

No. 652,871.

A. V. WILBUR.

Patented July 3, 1900.

PLOW.

(Application filed Oct. 10, 1899.)

(No Model.)

2 Sheets—Sheet 2.

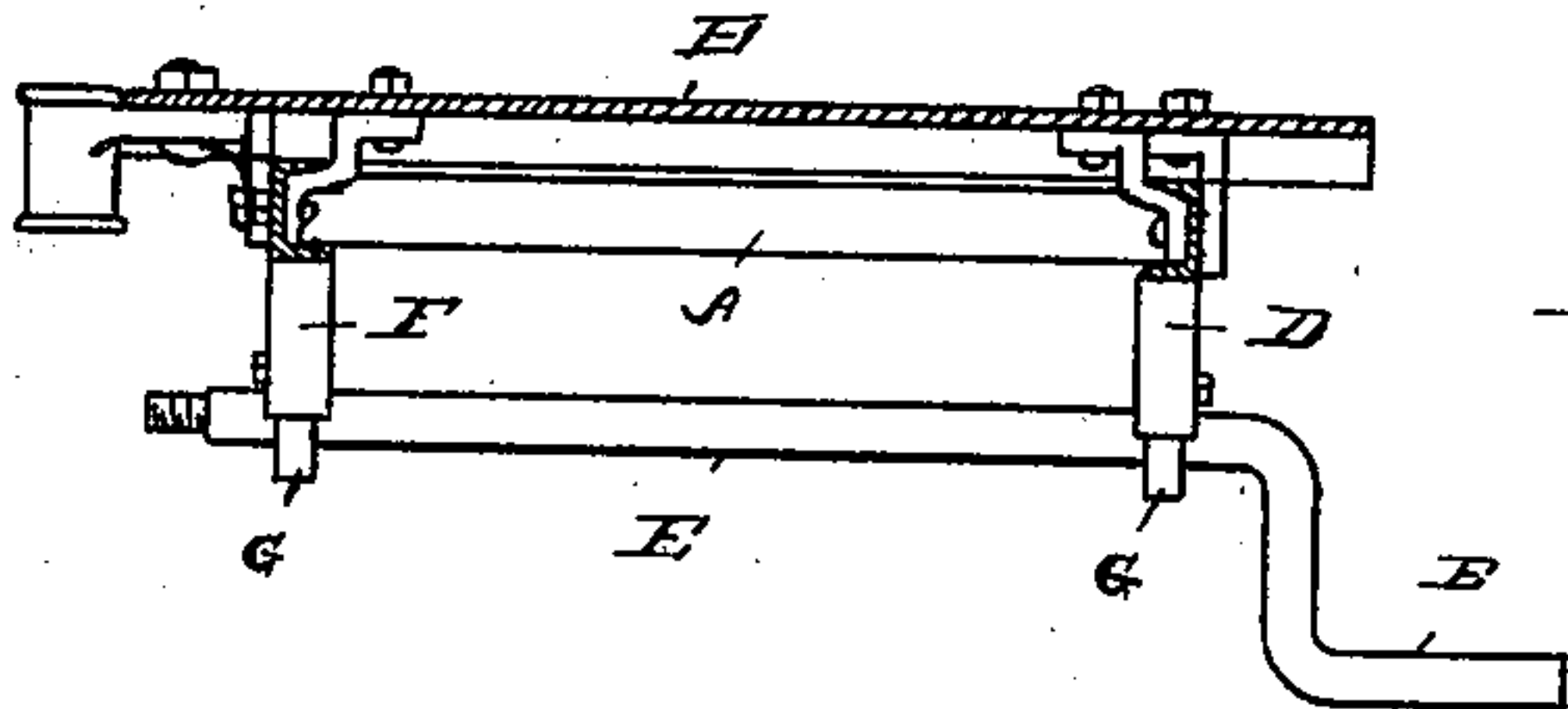


Fig. 3.

