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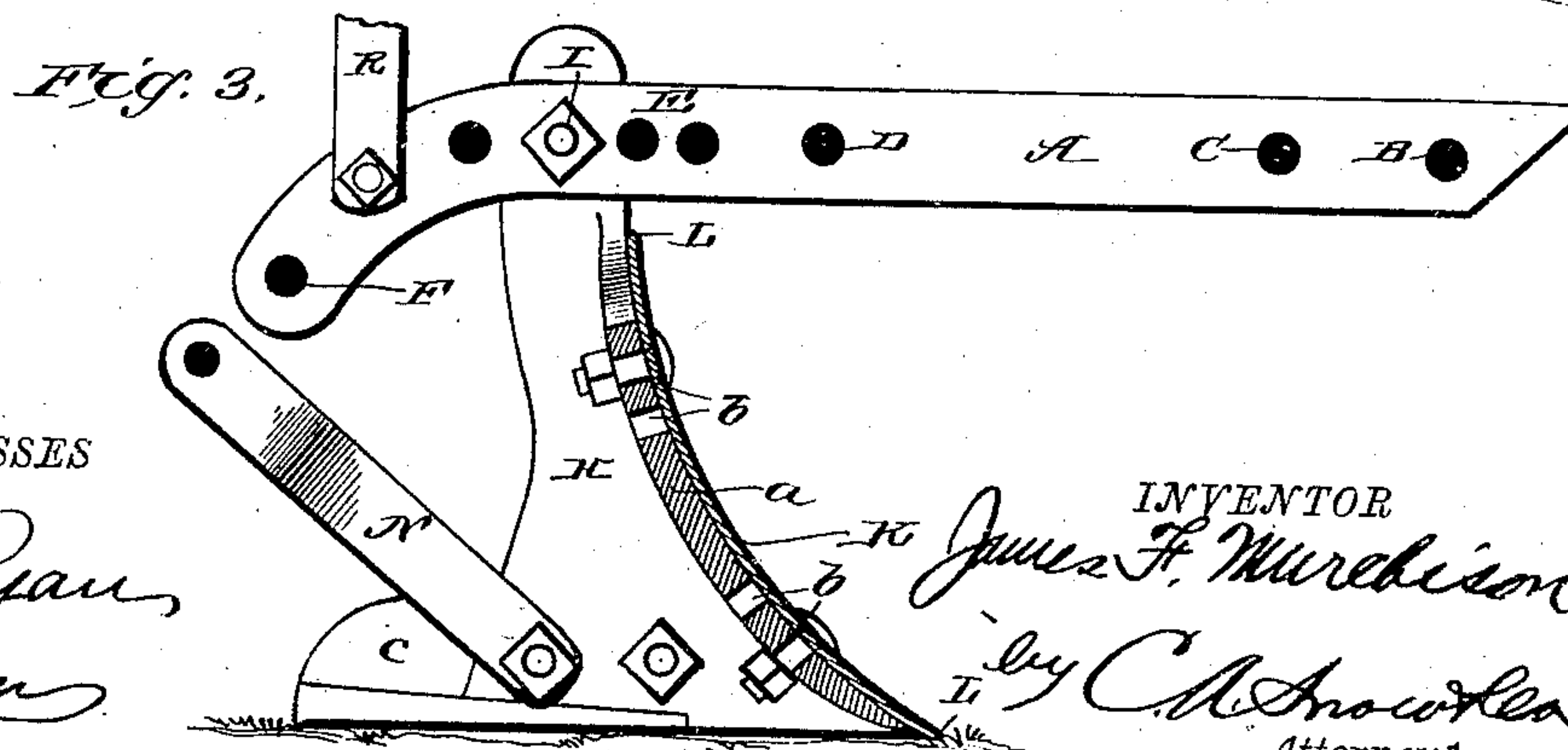
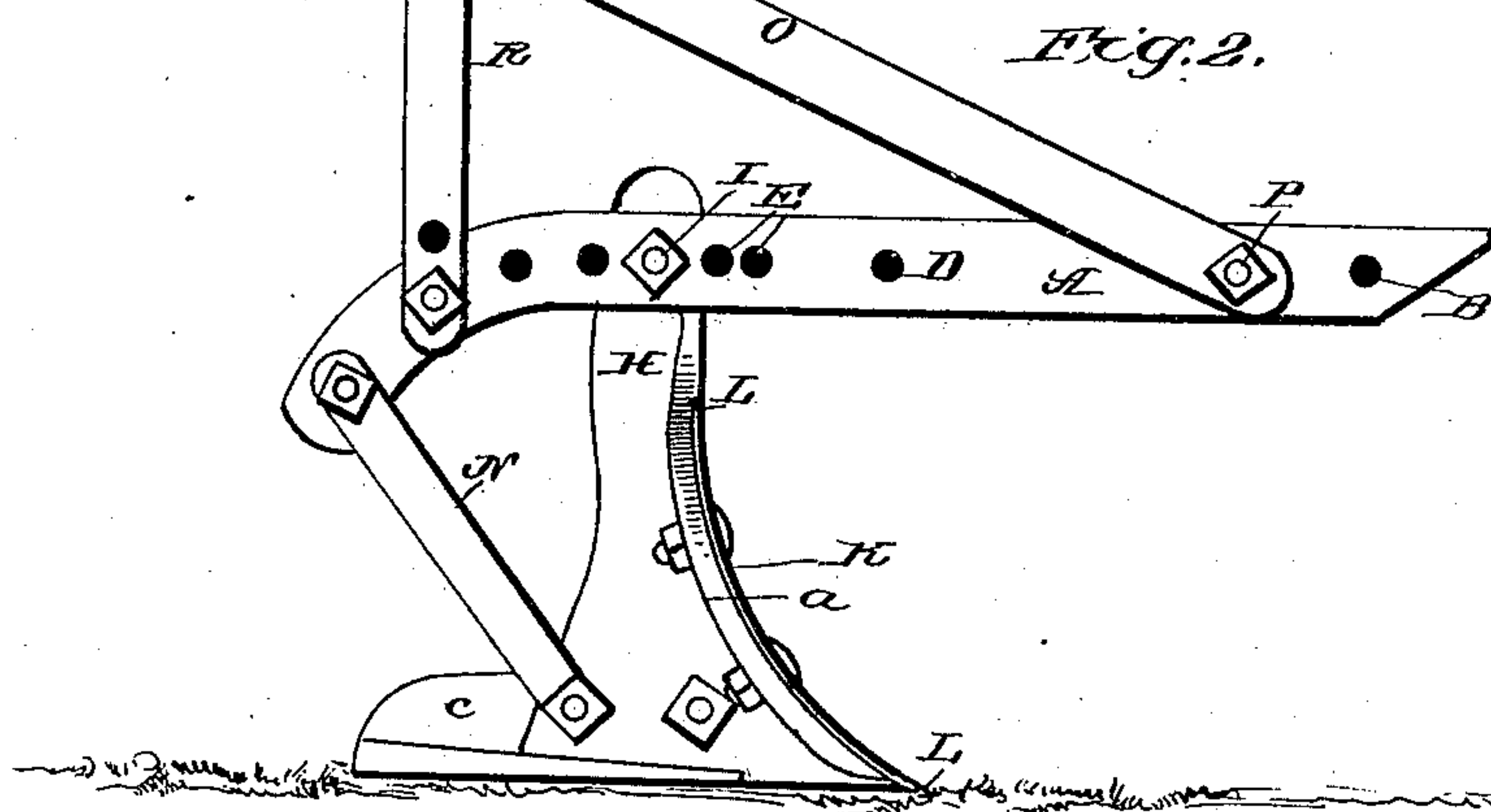
