

(No Model.)

M. B. SUTLEY.  
CLEARING ATTACHMENT FOR PLOWS.

No. 427,932.

Patented May 13, 1890.

FIG. I.

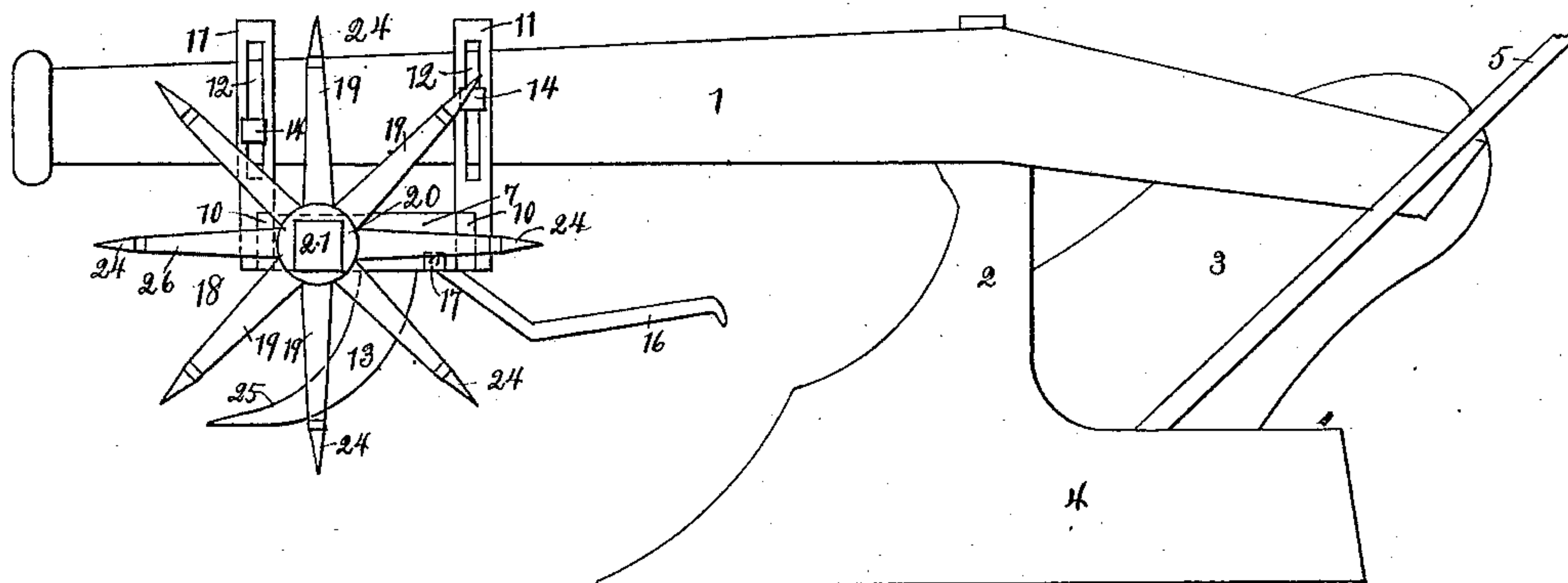


FIG. II.

