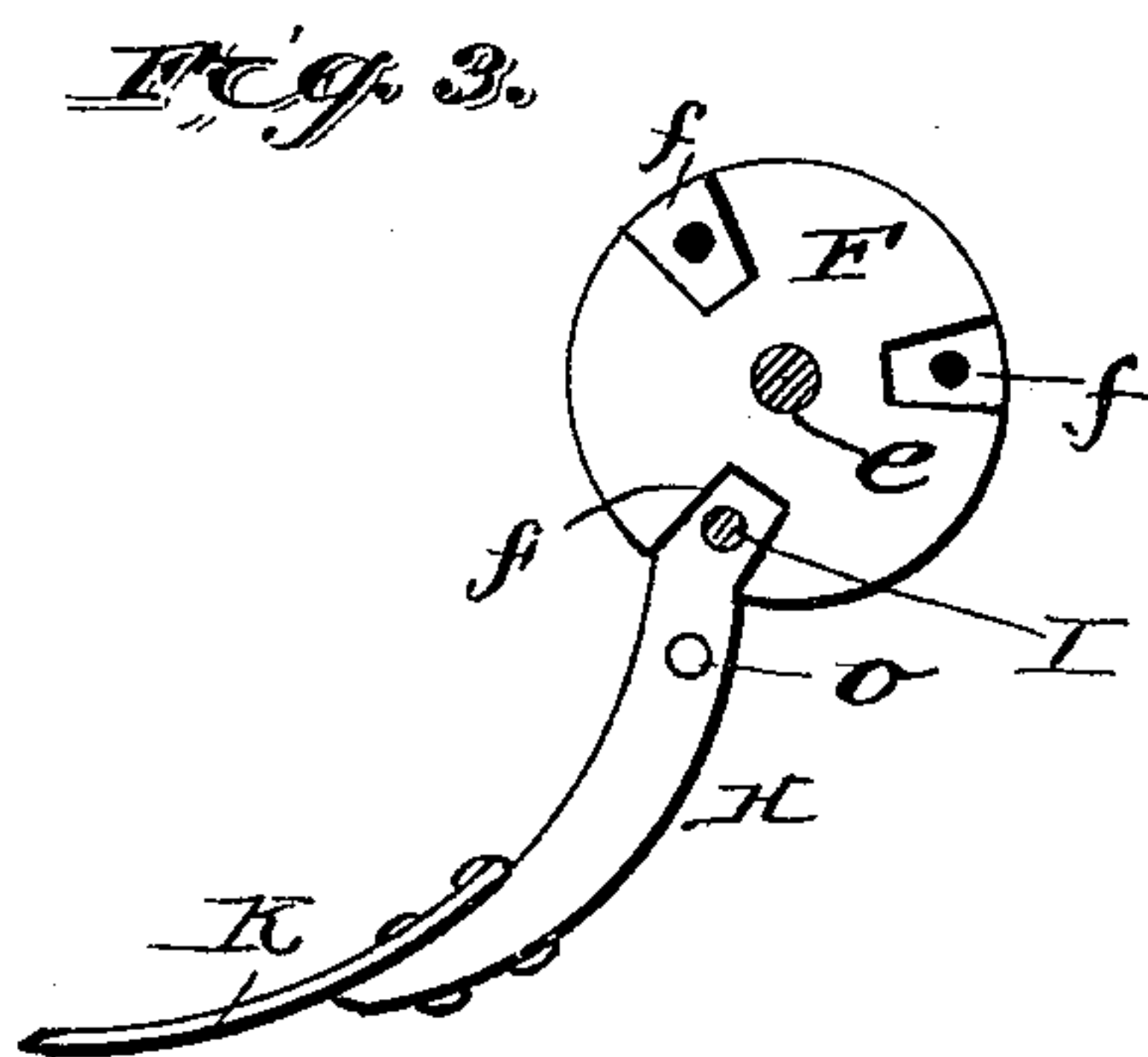
