

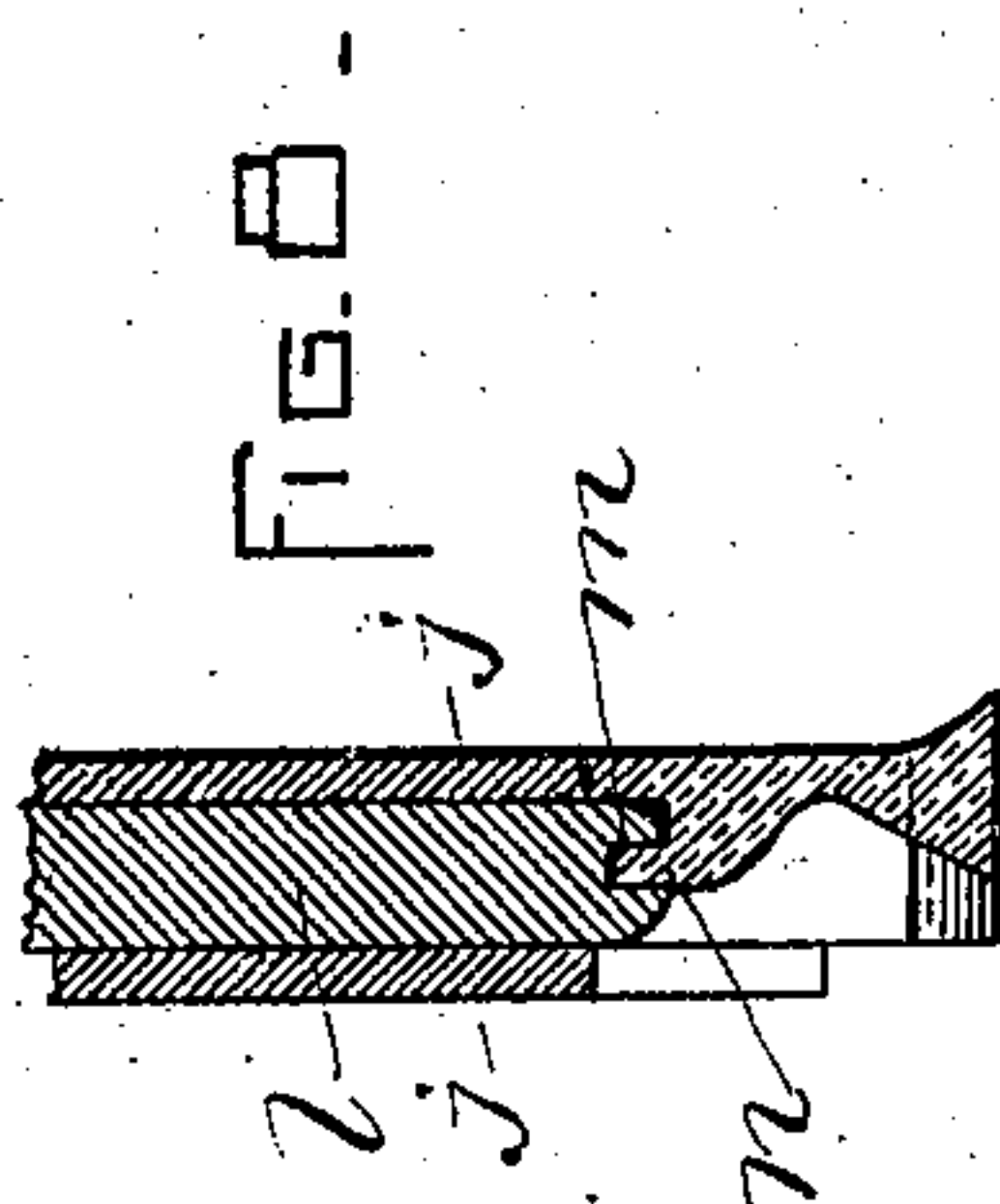