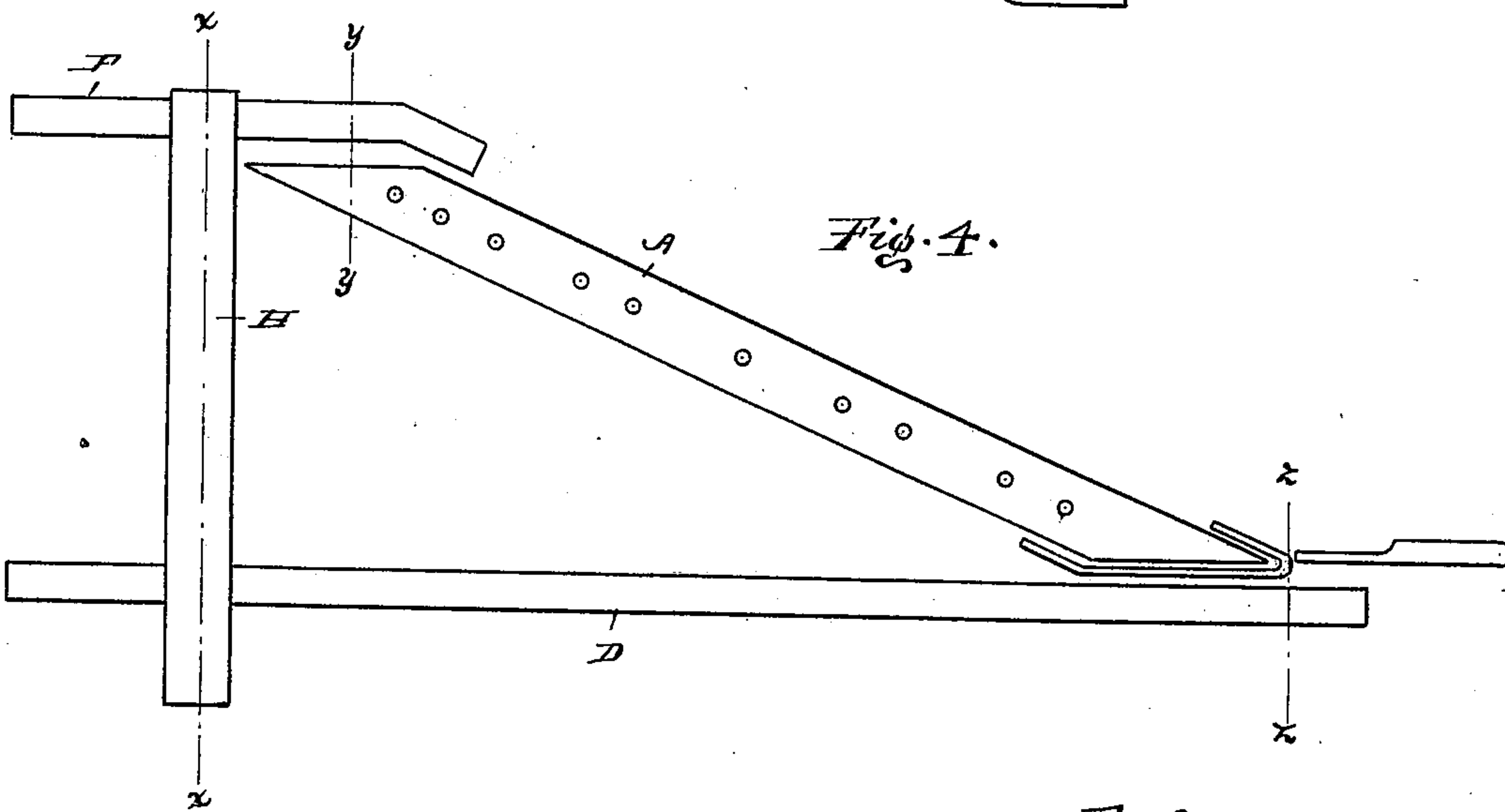


Fig. 4.