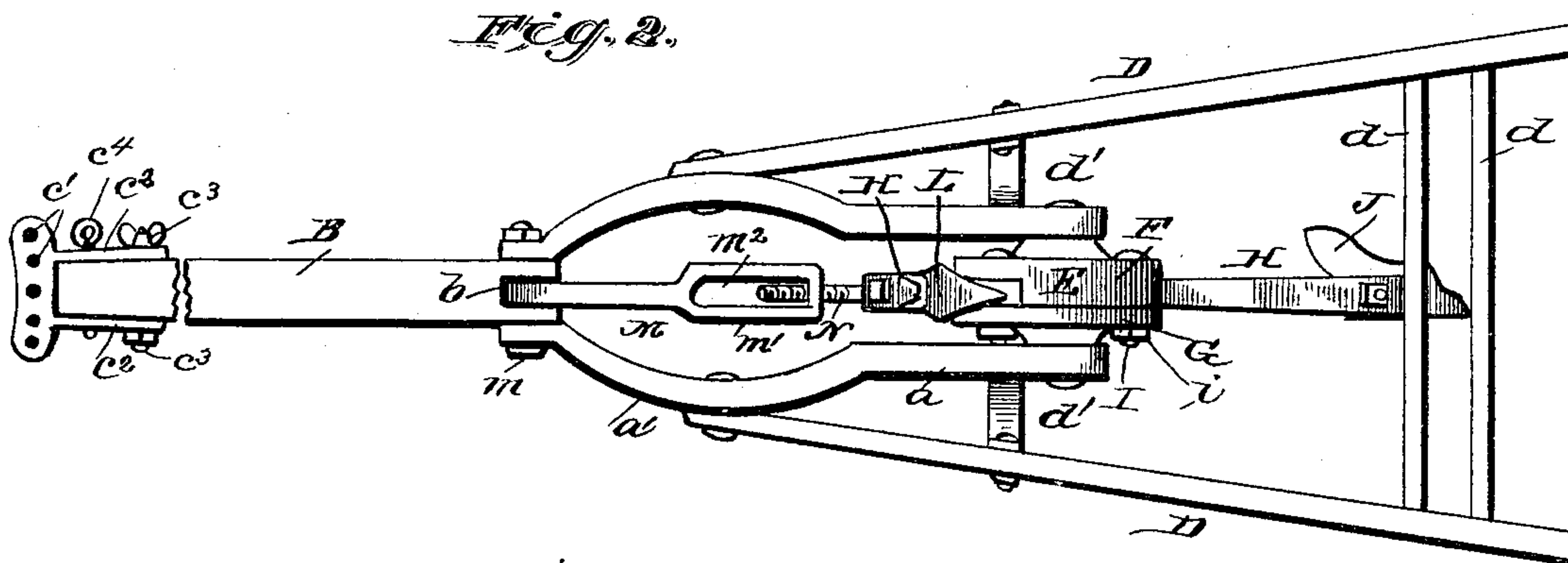