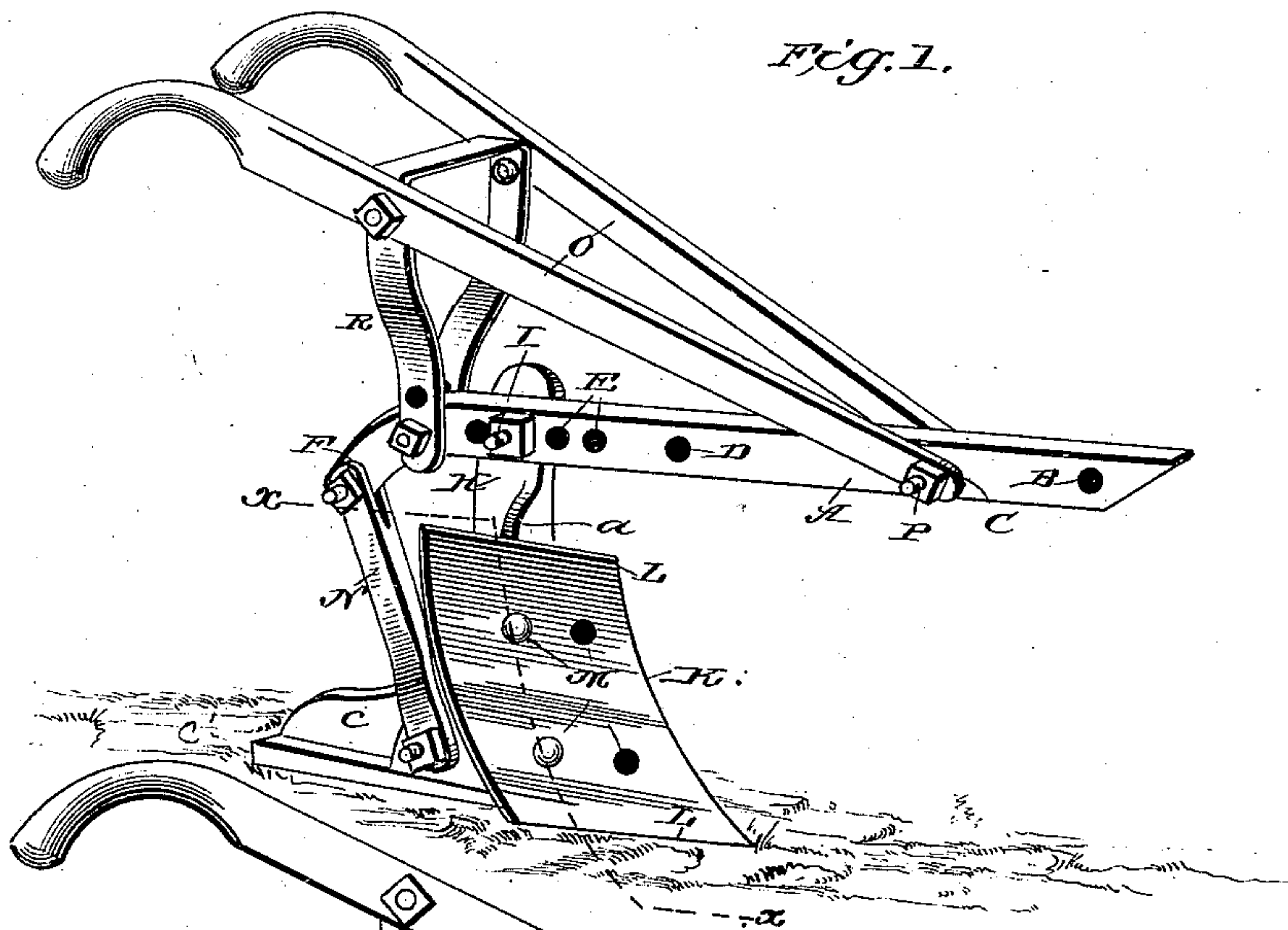
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J. F. MURCHISON.

