the step in the shoulder opposite another of its kind or opposite the step in the base of the cup, and the cross-bar placed in the two steps which are opposite, to cause the beams B B to be expanded to a greater or less degree, as may be required. For instance, when the plows are at their minimum of contraction all of the cups K may be turned around one-half and the plows expanded to their maximum. Where, however, it is only necessary to adjust to an intermediate point, as when the horse walks too near to or too far from the line of plants, only one, or possibly two, of the cups need be turned to effect the required adjustment.

The wedges T must, of course, be moved at each adjustment to keep the connection between the two portions of the beam rigid. The flanges L embrace the adjacent beam portions to prevent the cups K from turning after having been adjusted.

The adjusting devices herein described may be applied to plows and cultivators of constructions differing from that herein described, and the cups and bars themselves may be varied to correspond to the locations in which they are used without departing from the spirit of this invention.

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

1. In a plow, the combination of the wooden

portion A and iron portions B B of the plow-beam with the rod H, bolts G G', and the revolving cups K, having flanges L and steps N and O, and interposed cross-bars Q Q, secured  
5 in place in said steps by nuts, substantially as and for the purposes set forth.

2. In a plow, the combination of the portions A and B B of the beam, the bolts G G', wedges T, rod H, handles D, cups K, bars Q, and nuts  
10 and washers R S, constructed and operating substantially as and for the purposes set forth.

3. In a plow, the cups K, having flanges L, shoulders M, and steps N and O, in combination with the cross-bars Q, rod H, and beam A and B B, substantially as and for the pur- 15  
poses set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM P. BROWN.

Witnesses:

D. T. JOHNSON,  
DANIEL B. GARY.