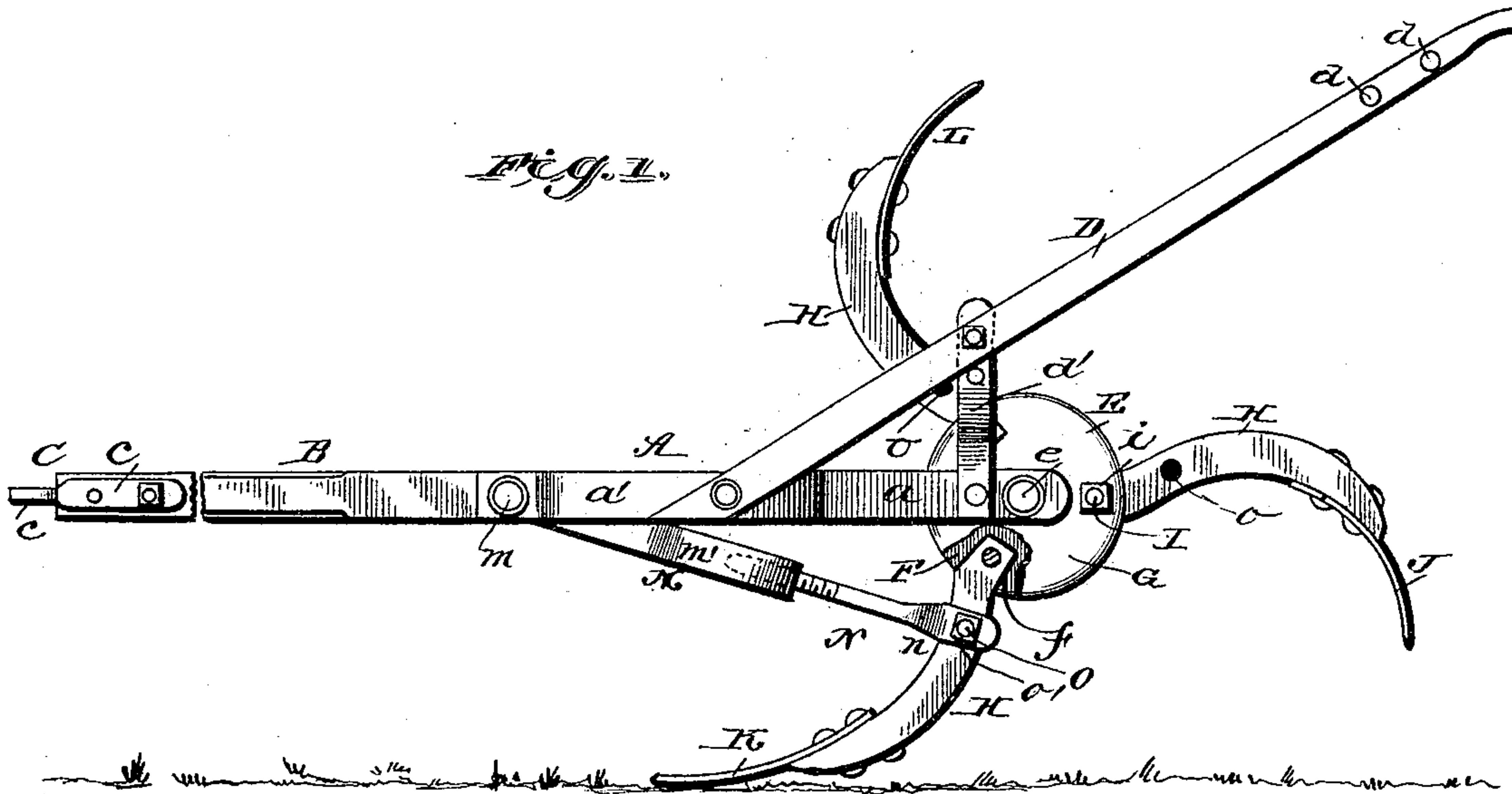