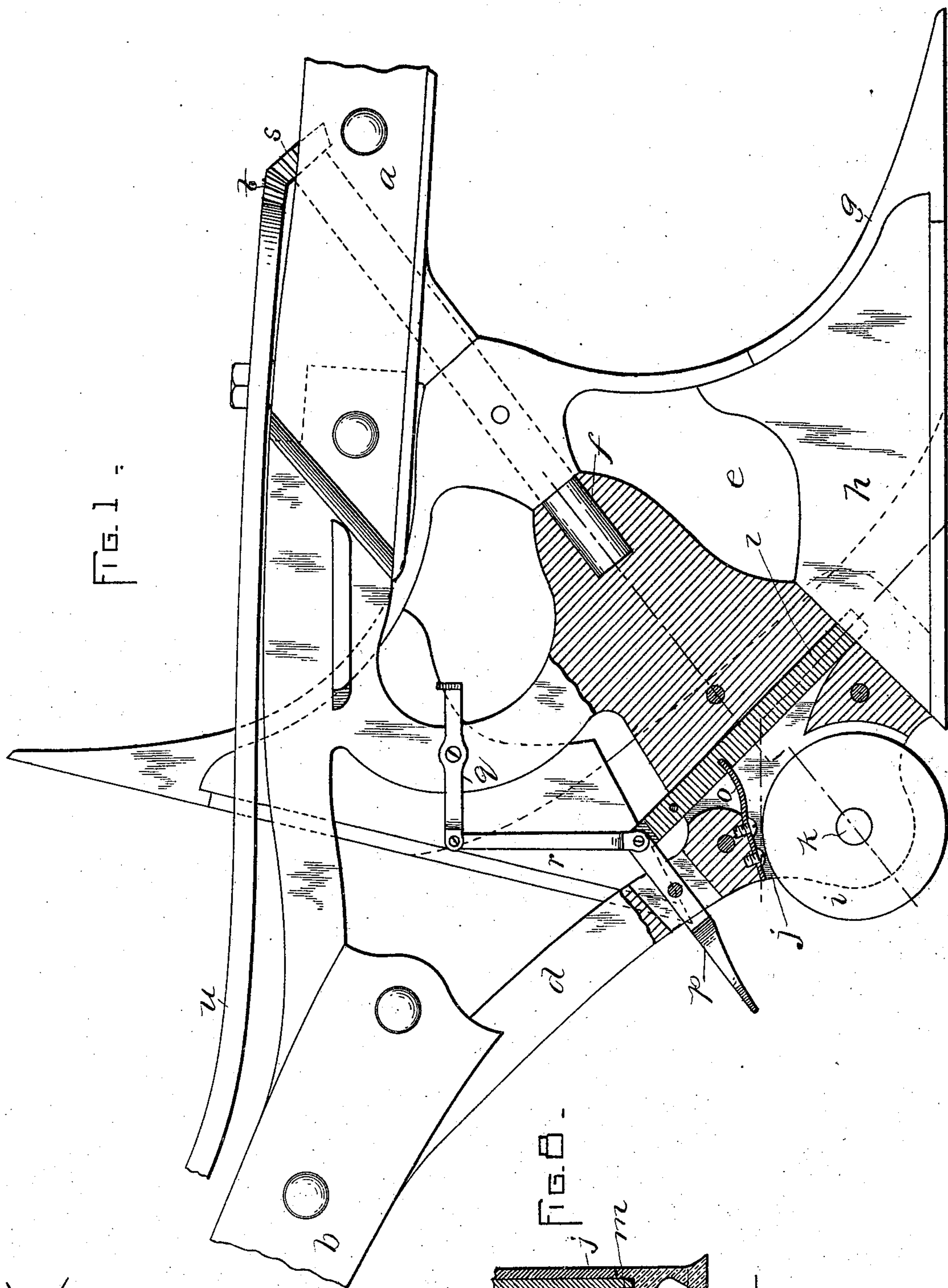
(No Model.)