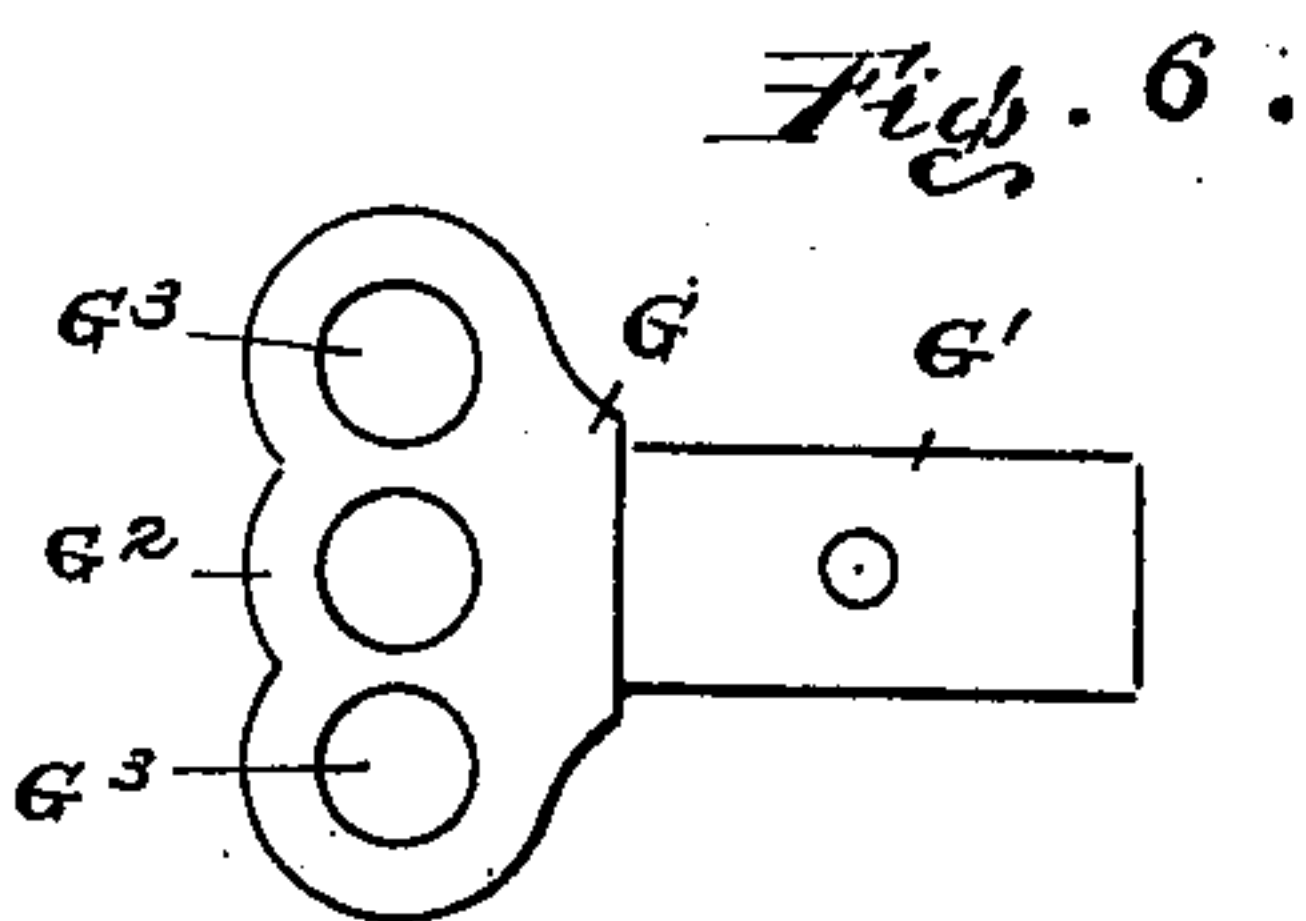


Fig. 6.

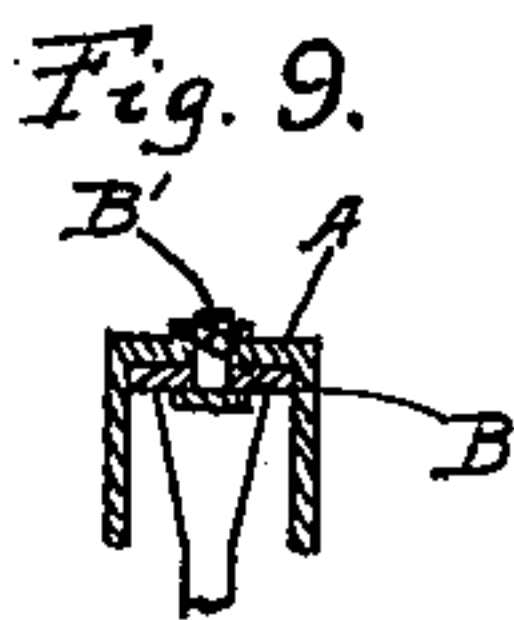


Fig. 9.