(No Model.)

W. H. H. SPRADLIN.  
PLOW AND CULTIVATOR.

No. 389,259.

Patented Sept. 11, 1888.



Witnesses,

*Jos. A. Ryan,*  
*E. J. Siggers,*

Inventor,

*William Henry H. Spradlin,*

By his Attorneys

*C. H. Howdell,*



# UNITED STATES PATENT OFFICE.

WILLIAM HENRY HARRISON SPRADLIN, OF SOUTH FORK, MISSOURI.

## PLOW AND CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 389,259, dated September 11, 1888.

Application filed May 5, 1888. Serial No. 272,937. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM HENRY HARRISON SPRADLIN, a citizen of the United States, residing at South Fork, in the county of Howell and State of Missouri, have invented new and useful Improvements in Plows and Cultivators, of which the following is a specification.

The invention relates to improvements in plows and cultivators; and it consists in the construction and novel combination of parts hereinafter described, illustrated in the accompanying drawings, and pointed out in the appended claim.

In the drawings, Figure 1 is a side view of a machine embodying the invention. Fig. 2 is a top plan view of the same. Fig. 3 is a detail view.

Referring to the drawings by letter, A designates the frame of the machine, composed of the parallel beams *a a*, having their front portions, *a'*, bowed out oppositely and the heel of the tongue B secured between their front ends, the said heel being provided with a deep longitudinal notch, *b*, in its end, for a purpose hereinafter apparent.

C is a clevis, having the front horizontal bar, *c*, resting against the front end of the tongue, slightly concave in front, and provided with the series of adjusting-openings *c'*.

*c<sup>2</sup> c<sup>2</sup>* are arms extending rearward from the bar *c* and resting on each side against the tongue, to which they are attached by the bolt *c<sup>3</sup>* and pin *c<sup>4</sup>*, which pass through suitable openings in the tongue and said arms, the bolt engaging a suitable nut on its threaded end.

D D are the handles, bolted at their lower front ends to the central parts of the outer surfaces of the bowed portion of the beams *a*, and extending thence rearward and upward. The handles are connected a suitable distance from their rear ends by the cross bars *d d*, and are supported by the braces *d'*, that connect them with the rear portions of the beams *a*.

E is a disk on a shaft *e*, journaled in bearings in the ends of the beams *a*. The said disk is composed of the two circular sections F and G, the former of which is thicker than the latter and provided on its inner or meeting surface with the equidistant inclined sockets *f* for the standards, hereinafter described, and preferably three in number. The section G is plain,

its inner or meeting surface completing the sockets.

H H are the standards of the plowshares or shovels, which standards are similar and preferably curved, each, when at its lowest point, curving downward and forward. The inner ends of the standards are inserted in the sockets *f*, and are provided with openings registering with similar transverse openings in the sections of the disk, through which openings pass the bolts I, having the nuts *i* on their threaded ends and binding the disk-sections and standards firmly together, so that the inner ends of the latter will not be loose in their sockets.

J, K, and L are the plowshares or shovels, firmly bolted to the front edges of the respective standards.

J is a turning-shovel to throw the earth on the planted grain.

K is a large double-edged share to plow between rows, and L is a smaller share to plow young crops. It is not intended to limit the invention to the particular plowshares or points described, the object being to secure different kinds of shares, serving different purposes, to the standards, no two of which shares are alike or perform similar duties.

M is a flat bar having its front end secured by a transverse bolt, *m*, in the notch *b* in the heel of the tongue and its rear end, *m'*, enlarged and provided with the vertical longitudinal slot *m<sup>2</sup>*, and N is a rod having its front end threaded and engaged in an opening in the rear end of the bar M, so that said end passes into the slot *m<sup>2</sup>*. The rear end, *n*, of said rod is flattened and bifurcated and fits upon the lowest standard H at a proper point, and a bolt, O, passes through an opening, *o*, in the standard and registering openings in the arms of the bifurcation and engages a nut, *o'*, securing the standard within said bifurcation.

All the standards are provided with similar openings *o* at corresponding points, so that by means of said bolt and nut any one of the standards may be turned down and secured to the rod N in position for use. When any one of the standards is in said position, the others are of course raised out of contact with the soil. By means of the transverse series of openings *c'* in the clevis the line of draft of the plow may be varied in the usual manner.

By means of the bar M and rod N the standard attached to said rod may be raised or lowered and the share or shovel attached to said standard may be run more or less deep in the soil.

Having described my invention, I claim—

As an improvement in plows, the combination of the beams *a a*, having their front ends bowed outward, the tongue secured between said front ends, the rotary disk mounted on a shaft journaled between the rear ends of said bars and consisting of a section, F, having recesses or notches in one side, and a smooth-faced section, G, secured to the section F and covering said notches or recesses, the stand-

ards secured in said recesses or notches and carrying shovels which pass between the bowed portions of the bars *a a* when the disk is rotated, the bar pivoted to the rear end of the tongue, and the rod adjustably secured to the said bar and adapted to be pivoted to the lowermost standard, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM HENRY HARRISON SPRADLIN.

Witnesses:

S. P. STOREY,

J. E. SPRADLIN.