2 Sheets—Sheet 1.

H. O. CHENEY.  
PLOW.

No. 502,877.

Patented Aug. 8, 1893.



WITNESSES:  
*W. W. Jackson*  
*H. S. M. Leedy*

INVENTOR:  
*H. O. Cheney.*  
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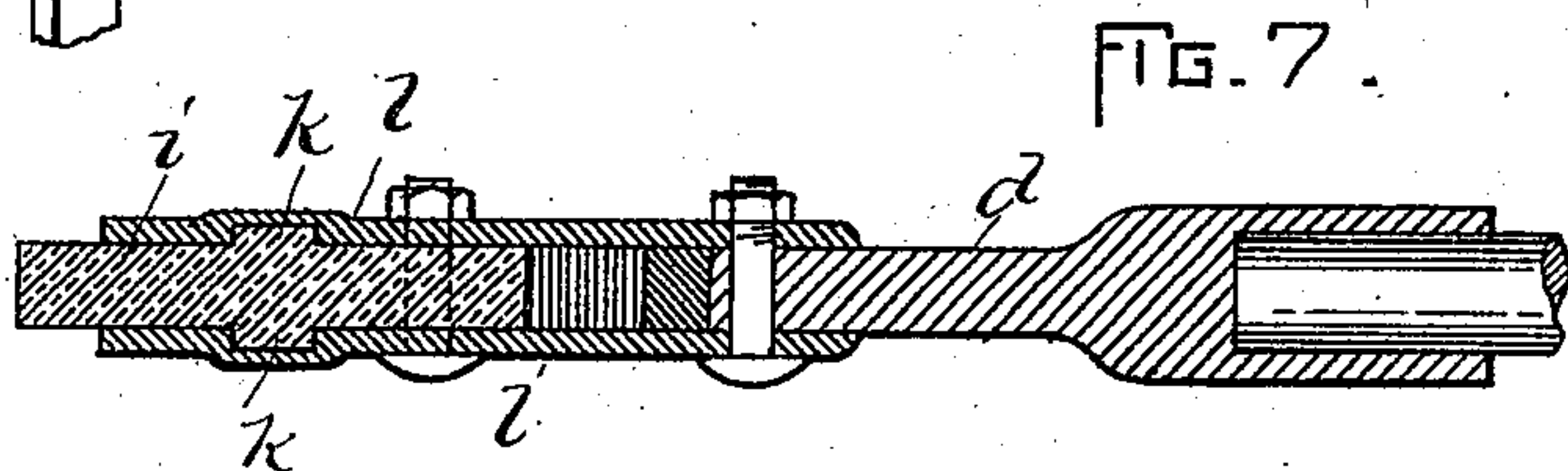