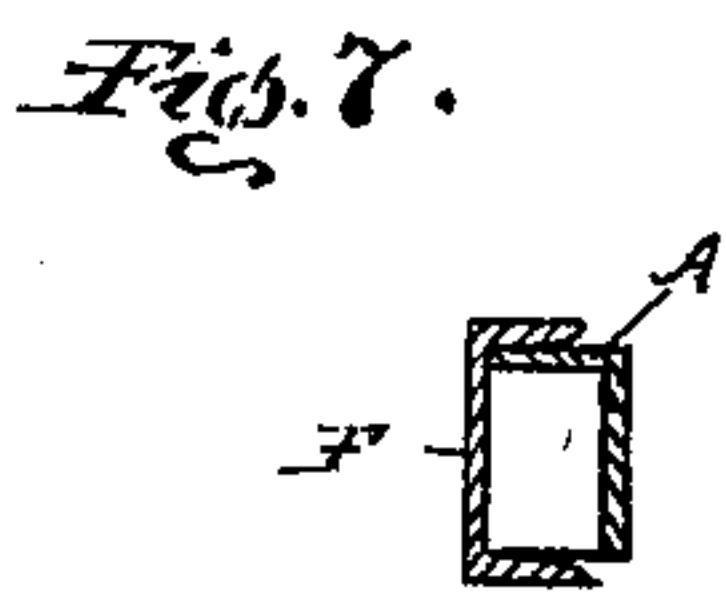


Fig. 7.

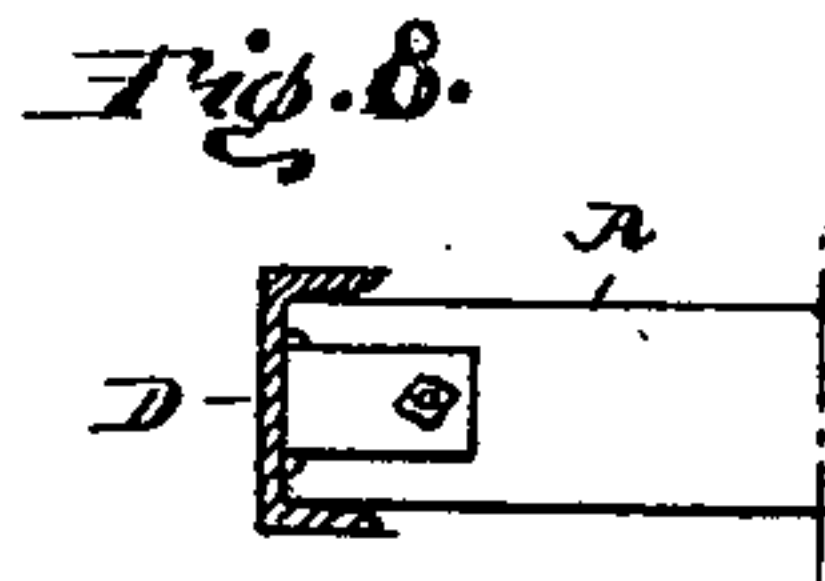


Fig. 8.

