

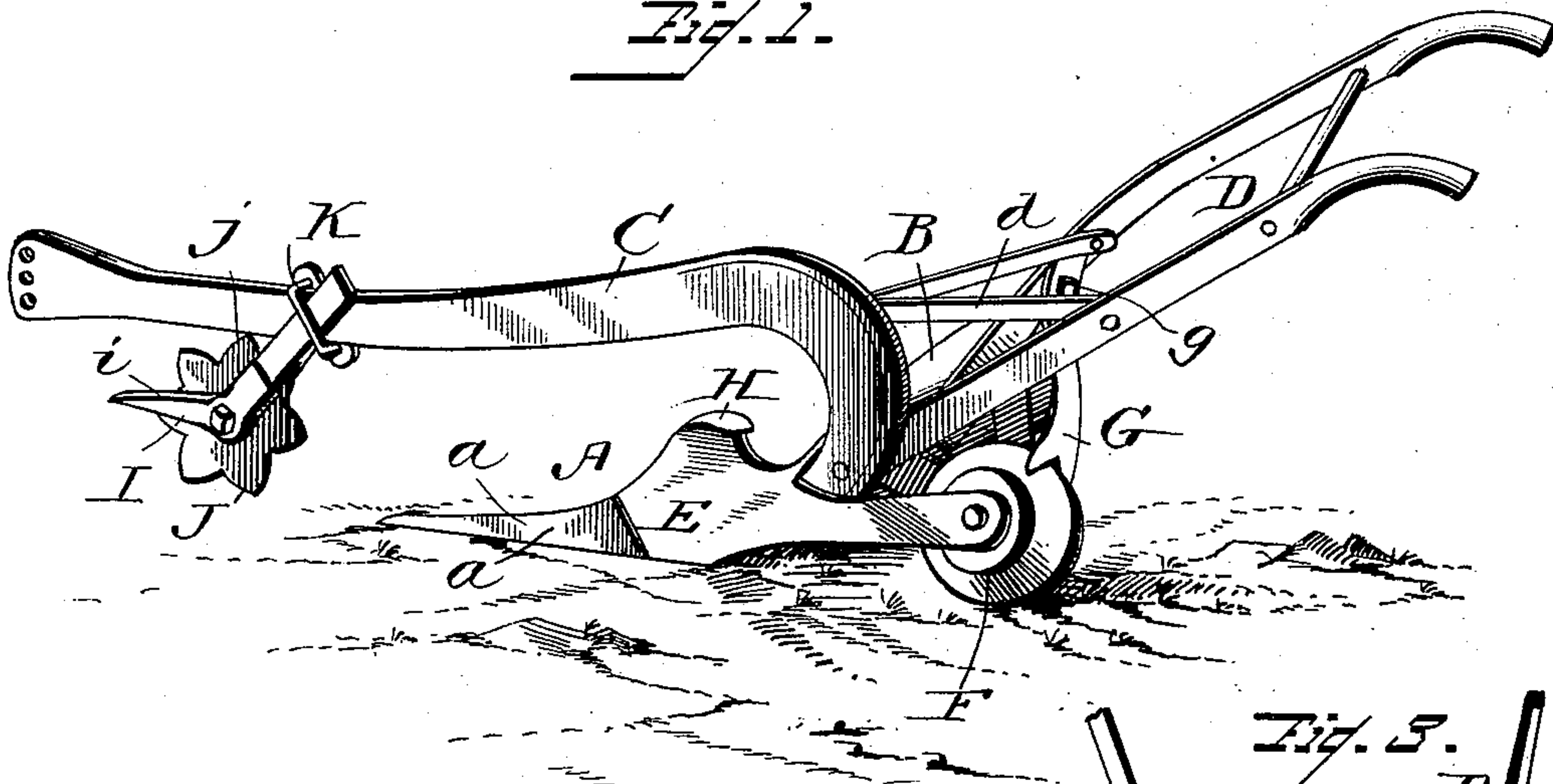
(No Model.)