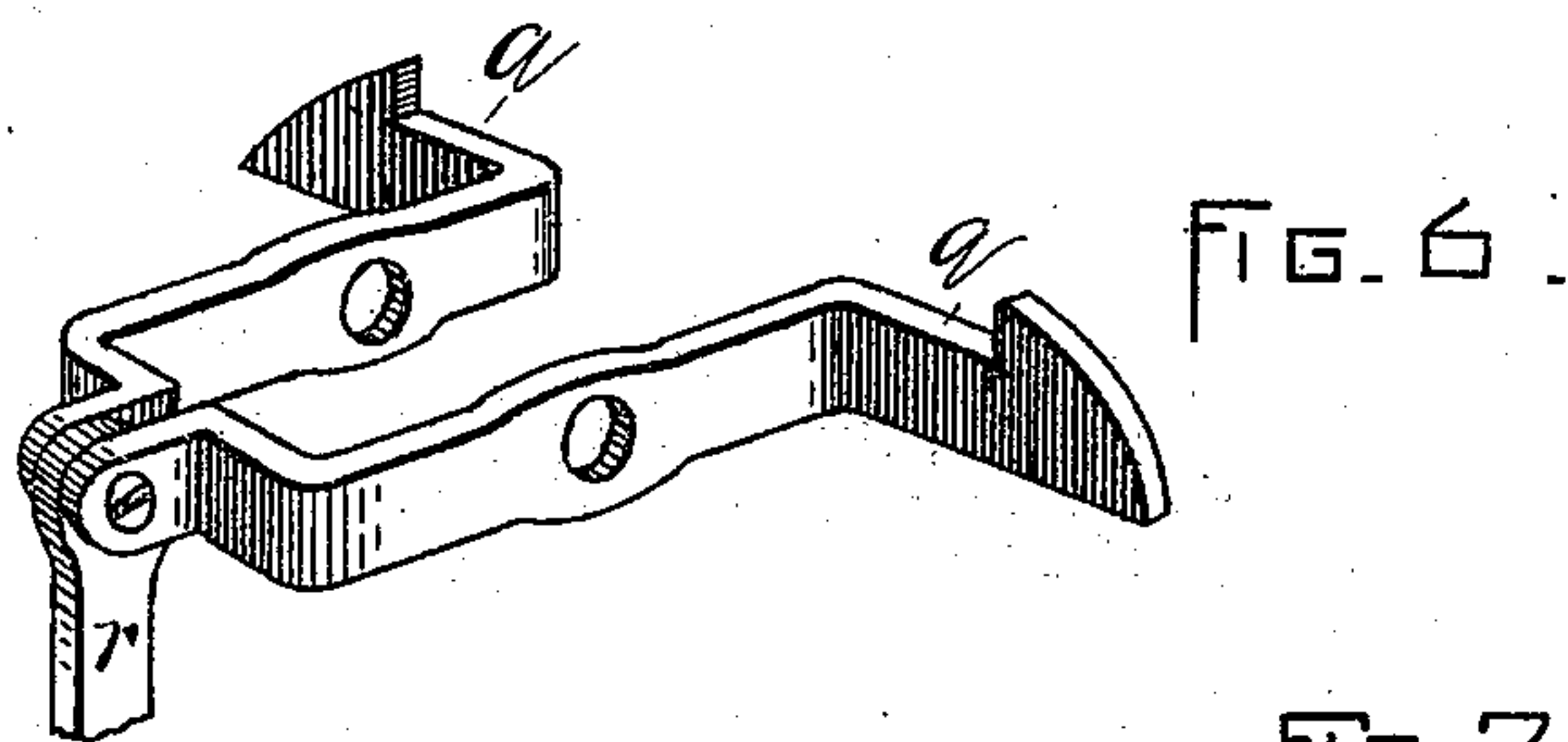
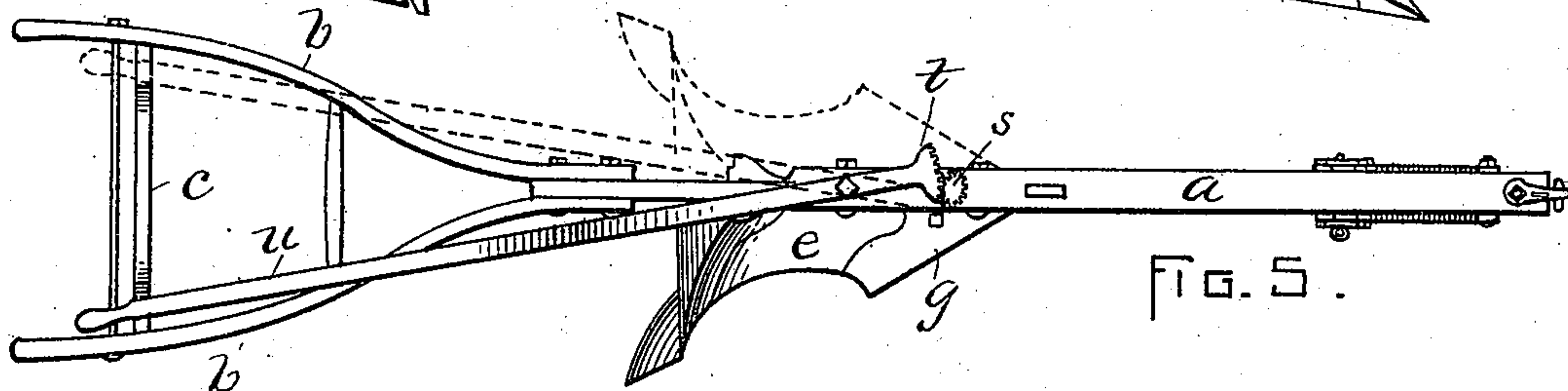