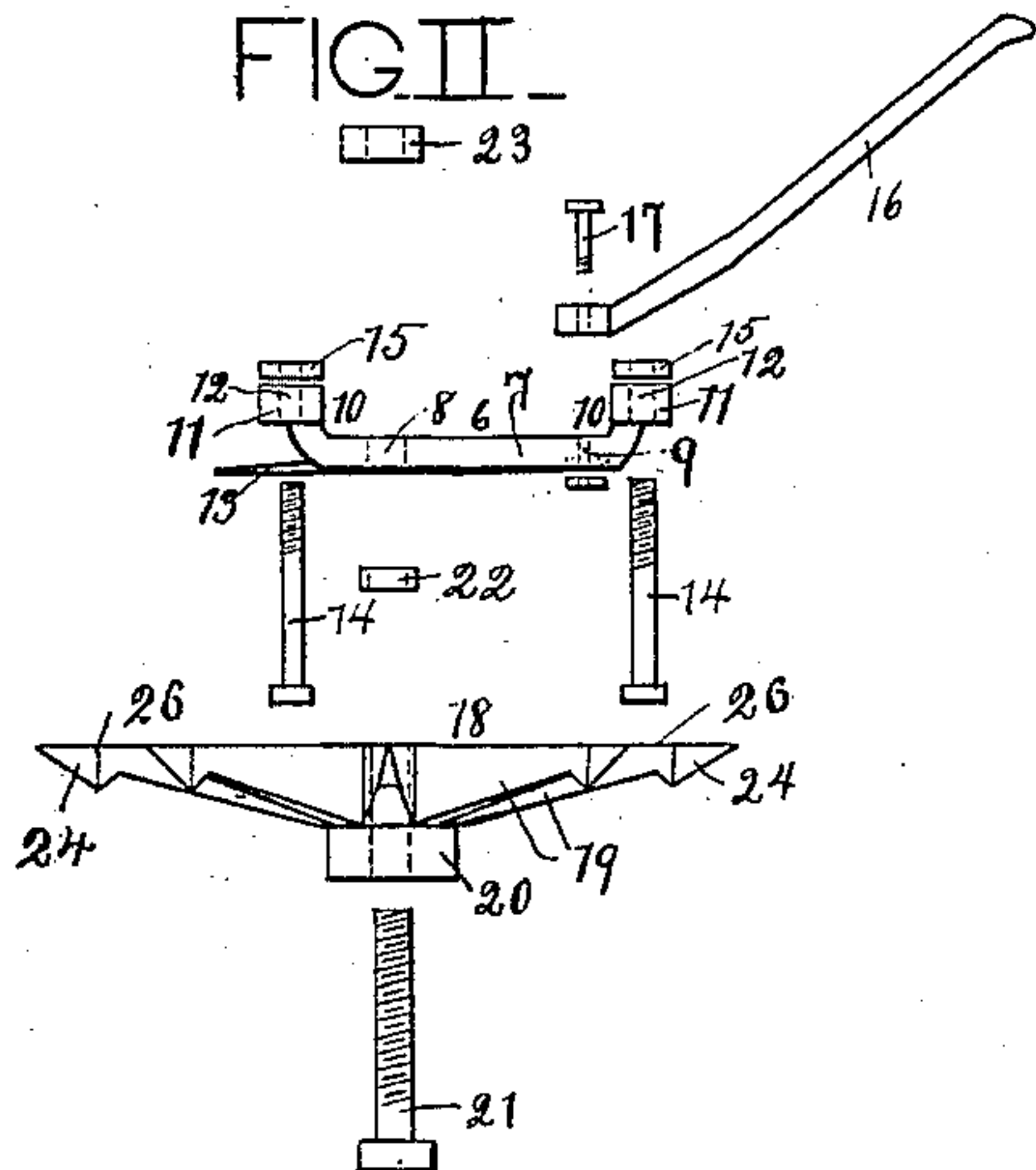


FIG. III.