U. A. CLEVELAND.  
PLOW.

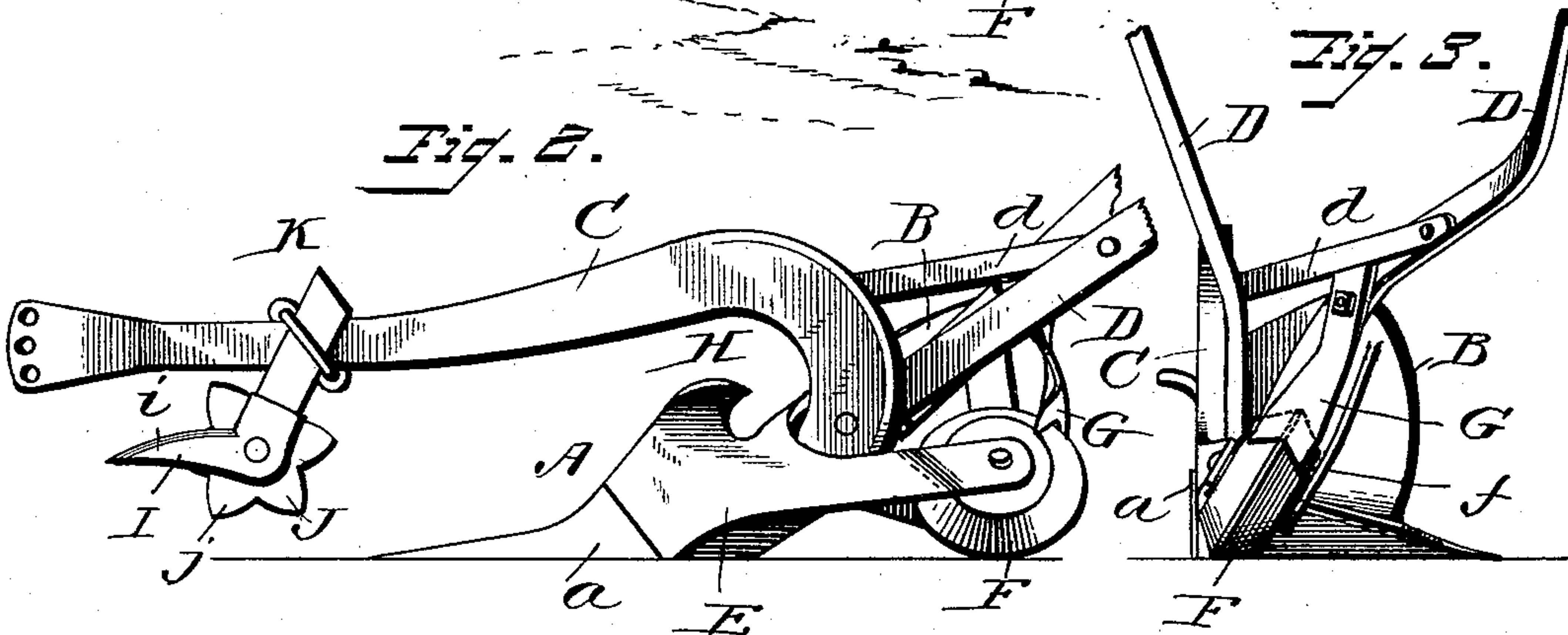
No. 484,178.

Patented Oct. 11, 1892.

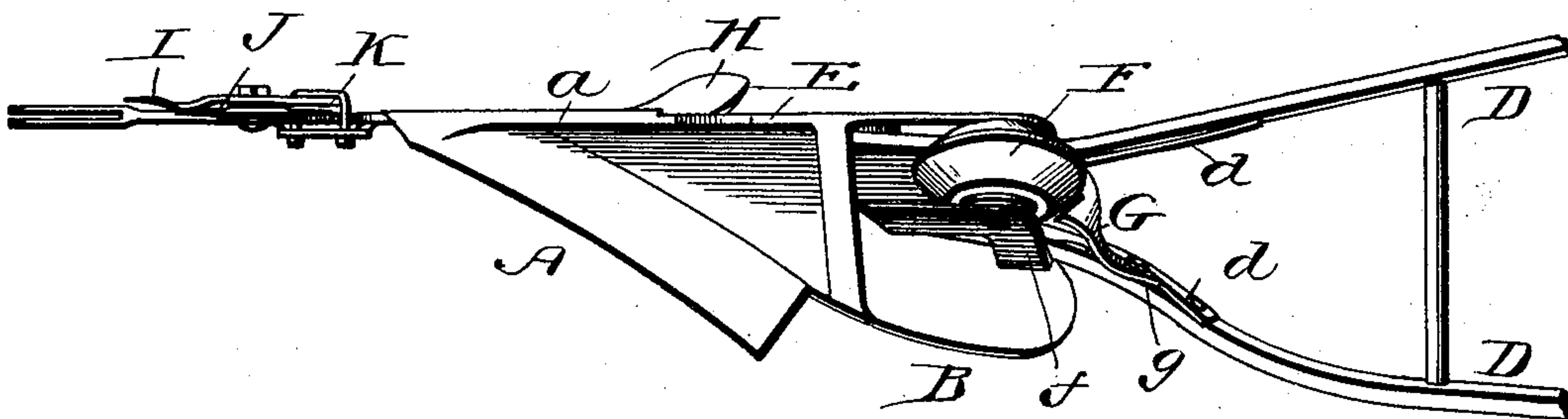
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Fig. 4.*

Witnesses  
*Wm. H. Hough*  
*A. L. Hough*

Inventor  
*Uriah A. Cleveland*  
By his Attorney  
*Franklin H. Hough*



# UNITED STATES PATENT OFFICE.

URIAH A. CLEVELAND, OF ALBERT LEA, MINNESOTA.

## PLOW.

SPECIFICATION forming part of Letters Patent No. 484,178, dated October 11, 1892.

