

(No Model.)

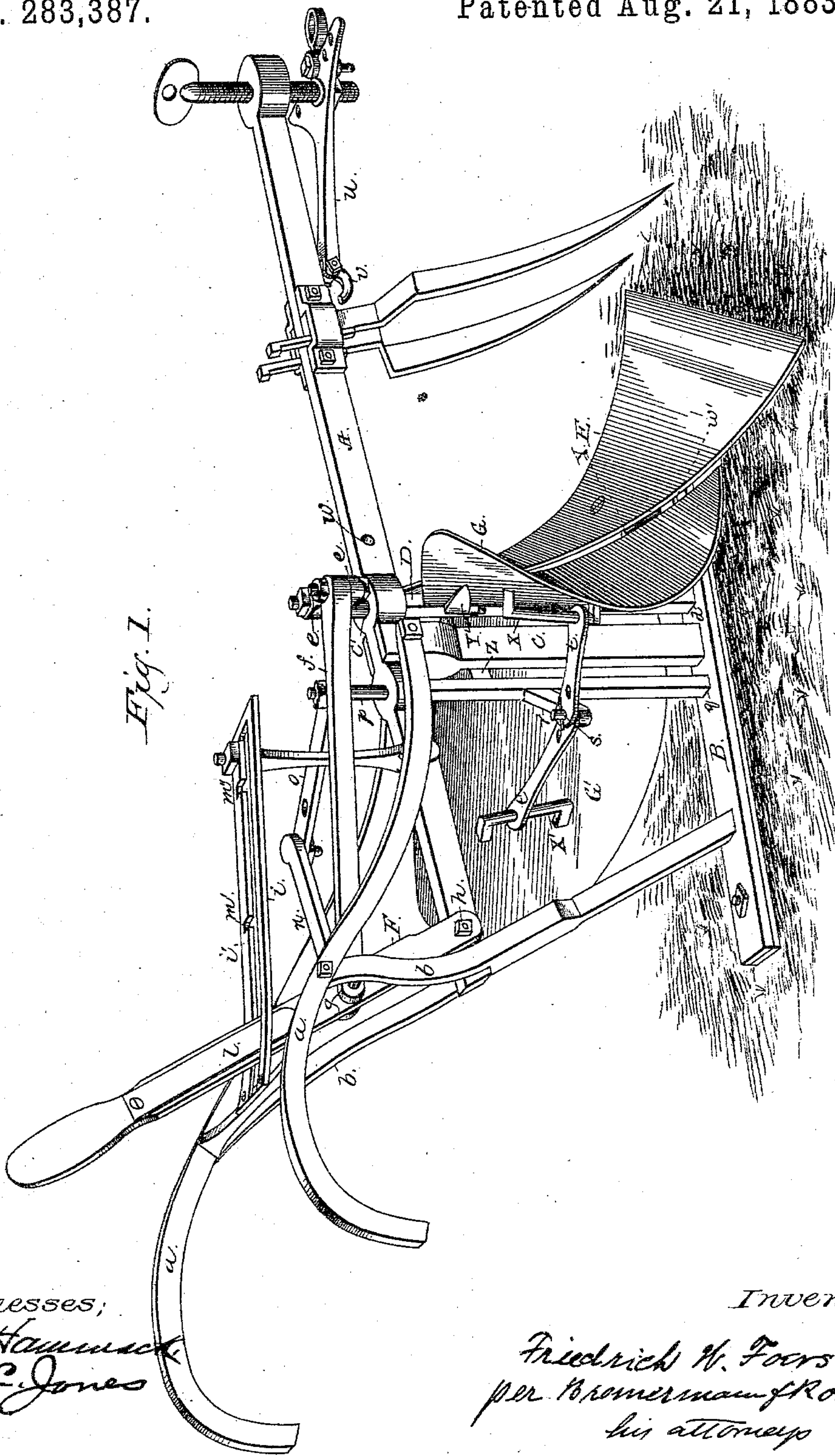
2 Sheets—Sheet 1.

F. W. FOERSTER.

REVERSIBLE PLOW.

No. 283,387.

Patented Aug. 21, 1883.