PLOW.

No. 370,808.

Patented Oct. 4, 1887.



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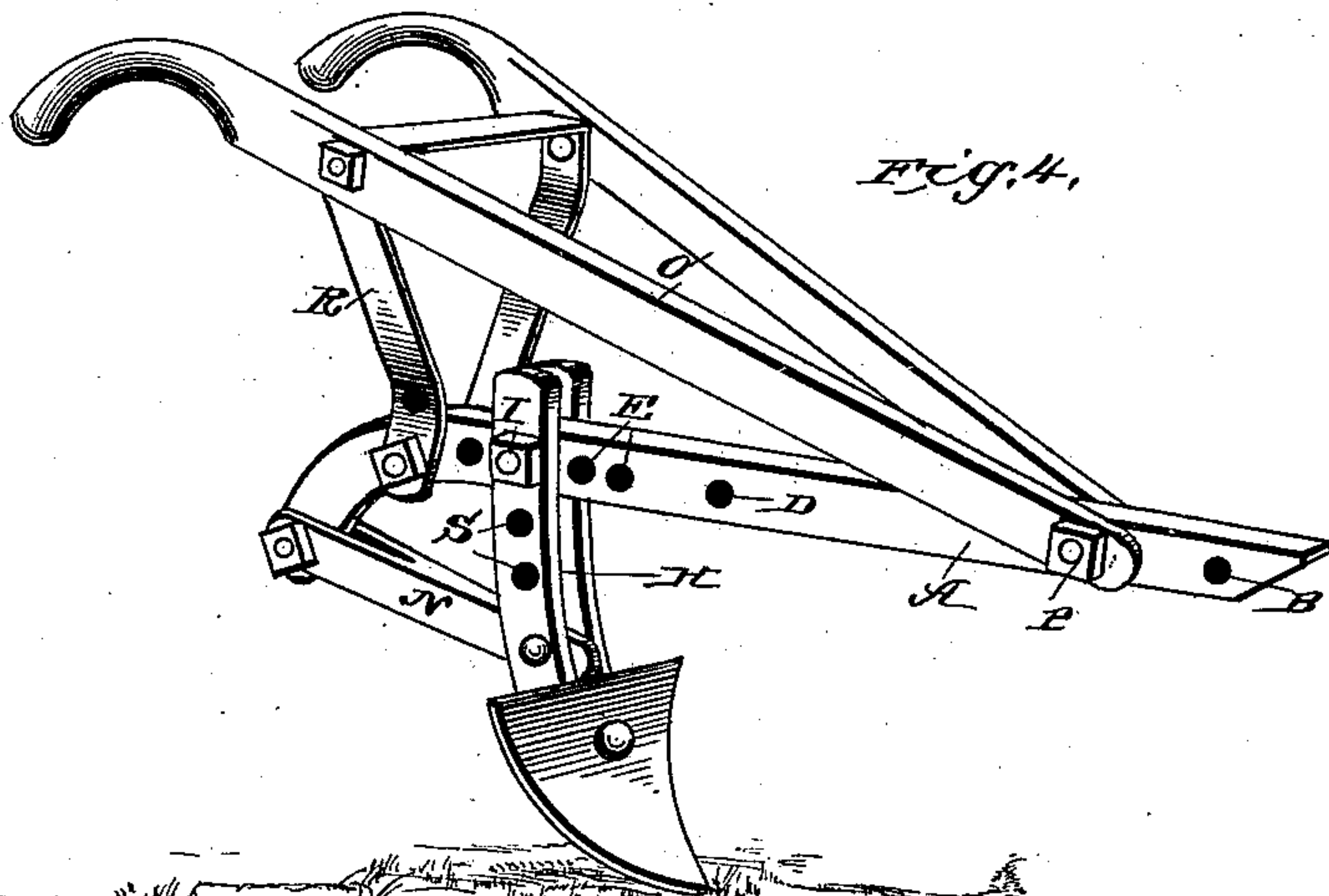