Application filed March 21, 1892. Serial No. 425,799. (No model.)

*To all whom it may concern:*

Be it known that I, URIAH A. CLEVELAND, a citizen of the United States, residing at Albert Lea, in the county of Freeborn and State of Minnesota, have invented certain new and useful Improvements in Plows; and I do 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 the letters of reference marked thereon, which form a part of this specification.

The object of the present invention is to prevent trash, weeds, and similar foreign matter from wedging in the space between the beam and the cutting-edge of the mold-board and to throw the same on the land bordering the furrow which is being cut in position to be plowed or turned under by the next furrow.

A further purpose of the invention is to obviate the necessity of cutting of cornstalks, cane, and other stalks prior to plowing and to accomplish the same in a simple and effective manner during the process of and simultaneously with the operation of plowing.

The improvement consists, primarily, of a cutter in line with and projected vertically from the cutting-edge of the mold-board, the cutting-edge of said colter curving upwardly from and forming a continuation of the cutting-edge formed by the intersection of the point with the landside, the upper end of the colter curving in an opposite direction to the mold-board and away from the landside.

The improvement also consists in the relatively-fixed cutter adjustably attached to the beam and a rolling cutter mounted on the said fixed cutter to co-operate therewith.

The improvement further consists of such other novel features, as will be hereinafter more fully referred to, and set forth in the claims, and which are shown in the accompanying drawings, in which—

Figure 1 is a perspective view of a plow embodying my improvements. Fig. 2 is a side view of a portion of the plow, looking toward the landside to show the relative position of the colter. Fig. 3 is a rear view, and Fig. 4 is a bottom plan view, of the plow.

The plow, consisting of the point and share A, mold-board B, beam C, and handles D, is

of ordinary construction and relative arrangement.

The handles are strengthened by the braces *d*, which are secured at their ends, respectively, to the beam C and the handles D.

The landside-bar E sets in slightly from the plane of the landside portion *a* of the point to lessen the frictional contact thereof with the vertical side of the furrow and diminish the draft of the plow. The rear end of the landside-bar E is given a partial twist toward the mold-board to receive and form a support for one end of the shaft, on which the roller F is journaled. The other end of the said shaft is supported by a bracket *f*, secured to and depending from the mold-board.

The scraper G, for keeping the roller F clean, is a single flat strip, the lower end being fish-tail-shaped to engage with the two faces of the roller F and the upper end being partially twisted and secured to one of the handles by a single bolt *g*. The upper end of the scraper comes directly under and bolts against the under side of one of the braces *d*, thereby preventing the scraper from turning on the single fastening *g* when subjected to strain during the process of cleaning the roller.

The colter H projects vertically from the cutting-edge of the mold-board, and its front cutting-edge forms a continuation of the cutting-edge formed by the intersecting surfaces of the upper and landside faces of the point. The colter, mold-board, and landside are all integral. The upper end of the colter curves laterally in an opposite direction to the mold-board side of the plow for the purpose of deflecting weeds, trash, and other foreign matter onto the land bordering the furrow, being cut so that the next furrow will cover them up or turn them under, and thereby preventing the wedging of the said weeds, &c., under the beam and between it and the mold-board.

The provision for cutting the stalks consists of an approximately-right-angled cutter I, which is relatively fixed in the operation of the same in contradistinction to the rotary cutter J, which is mounted thereon, said rotary cutter being star-shaped, the points *j* co-acting with the horizontal blade *i* of the cutter I to sever the stalks by a shear cut. The lower portion of the vertical shank of the cut-



ter I is bifurcated or separated, the cutter J being joined under and supported between the said separated portions. The cutting-edges of the blade *i* and the points *j* are beveled in opposite directions, so that the said cutting-edges will work close together. The right-angled cutter I, with the rotary cutter J attached thereto, is adjustably secured to the beam C by any convenient means that will admit of the ready adjustment of the said cutter in a vertical direction to adapt it to the nature of the work to be performed. To show a means for adjustably connecting the cutter I, the clip K is illustrated and embraces the beam and the upper end of the vertical shank of the said cutter I.

In the operation of the plow the blade *i* runs a slight depth in the ground and elevates the stalk, which is severed by a point of the rotary cutter J. Obviously the stalk-cutter can be removed when desired.

The colter and landside-bar are preferably formed in one piece.

Having thus described my invention, what

I claim to be new, and desire to secure by Letters Patent, is—

1. A plow having a colter integral with and projected vertically from the cutting-edge of the mold-board and curving laterally at its upper end in an opposite direction to the mold-board, substantially as and for the purpose described.

2. The combination, with the plow having the landside-bar set in from the plane of the landside-face of the point and having the rear end of the landside-bar twisted in substantially the manner shown, of a roller mounted on a shaft which is connected at its ends with, respectively, the mold-board and the twisted end of the landside-bar, substantially as set forth.

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

URIAH A. CLEVELAND.

Witnesses:

E. A. HARRIMAN,  
F. R. CHRISMAN.