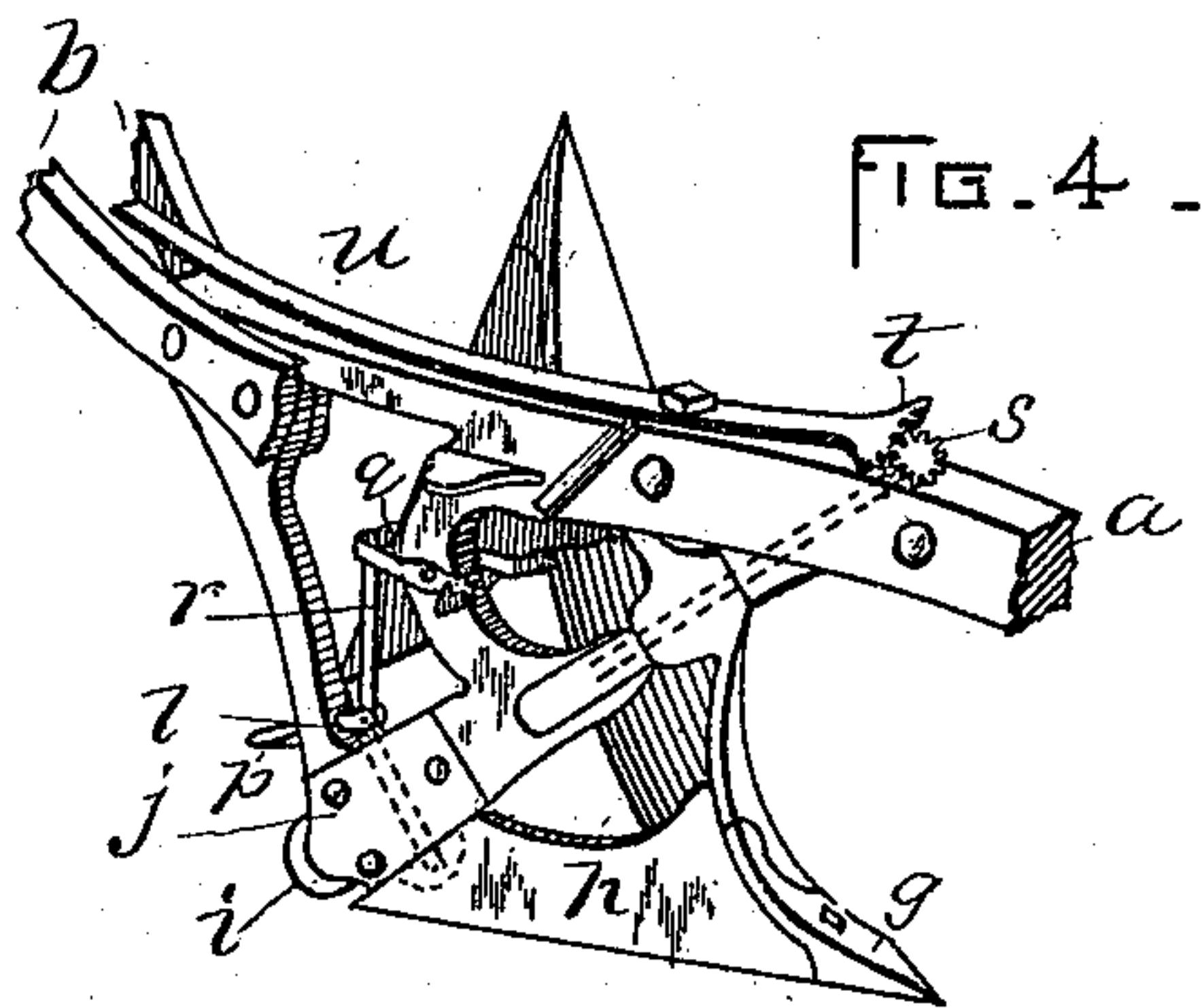
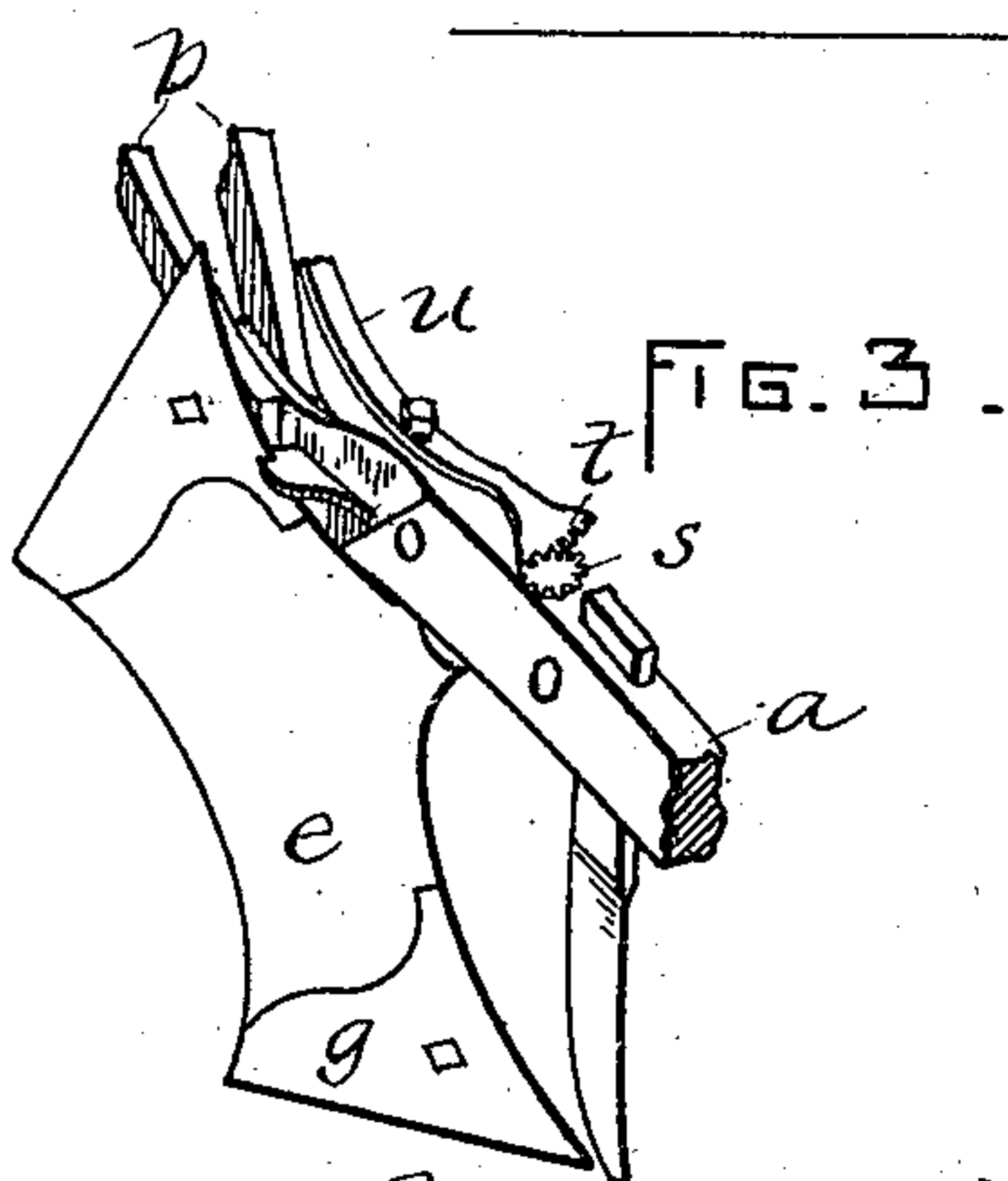
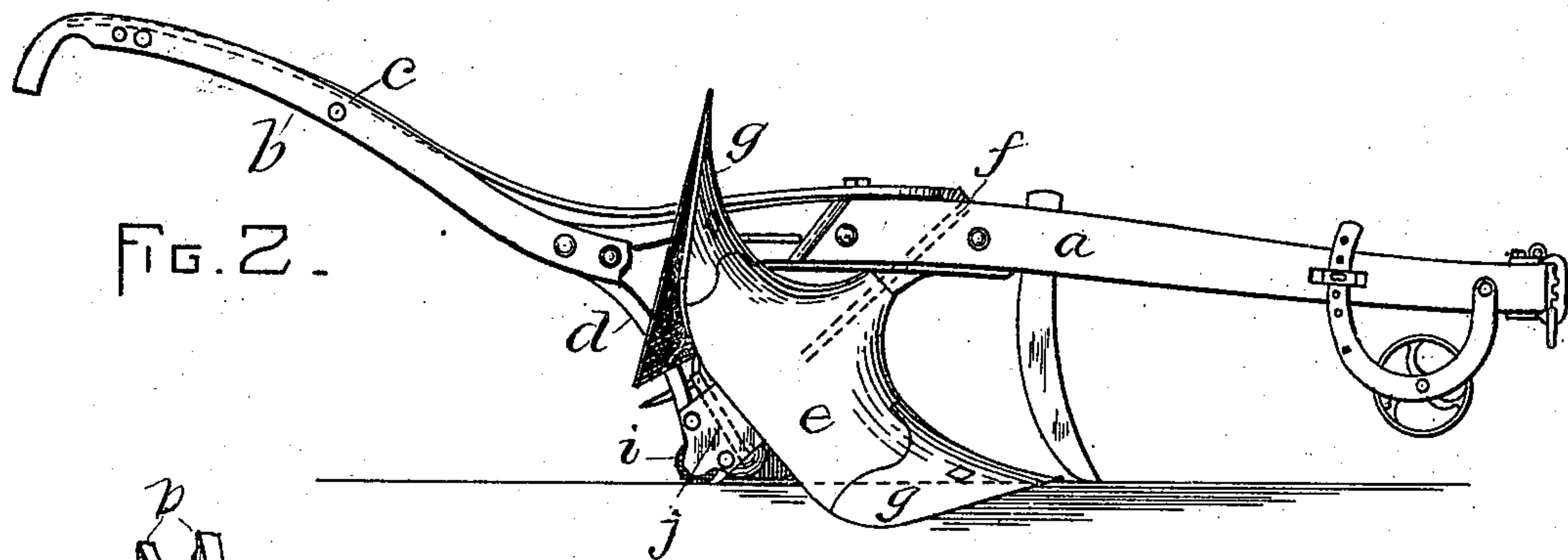
(No Model.)