Fig. 4.

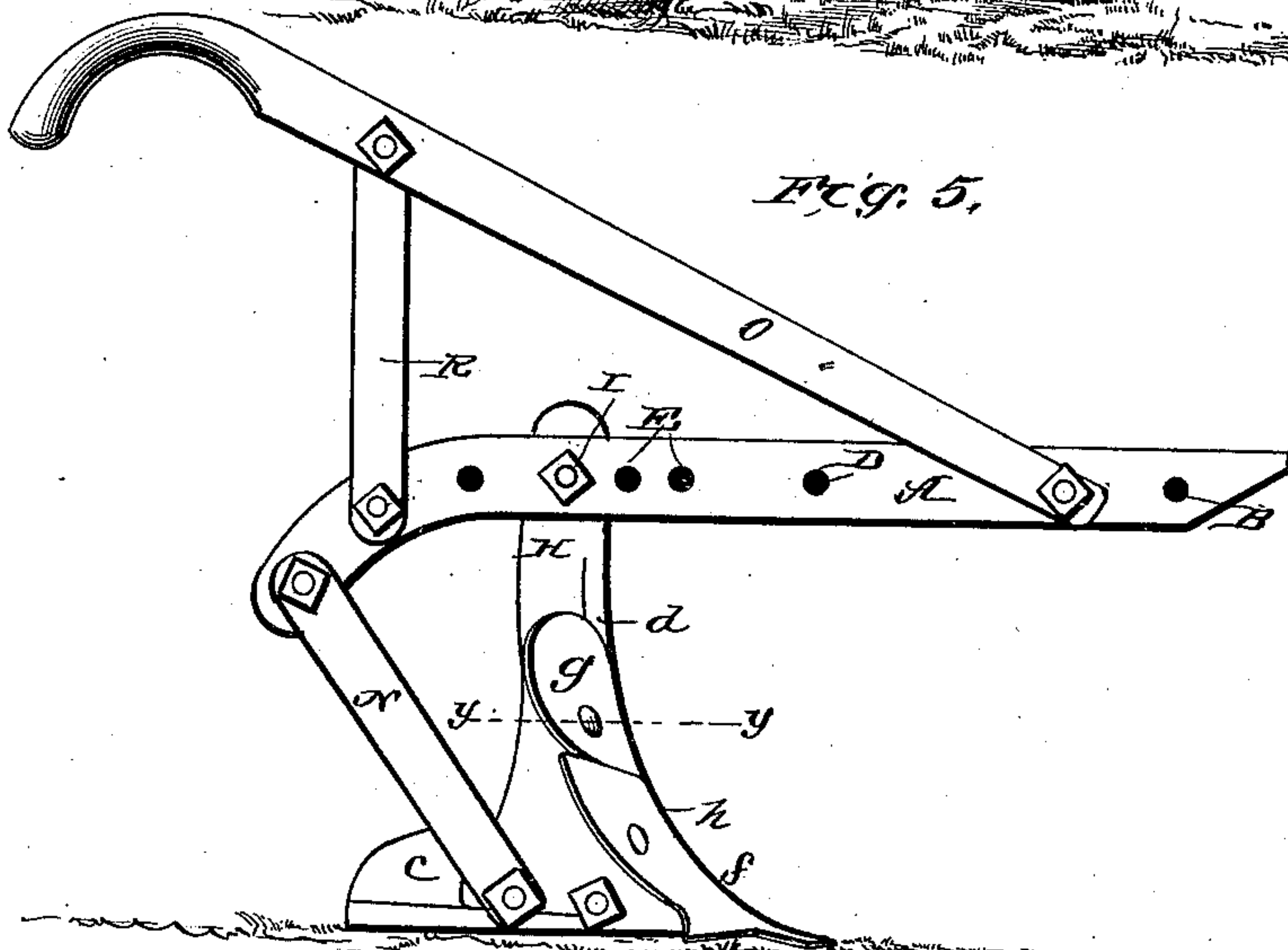


Fig. 5.