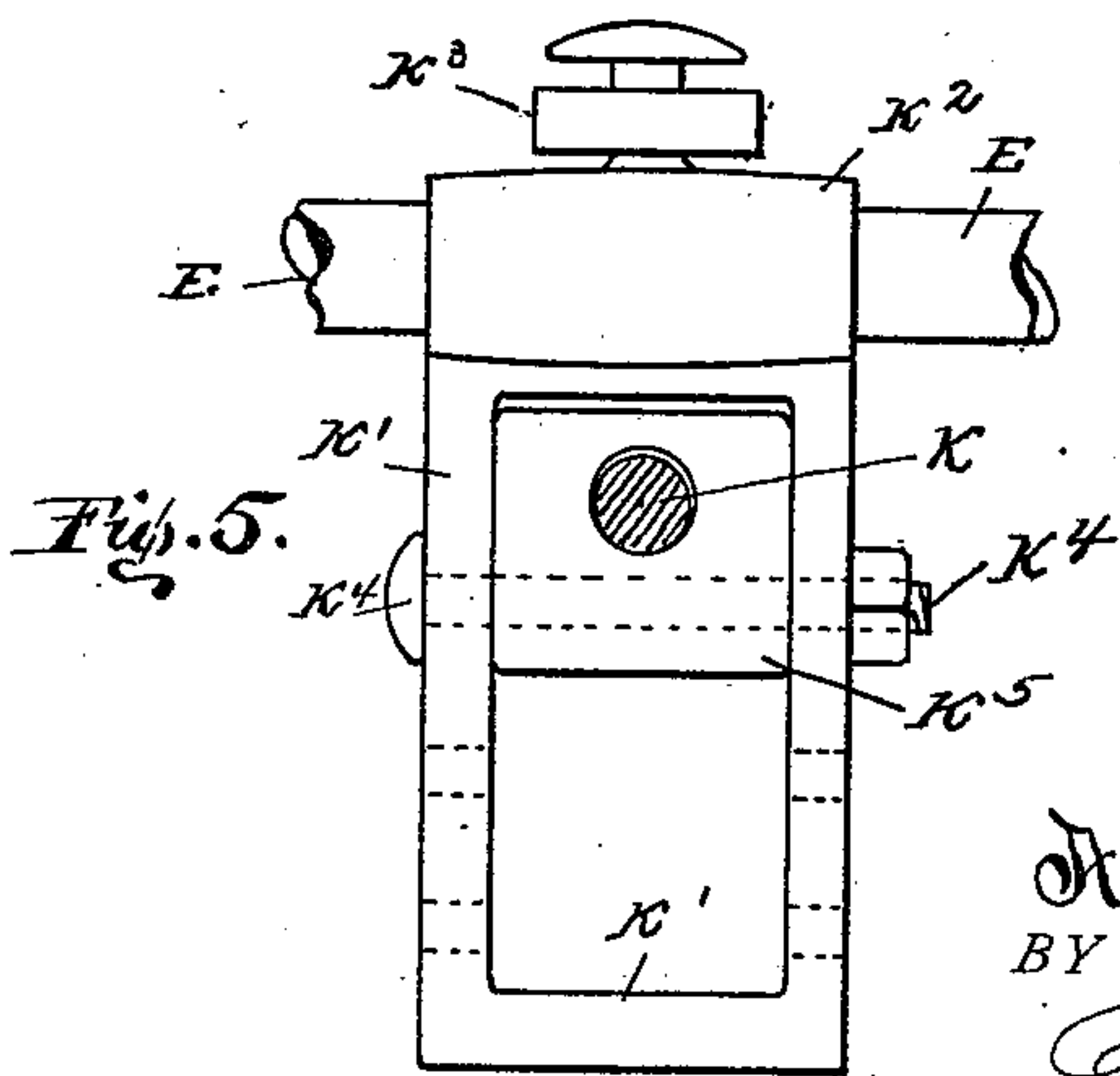


Fig. 5.