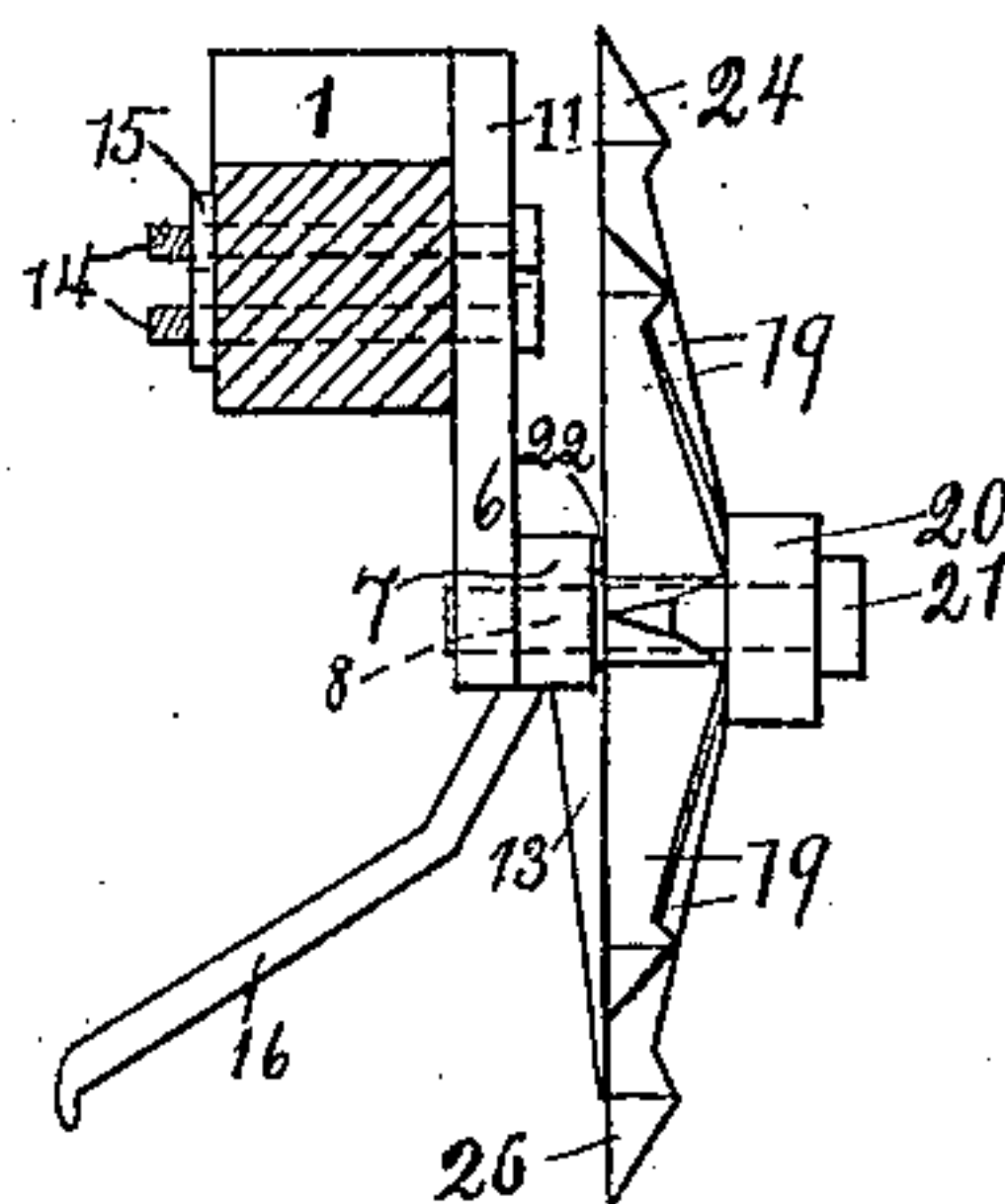


FIG. IV.