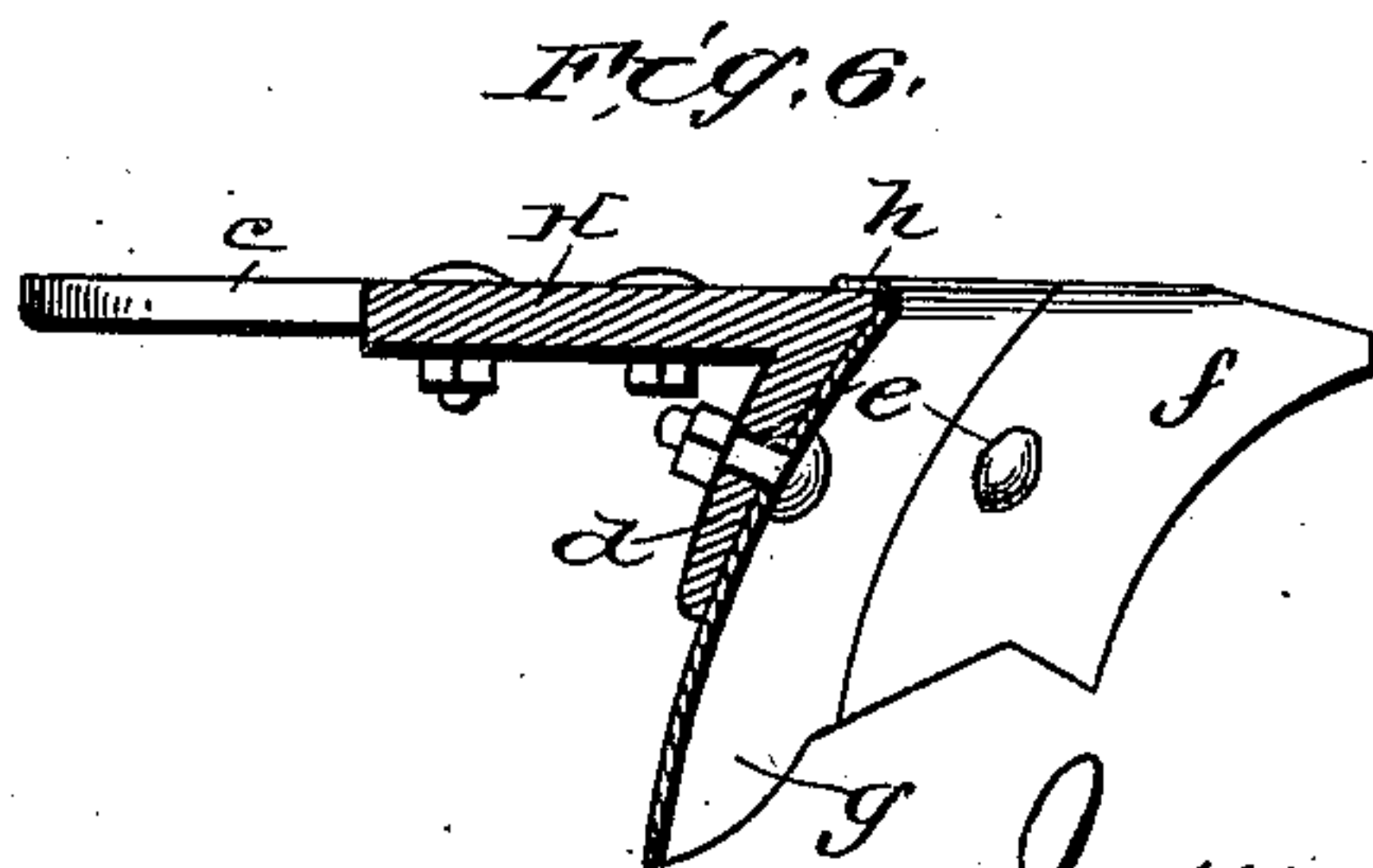


Fig. 6.

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Fig. 7.