2 Sheets—Sheet 2.

H. O. CHENEY.  
PLOW.

No. 502,877.

Patented Aug. 8, 1893.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

HENRY O. CHENEY, OF HOPKINTON, ASSIGNOR OF ONE-THIRD TO CHARLES F. PIKE, OF WOODVILLE, MASSACHUSETTS.

## PLOW.

SPECIFICATION forming part of Letters Patent No. 502,877, dated August 8, 1893.

Application filed October 14, 1892. Serial No. 448,829. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY O. CHENEY, of Hopkinton, in the county of Middlesex and State of Massachusetts, have invented certain  
5 new and useful Improvements in Plows, of which the following is a specification.

This invention has special relation to that class or kind of plows which is adapted to have the furrow-turning means reversed, so  
10 that the plow may be traversed back and forth, turning all the furrows in one direction, and avoiding so called "open furrows."

It is the object of the invention to provide such improvements in swivel or reversible  
15 plows as will enable the same to be quickly and easily reversed, be readily taken to and from the field, to be easily turned at the end of a furrow, to be made to at once meet an emergency occasioned by the breakage of a  
20 point or share, and to possess other advantages and overcome other objections of greater or less importance, as will more fully appear hereinafter.

To these ends the invention consists of the  
25 improvements which I will now proceed to describe and claim, reference being had to the annexed drawings and to the letters marked thereon, the same letters designating the same parts or features, as the case may be, wherever they occur.

Of the drawings—Figure 1, is a side view, partially in section, and drawn to an enlarged scale of the principal parts of the improved  
35 plow constituting the invention, the land-side facing the observer. Fig. 2, is an opposite side view of the improved plow, the representation being upon a reduced scale. Fig. 3, is a perspective view of the principal parts of the improvement, from the mold-board  
40 side. Fig. 4, is a similar view from the land-side. Fig. 5, is a top plan view of the improved plow. Fig. 6, is a perspective view of the latch for holding the point and mold-board in operative position. Fig. 7, is a sectional  
45 view taken on the line 7, 7 of Fig. 1. Fig. 8 is a sectional view taken on the line 8 8 of Fig. 1.

In the drawings, *a* designates the beam; *b*, the handles; *c*, the rounds connecting and  
50 bracing the handles; and *d*, the frame with

which the beam, handles and other parts of the plow are rigidly connected.

*e*, designates the mold-board which is made double, and which is at its center swiveled upon a bolt *f*, supported at its ends in the  
55 beam and plow frame, and extending at an angle of about forty-five degrees to the beam, so that when one of the double parts is in operative position the other will extend upon the same side of the beam out of the way. 60 Each of the double parts is provided with a removable point or share *g*, as usual.

*h*, designates the land-sides, one being connected with each mold-board, so that the plow is equipped with double complete furrow-  
65 turning means.

In the bottom of the frame *d*, at the heel of the land-side there is a wheel *i*, arranged between two plates *j*, bolted to the frame. See Fig. 7. Bosses or journal studs *k*, may  
70 be cast or formed integral with the wheel, and arranged to operate in depressions or recesses formed on the inner faces of the plate *j*, as shown. With these means, by bearing down slightly on the handles, the whole weight of  
75 the plow may be brought upon the wheel *i*, so that it may be taken to and from the field or from other place to place with the greatest ease and readiness. Besides this the wheel at the land-side affords means for the ready  
80 turning of the plow, and for effecting the reversal of the furrow-turning devices.