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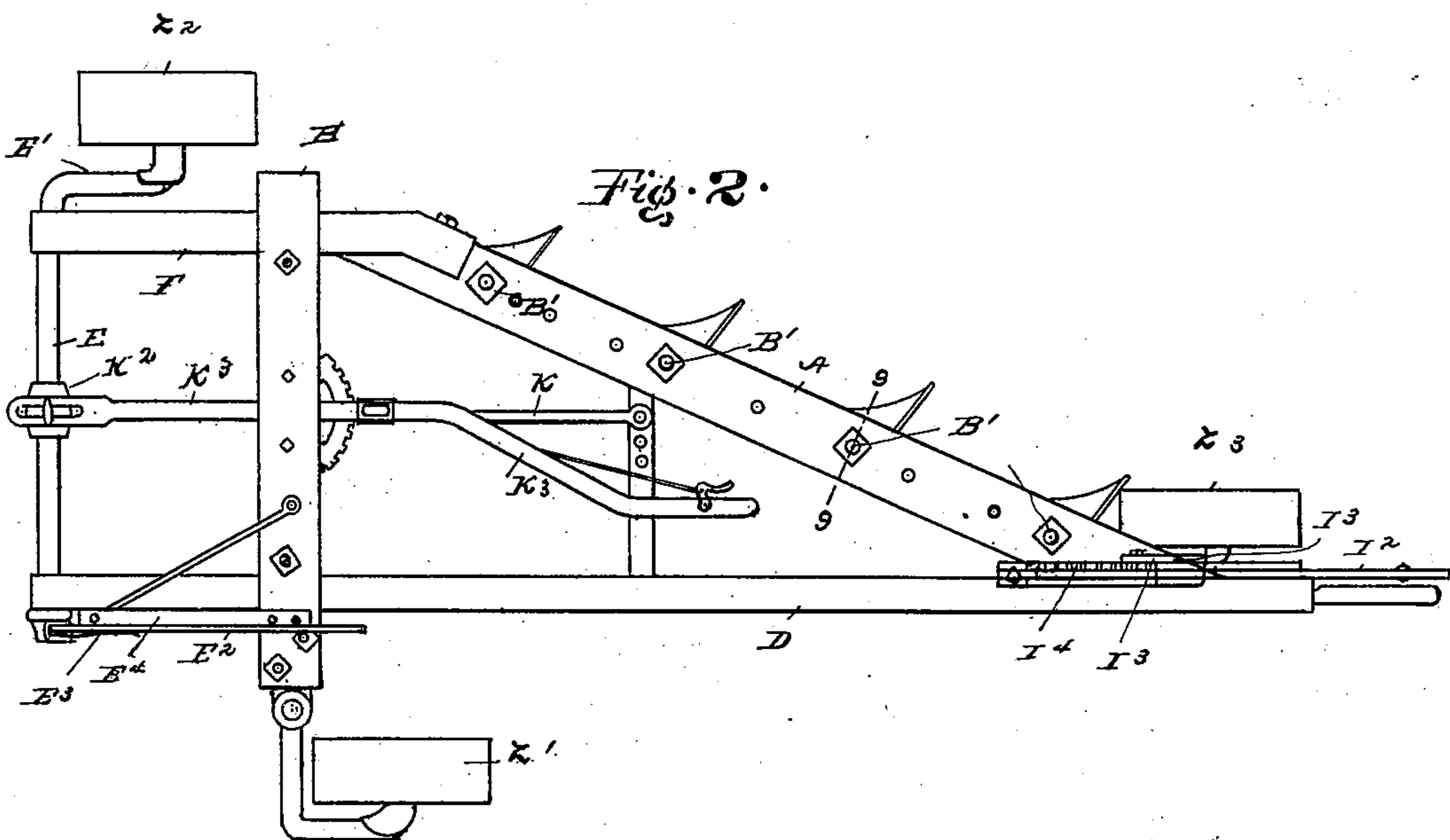
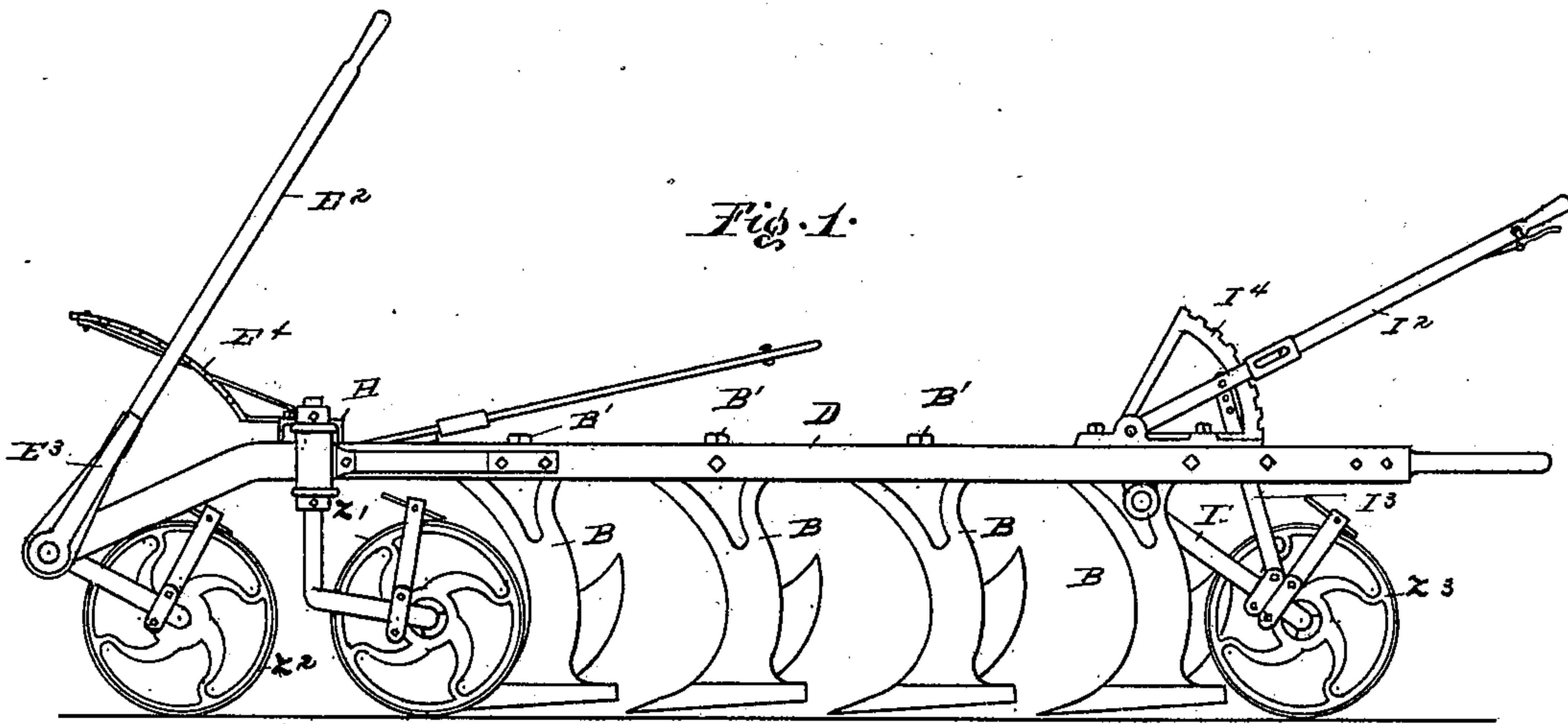
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2 Sheets—Sheet 1.