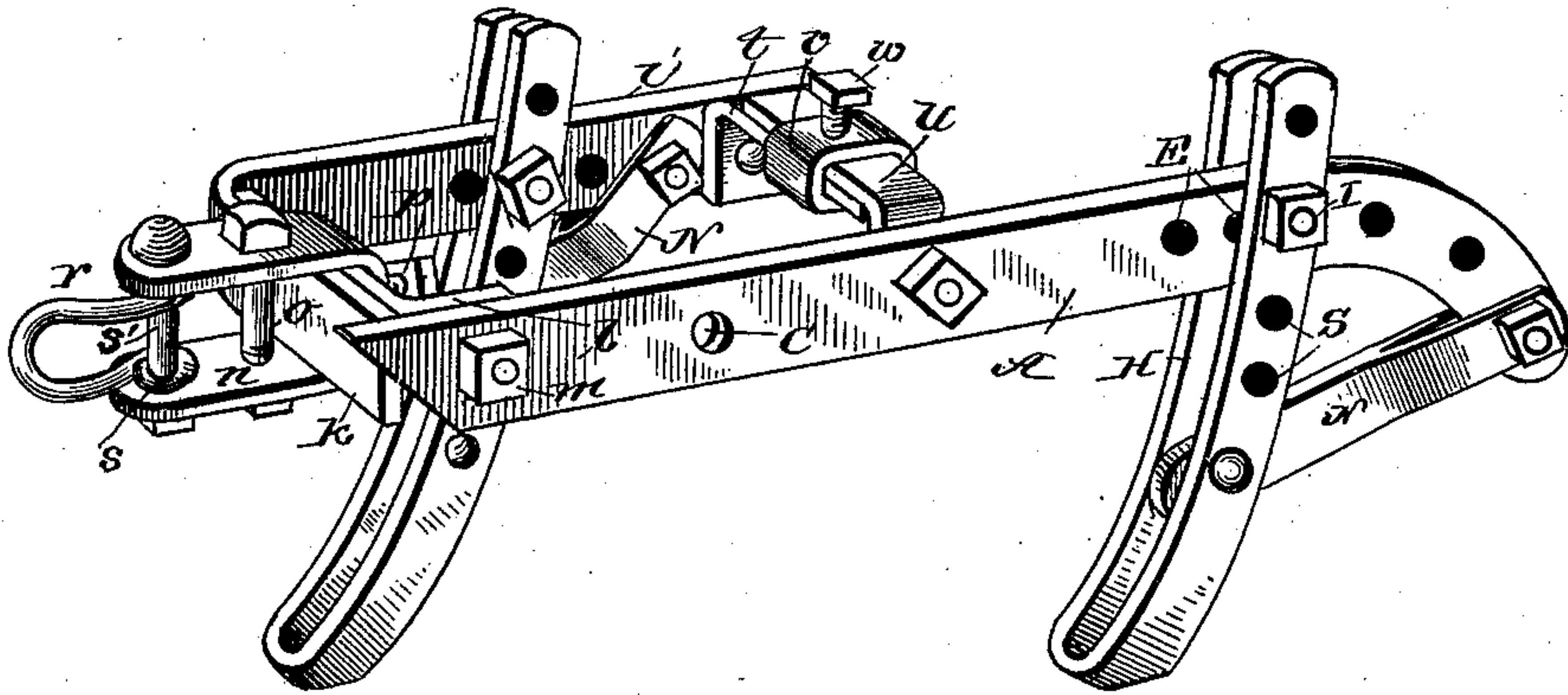
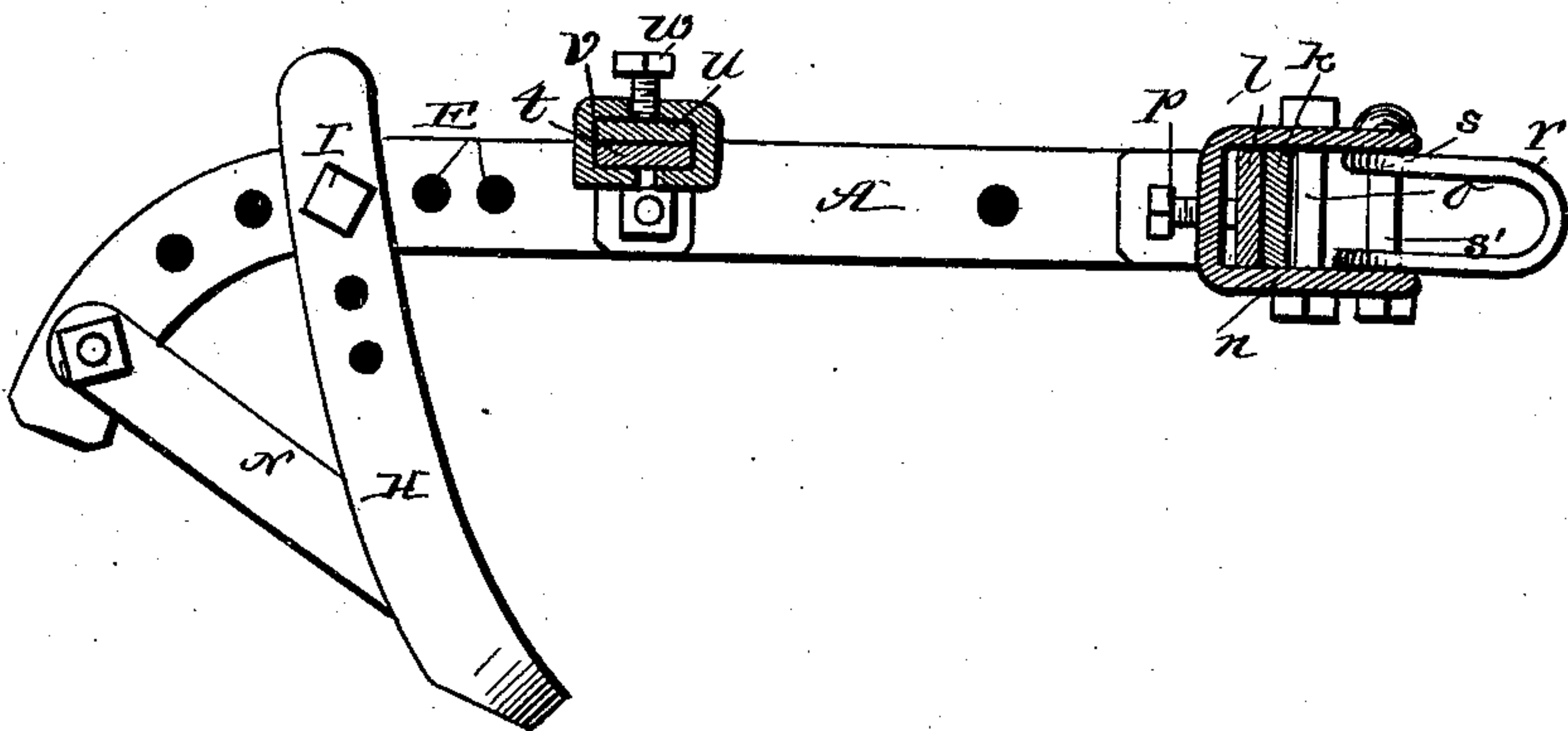