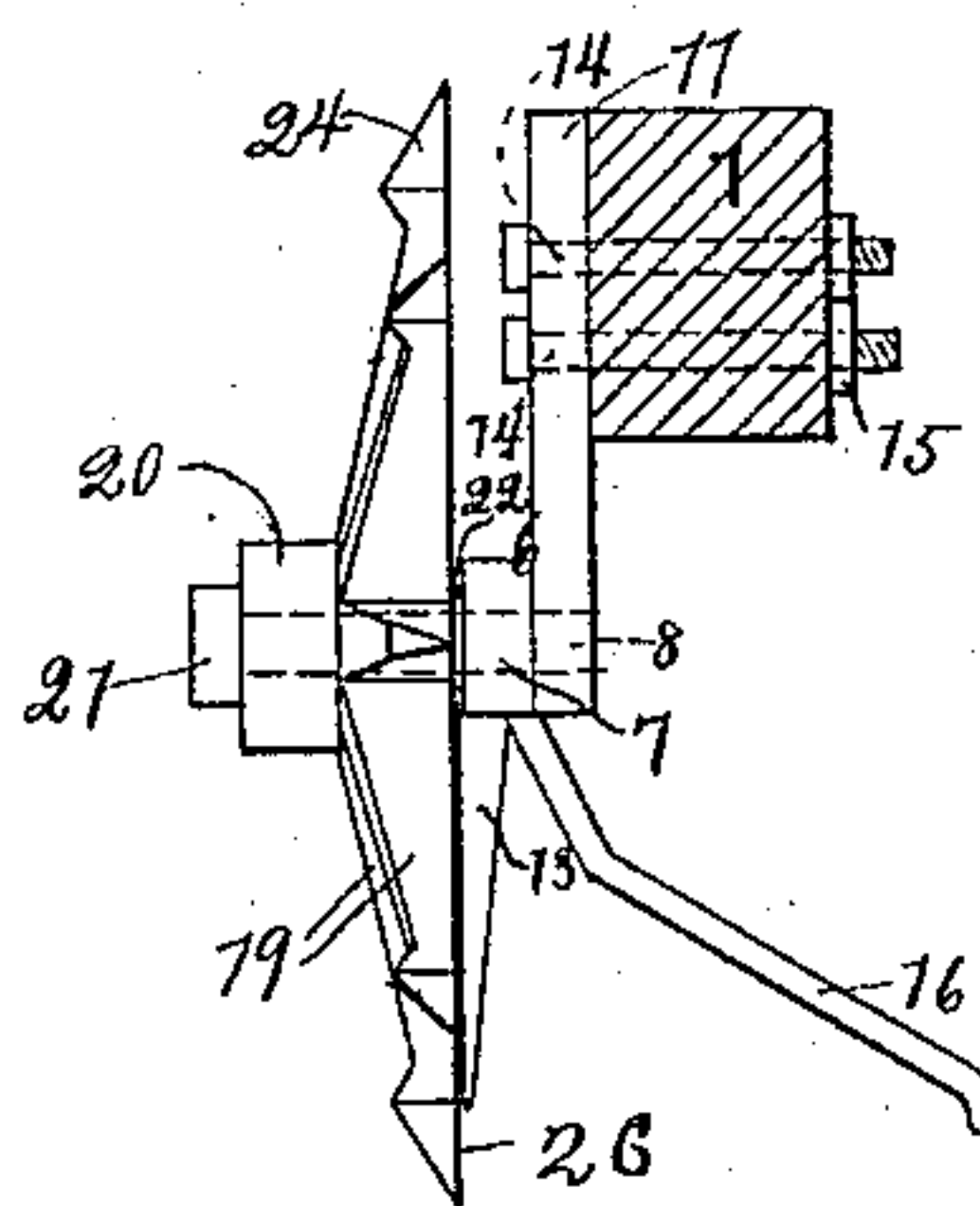


FIG. V.

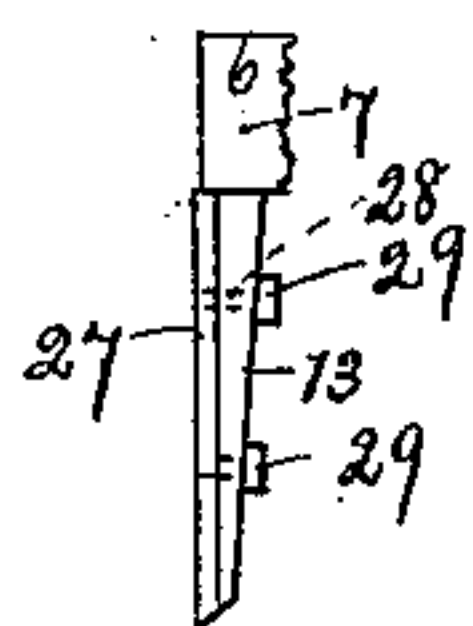
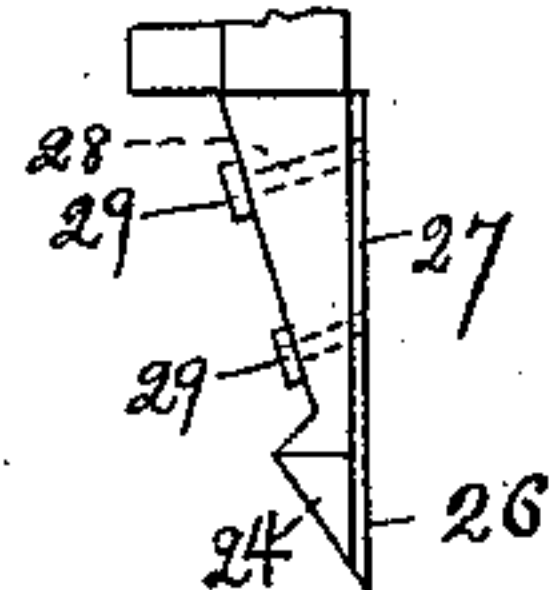


FIG. VI.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## CLEARING ATTACHMENT FOR PLOWS.

SPECIFICATION forming part of Letters Patent No. 427,932, dated May 13, 1890.

Application filed September 16, 1889. Serial No. 324,042. (No model.)

*To all whom it may concern:*

Be it known that I, MELVIN BARKER SUTLEY, a citizen of the United States, and a resident of Rockland, in the county of Venango and State of Pennsylvania, have invented a new and useful Improvement in Clearing Attachments for Plows, of which the following is a specification.