*l*, designates a latch-bolt or bar arranged to slide in the frame above the wheel *i*, and at substantially a right angle to the bolt *f*, which  
85 bar is notched at its lower end as at *m* (see Fig. 8), so as to engage a catch *n*, provided on the inner face of each land-side, at the heel thereof, the sides of the lower end of the latch-bolt being beveled, as shown, so as to permit  
90 the bolt to snap over the catch when the latter is brought thereagainst with sufficient force.

*o*, is a spring secured to the frame and connected with the latch-bolt in such manner as  
95 to operate with a tendency of forcing the said bolt downward.

*p* is a lever fulcrumed in the frame and provided on its outer end with a plate or other means which will permit the toe of the foot of  
100



the plowman to be placed thereon in order to depress the said end of the lever and raise its inner end and the latch-bolt with which the inner end of the said lever is connected.

5  $q$ , is a double latch pivoted upon the frame and having its outer end connected through the medium of a pitman  $r$ , with the inner end of the lever  $p$ , and upper end of the latch-bolt  $l$ . The latches  $q$ , are beveled on their  
10 outer ends, and are so arranged as that when the plow is reversed, the land-side of the part thrown out of action, will at its upper edge engage the beveled part of the latch, depress the same, and allow the offset part of the  
15 latch to catch on the inner side of the land-side, and with the latch-bolt engaging the land-side of the other part of the plow, hold the same in operative position. The upper end of the bolt  $f$  is provided with a pinion  $s$   
20 or it may be a segmental gear which is engaged by a toothed segment  $t$  formed on the lower end of a lever  $u$  pivoted upon the beam of the plow. The upper end of the said lever  $u$  is provided with a handle which rests upon  
25 the upper round  $c$  which may be offset or notched near its ends so that the handle may be held in place when moved into engagement with the said offsets or notches. Supposing the plowman to have reached the  
30 end of a furrow, and that it is desired to reverse the plow, he may place the toe of his boot on the outer end of the lever  $p$  raise the latch-bolt  $l$  and lower the latch  $q$  so as to release the land-side and mold-boards, and then  
35 taking hold of the handle of the lever  $u$  he may shift said lever to the opposite side on the round  $c$ , reversing the plow through the medium of the bolt  $f$ , its gear  $s$  and the segment  $t$ , and when the parts swing around into  
40 place they will be automatically engaged by the latch-bolt and latch and held in place as has already been described. By pressing down slightly on the handles the plow can be balanced on the wheel at the heel of the land-  
45 side and the plow reversed and turned with great ease and convenience.

It will be noted further that the invention affords a swivel or reversible plow which may be made light so as to be employed with one  
50 horse; that each plow, by being provided with a land-side can be very easily held and

guided; that the mold-board can be formed so as to give any desired turn to the furrow-slice; that in case of breakage of a point or share the work may be immediately continued 55 by the use of the other plow; and that the construction, in view of the functions performed, is simple, and not liable to get out of order.

I claim—

1. A reversible plow comprising in its construction a beam, handles, and a frame all rigidly secured together; a rotatable bolt supported by the frame and beam; a double mold-board fixed on said bolt; a pinion fixed on the bolt; and a lever fulcrumed on the beam and 65 having a segment at its end in mesh with said pinion, the opposite end of said lever arranged to be vibrated between the handles of the plow, whereby the mold-board is reversed in the manner described. 70

2. The combination, with the double furrow turning means, each provided with a land-side having a catch  $n$ , of a spring-pressed latch-bolt or bar, notched at its lower end to engage the said catch, and beveled opposite its 75 notched point, as described.

3. The combination, with the double furrow turning means, each provided with a land-side having a catch  $n$ , of a spring-pressed latch-bolt or bar, notched at its lower end to engage the said catch, and beveled opposite its 80 notched point, a lever fulcrumed on the frame, engaged at its inner end with said bolt and adapted at its outer end to have the foot of the plowman placed thereon to depress the 85 said outer end and raise the inner end, as described.

4. The combination, with the double furrow turning means, of the plates  $j$  bolted to the frame at the heel of the land-side and provided with depressions, and the wheel provided with bosses arranged in said depressions between the said plates, as described. 90

In testimony whereof I have signed my name to this specification, in the presence of 95 two subscribing witnesses, this 21st day of September, A. D. 1892.

HENRY O. CHENEY.

Witnesses:

H. A. GREELEY,  
J. J. WHITNEY.