Fig. 8



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UNITED STATES PATENT OFFICE.

JAMES FRANKLIN MURCHISON, OF TENNILLE, GEORGIA.

PLOW.

SPECIFICATION forming part of Letters Patent No. 370,808, dated October 4, 1887.

Application filed May 14, 1887. Serial No. 238,250. (No model.)

To all whom it may concern:

Be it known that I, JAMES FRANKLIN MURCHISON, a citizen of the United States, residing at Tennille, in the county of Washington and State of Georgia, have invented a new and useful Improvement in Plows, of which the following is a specification.

My invention relates to an improvement in plows; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of my invention when adapted for use as a scraper. Fig. 2 is a side elevation. Fig. 3 is a vertical sectional view taken on the line *x x* of Fig. 1. Fig. 4 is a perspective view of my invention when adapted for use as a single-shovel cultivator. Fig. 5 is a side elevation of my invention when adapted for use as a turning-plow. Fig. 6 is a detail sectional view on the line *y y* of Fig. 5. Fig. 7 is a perspective view of my invention when adapted for use as a double-shovel cultivator. Fig. 8 is a detail view of the same.

A represents a beam, which is made of iron, and has its rear end curved downward, as shown. Near the front end of the beam is a transverse opening, B. At a suitable distance in rear thereof is a similar opening, C, and at a suitable distance in rear of the opening C is an opening, D.

E represents a longitudinal series of transverse openings which extend through the rear portion of the beam, and F represents the transverse opening which is made in the extreme rear downturned end of the beam.

H represents a standard, which has its upper end secured to the beam by means of a transverse bolt, I, which extends through the upper end of the standard and through one of the openings E. This standard varies in construction according to the use for which it is adapted.

The standard shown in Fig. 1 is adapted for the attachment of the scraping-shovel, and the construction of the said standard is as follows: The front side of the standard is curved, and is provided with an obliquely-arranged laterally-extending base-plate, *a*, which projects from one side of the standard, and is

provided with a series of four transverse openings, *b*.

c represents a landside, which is bolted to the opposite side of the standard at the lower end thereof, and is pivoted at its lower edge with a laterally-extending flange, *c'*, on one side, which is arranged under the lower edge of the standard and forms a sole-plate.

K represents a scraping-shovel, which is substantially diamond-shaped, and is provided at its upper and lower ends with parallel cutting-edges L. Near the central portion of the shovel is a series of four openings, M, two of which are adapted to coincide with two of the openings *b* in the base-plate of the standard.

Suitable bolts extend through two of the openings M and through two of the openings *b* and secure the scraping-shovel to the front side of the base-plate, and the shovel is adapted to be adjusted laterally, so as to cause one of its vertical edges to be arranged either in line with the landside of the standard or to be projected inward beyond the same, and the said scraping-shovel may be vertically adjusted on the standard to regulate the depth at which it shall run in the ground. When one of its cutting-edges, L, becomes worn, the scraping-shovel is adapted to be detached from the standard and replaced thereon in an inverted position, thus greatly enhancing the durability of the scraper.