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UNITED STATES PATENT OFFICE.

ALPHONSO V. WILBUR, OF STOCKTON, CALIFORNIA.

PLOW.

SPECIFICATION forming part of Letters Patent No. 652,871, dated July 3, 1900.

Application filed October 10, 1899. Serial No. 733,196. (No model.)

To all whom it may concern:

Be it known that I, ALPHONSO V. WILBUR, a citizen of the United States, residing at No. 361 Eldorado street, Stockton, in the county of San Joaquin and State of California, 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 said invention, such as will enable others skilled in the art to which it most nearly appertains to make, use, and practice the same.

This invention relates to improvements in plows, and more particularly to gang-plows. In the drawings, Figure 1 is a side elevation of a plow constructed in accordance with this invention. Fig. 2 is a plan view of the same. Fig. 3 is a cross-section of the frame, taken on the line X X of Fig. 4. Fig. 4 is a plan view of the beams constituting the frame, the parts being separated. Fig. 5 is a detail view of the preferred form of clevis-block. Fig. 6 is a detail view of an alternative form of clevis-block. Fig. 7 is a detail view in section, taken on the line Y Y of Fig. 4, looking toward the rear. Fig. 8 is a detail view in section, taken on the line Z Z of Fig. 4, looking toward the front. Fig. 9 is a detail view in section on the line 9 9 of Fig. 2.

To facilitate the description of the invention with reference to the drawings, we will use the letter A to designate the plow-beam or beam upon which the plow-standards are carried. This is formed from channel-steel, the channel being turned downward. The heads of the plow-standards B are shaped to fit within the channel snugly between the flanges thereof and are each provided with a single perforation to receive the bolt B'. By this construction the plow-standards may be quickly and easily adjusted and secured upon the beam A. This beam is provided with several series of perforations, in which the bolts B' are placed when a greater less number of plows are used. The adjustments of the plows are for eight-inch, ten-inch, and twelve-inch furrows. The arrangement of the three perforations in the forward end of the beam regulates the adjustment of the forward plow with relation to the forward furrow-wheel Z², which is intended to track in the furrow already cut. From some of these

perforations the remaining perforations are spaced along the beam to produce the proper separation in the line of operation of the plows to make the furrows above mentioned.