The object of my invention is to provide improved means for the purpose of plowing down clover, weeds, &c., by cutting away such obstructions in advance of the plow.

My invention relates to an improvement on those clearing attachments for plows which comprise a combined colter-frame having a curved knife and a wheel having knife-spokes; and my improvement consists in the construction hereinafter described, and pointed out in the claims.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure I is a side elevation of a plow, looking at the land side, showing my clearing attachment secured to the beam thereof in desired position. Fig. II is a top view of my clearing attachment, the parts being separated. Fig. III is a front elevation of the same, the parts being connected together and secured to the beam. Fig. IV is a rear elevation thereof. Fig. V is a detail view showing a colter-knife having a detachable blade or cutter. Fig. VI is a detail view showing a knife-spoke having a detachable blade or cutter.

1 is the beam, 2 is the standard, 3 is the share, 4 is the land side, and 5 is the handle, of a plow, adapted to receive my clearing attachment, which is secured to the beam 1 thereof.

6 is an adjustable colter-frame, formed with a horizontal part 7, having bolt-holes 8 and 9, inturned portions 10, with a pair of arms 11, extending upwardly from the inturned portions having bolt-slots 12, and with a pendent curved knife 13, connected to the horizontal part.

14 are bolts passed through the slots and beam and secured by nuts 15, by which means the adjustable colter-frame is rigidly

attached at desired height to the beam. To the horizontal part 7 is secured a drag-bar 16, by means of a bolt 17, inserted through the front end of the latter and riveted or screwed into the bolt-hole 9. This bar extends downward, rearward, and toward the furrow side for the purpose of throwing the clover, weeds, &c., into the furrow.

18 is a wheel, having knife-spokes 19 and hub or sleeve 20. This wheel is mounted on the outer end of a bolt 21, and secured in place thereon by means of a check-nut 22, the inner end of the bolt being passed through the bolt-hole 8 of the colter-frame and fastened by a nut 23. The check-nut provides means by which to regulate the distance between the wheel and the colter-frame, and also holds the wheel to its place, as the wheel must run just so close to the curved knife as is desirable or it will not cut, and if it runs too close it will bind. This provision for adjustment of the wheel is important, as the wear and tear can by this means be taken up. Each knife-spoke is formed tapering from the hub or sleeve to its outer end or point, where it is provided with a portion beveled toward the inner side of the wheel, presenting a flat face toward the side of the curved knife and forming an abrupt angular projection 24. The peculiar shape given to the projection makes it desirable for working in clover. The cutting-edge 25 of the curved knife and the cutting-edges 26 of the knife-spokes form shears for cutting the weeds in advance thereof. The re-enforced outer ends of the knife-spokes catch in the ground and cause the wheel to turn. When anything tough or hard gets between the cutting-edges, it slips up the curved knife-spokes toward the hub or sleeve of the wheel which gives it leverage.

I have shown in Figs. I, II, III, and IV the colter-frame and wheel of cast-steel, with cutting-edges formed integral therewith; but I may form the cutting-edges separate in the form of blades or cutters 27, having pins 28 passed through the supports therefor and secured by nuts 29, as shown in detail views, Figs. V and VI, where the curved knife and knife-spoke are formed of cast-iron, and the blades or cutters are of steel. The check-nut 22 on the bolt 21 between the colter-frame



and wheel is equal to the width of the shoulder 13.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. The combination of a colter-frame having a pendent curved knife, a wheel working in connection therewith having knife-spokes, and a drag-bar extending downward, rearward, and toward the furrow side, substantially as described.

2. The colter-frame constructed with a horizontal part having a bolt-hole, a pair of arms extending upwardly, having bolt-slots, and an integral pendent curved knife, substantially as described.

3. The combination of a colter-frame

formed in one piece, composed of a horizontal part having a bolt-hole, a pair of arms extending upwardly, having bolt-slots, and a pendent curved knife with a wheel having knife-spokes, substantially as described.

4. The combination of the colter-frame having a bolt-hole and a pendent curved knife, the wheel having hub or sleeve and knife-spokes, the bolt on which the wheel is mounted, the adjustable check-nut on the bolt between the hub or sleeve, and the horizontal part, and the nut for securing the parts together, substantially as described.

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Witnesses:

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