N represents a brace-arm, which has its upper end bifurcated and attached to the rear end of the beam by a bolt which passes through the upper end of the arm and through the opening F in the beam. The lower end of the said arm is bolted to the inner side of the foot of the standard, as shown.

The openings C and D permit longitudinal adjustment of handles O, which are secured at their lower front ends to the beam by means of a bolt, P, and the rear portions of the said handles are supported by brace-arms R, which have their lower ends bolted to one of the series of openings E, and their upper ends bolted to the inner sides of the handle, as shown.

In Fig. 4 I illustrate a modified form of my invention, in which the standard is made of a single piece of metal bent in the center to form a U, and thereby provided with up-

wardly-extending arms, which embrace opposite sides of the beam and are provided with a series of openings, S. A bolt is adapted to pass in either of the said series of openings S and through one of the openings E, and thereby secure the upper end of the standard to the beam and enable the standard to be adjusted vertically and longitudinally with respect to the beam. The front end of the brace N is attached to one of the openings S in the standard, and by adjusting the said front end of the beam up or down on the standard the latter may be arranged at any desired inclination with respect to the plow-beam. This form of the standard is adapted for the attachment and vertical adjustment for a shovel plow or cultivator of the usual construction.

In Fig. 5 I illustrate a modified form of my invention, in which the standard is provided with a laterally-extending base-plate, *d*, which is similar to the base-plate *a*, previously described, and is provided with two openings, *e*. *f* represents a point or share, which is made of metal, and is adapted to be attached to the lower front side of the base-plate *d* by means of a bolt which extends through an opening in the said share, and also through an opening, *e*. *g* represents a mold-board, which is adapted to be secured on the base-plate above the upper edge of the share in a similar manner, and the landside-edges of the share and the mold-board are turned rearward at right angles to form flanges *h*, which bear against the outer side of the standard, and thereby prevent the shaft and mold-board from turning thereon.

In Fig. 7 I illustrate another modified form of my invention, in which I provide a secondary beam, *i*, which is made of iron, is much shorter than the beam A, and has its front end bent at right angles to form an arm, *k*. *l* represents a right-angled bracket, which has its short arm secured to one side of the beam A by a bolt, *m*, which extends through the opening B. The arm *k* bears against the front side of the long arm of the bracket *l*, and thereby the beam *i* is disposed parallel to the beam A, and at a suitable distance to one side thereof. *n* represents a U-shaped yoke, which is arranged in a horizontal position, and has its central portion bearing against the rear side of the bracket *l*. A vertical bolt, *o*, passes downward through the arms of the yoke in front of the arm *k* of the secondary beam, and a set-screw, *p*, works in the central opening in the rear central portion of the yoke, and has its point bearing against the rear side of

the bracket *l*, and thereby clamping the said bracket and the arm *k* of the secondary beam firmly together, and permitting the secondary beam to be adjusted laterally. *r* represents a clevis provided at its rear end with rings or eyes *s*, through which extends a vertical bolt, *s'*, that is passed downward through a pair of aligned openings made in the front arms of the yoke. *t* represents a right-angled bracket, which is bolted to the rear end of the secondary beam, at the inner side thereof, and projects toward the beam A. *u* represents a similar bracket, which is bolted to one side of the beam A, and extends toward the secondary beam and bears upon the upper side of the bracket *t*. *v* represents a clip which encompasses the horizontal arms of the brackets *t* and *u*, and is provided with a clamping-screw, *w*, by means of which said bracket-arms are clamped together at any desired lateral adjustment on the beams. To each of the beams is bolted a standard constructed as shown in Fig. 4, and hereinbefore described and each of the said standards is braced at any desired inclination by brace-arms N. To the lower end of each standard is attached a cultivating-shovel.

By reference to Fig. 7 it will be observed that the standard which is attached to the secondary beam is arranged at a considerable distance in advance of the standard attached to the main beam A.

A plow constructed as hereinbefore described is adapted to be employed for a number of different purposes, and will be found exceedingly useful on a farm.

Having thus described my invention, I claim—

1. The combination of the standards and the rearward-extending landside *c*, bolted to one side of the standard, near the lower end thereof, and having the laterally-extending flange *c'* on one side at its lower edge, arranged under the lower edge of the standard, substantially as described.

2. The combination of the standard having the laterally-extending base-plate on the front edge, and the shovel or scraper K, attached to the said base-plate and adjustable laterally thereon, substantially as described.

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

JAMES FRANKLIN MURCHISON.

Witnesses:

GEO. P. DARE,
A. J. SWAN.