At the rear end the beam A is secured by proper corner irons or brackets to the land-side-beam D, which is formed from channel-steel and is mounted so that the flanges extend horizontally to infold the end of the beam A. The land-beam D extends on a line parallel with the furrows. At the forward end it is bent so that the forward extremity is depressed to receive the draft-bar E at the approximately-correct height. Attached to the forward end of the plow-beam is the short beam F, which is of similar dimensions in cross-section to the beam D. The short beam F is bent to depress its forward extremity similarly to the beam D. The beams D and F are perforated at their forward extremity to receive the draft-bar E. The draft-bar is provided with a clevis through which the hitching-rod K extends. It consists in a dependent yoke K', extended from the loose sleeve K², which is longitudinally perforated to fit loosely on the draft-bar E to slide along the same. The sleeve K² and the lever K³ and their various connections are described in the patent granted to me on the 10th day of August, 1899, No. 617,377, and for a particular description of which construction reference is here made. The yoke K' is provided with a series of perforations to receive a bolt K⁴. The bolt K⁴ supports in position the clevis-block K⁵. The clevis-block K⁵ has a perforation through which the hitching-rod K extends. By withdrawing the bolt K⁴ from the block K⁵ the block may be shifted, with the effect that the hitching-rod is raised or lowered, thereby changing the shoulder draft or lifting strain.

An alternative construction of the clevis is sometimes used by me, as shown at Fig. 6 of drawings. In this construction the beams D and F are each provided at their forward extremity with a clevis G. Each clevis has a shank G', which fits snugly between the flanges of its respective beam and is provided with a head G², which has a vertical extension and is provided with three perforations G³, through which is passed the draft-bar E. Each clevis is secured to the beam by a single

bolt, which draws the shank G' firmly between the flanges of the beam. The draft-bar is supported at each end in a perforation of one of the clevises. By means of this construction the shoulder draft or lifting strain of the plow-frame may be varied by withdrawing the draft-bar from any two perforations—*i.e.*, from one perforation in each clevis—and inserting it in any other two, higher or lower, as the case may be.

Just back of the bend in the beams D and F they are connected by the cross-brace H , which is extended beyond the landside-beam D to carry the journal-box for the vertical extension of the axle of the caster-wheel Z' . This journal-box is provided with an extension or lug, which is bolted to the end of the brace H .

The plow-frame is carried on three wheels Z' Z^2 Z^3 . The first-mentioned wheel, Z' , is mounted on a bent axle having a vertical extension which is mounted on a journal-box, so that the said wheel may act as a caster. The remaining wheels, Z^2 and Z^3 , are mounted on the ends of bent inclined arms or axles, which are pivotally mounted on the frame, so that the said wheels may be raised or lowered, and thereby lower or raise the plow-beam A and plows connected thereto. The inclined arm E' and the axle of the wheel Z^2 are formed from the draft-bar E or by bending the same rod constituting the said bar. At the farther or land side the draft-bar is provided with a lever E^2 , to which it is secured firmly. The lever E^2 is provided with a spring-latch E^3 , which engages the serrations or teeth in the sector E^4 and is locked in position thereby. The particular construction of this lever is set forth in the patent above referred to. The wheel Z^3 is mounted on the bent end of the arm I , which is also bent at the end removed from the wheel to enter a journal-box bolted to the frame. This wheel is raised and lowered by the lever I^2 , to which it is connected by a rod I^3 . The lever is pro-

vided with a latch, by which it is locked in position upon the quadrant I^4 when the wheel is raised or lowered.

Having thus described this invention, what is claimed is—

1. In a gang-plow the combination with a plow-beam having flanges turned toward the ground and having suitable perforations for fastening-bolts extended through the web of the beam; of a landside-beam having flanges horizontally extended to infold the rear end of the said plow-beam and depressed in front to receive the draft-bar; a short beam having flanges turned horizontally to infold the forward end of the said plow-beam and depressed in front to aline with the forward end of the said landside-beam to receive the draft-bar; suitable fastenings to secure the said beams together; and a draft-bar to extend between and mounted in the depressed ends of the said landside and short beams, substantially as described.

2. In a gang-plow the combination with a plow-beam adapted to receive and hold plow-standards; of a landside-beam attached to the rear end of the plow-beam and bent to depress the forward end to the desired height to receive the draft-hitch; a short beam attached to the forward end of the plow-beam and bent to depress the forward end to aline with the forward end of the landside-beam; clevises having a shank to fit between the flanges of the said land and short beam and provided with a head having perforations to receive the draft-bar at varying heights above the ground; and a draft-bar adapted to be inserted in the perforations in the heads of the said clevises substantially as described.

In testimony whereof I have hereunto set my hand this 15th day of September, 1899.

ALPHONSO V. WILBUR.

Witnesses:

E. F. MURDOCK,
G. W. MARSH.