Witnesses;
L. M. Hammack
J. M. C. Jones

Inventor;
Friedrich W. Foerster
per Bromer & Roddy
his attorneys

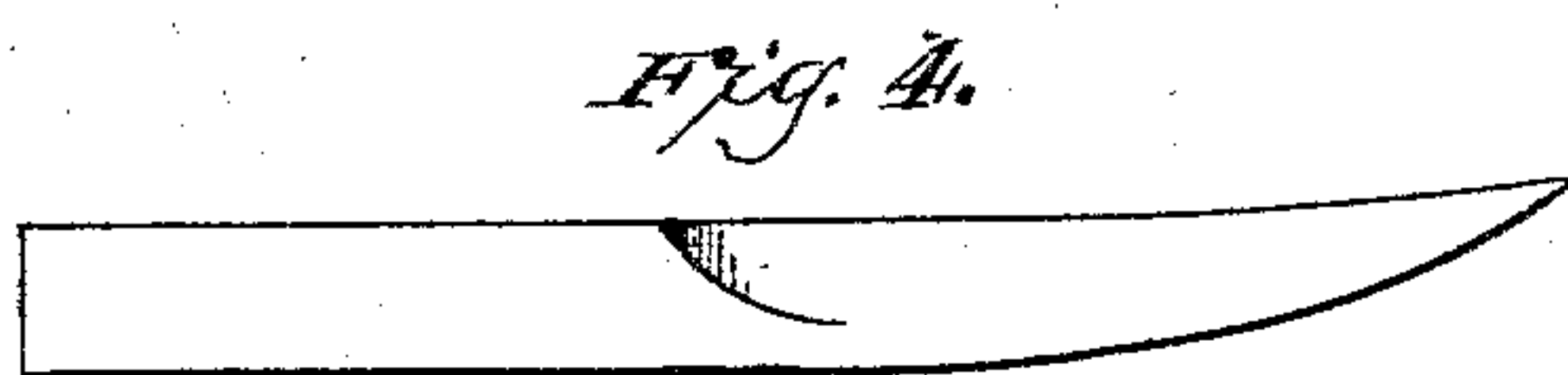
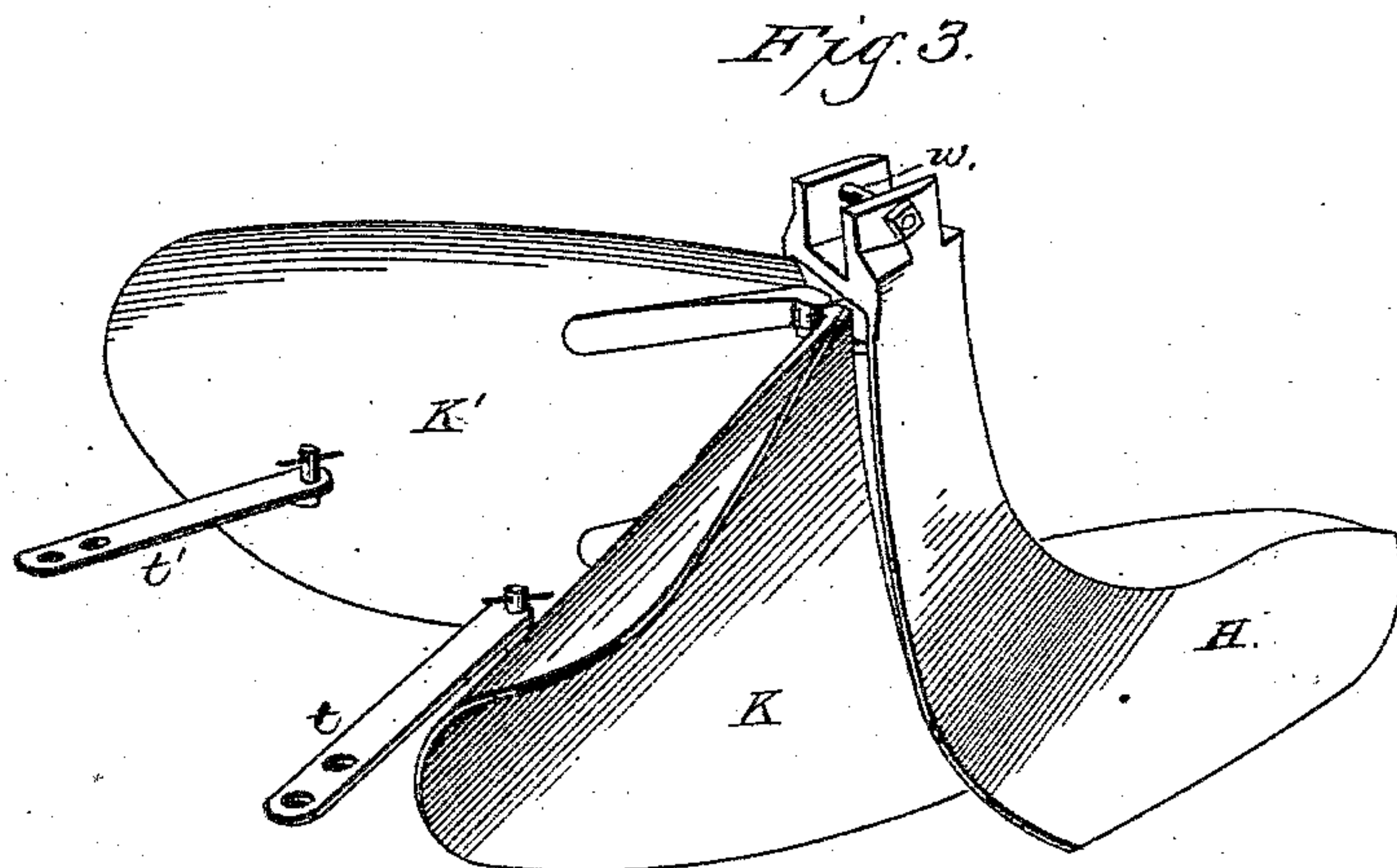
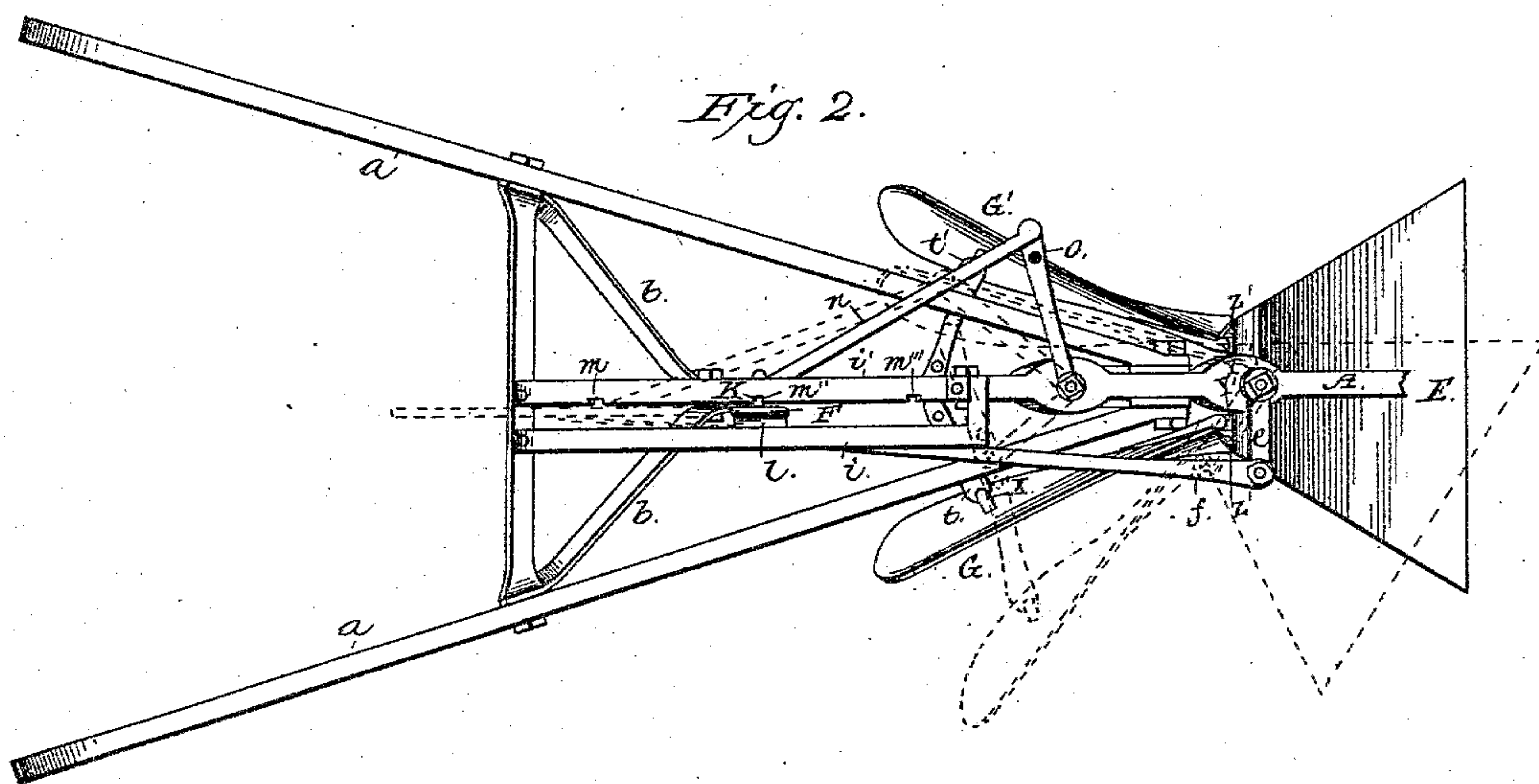
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2 Sheets—Sheet 2.

F. W. FOERSTER.
REVERSIBLE PLOW.

No. 283,387.

Patented Aug. 21, 1883.



Witnesses,

*D. M. Haysmeyer,
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Inventor,

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per Breuermann & Rohde,
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UNITED STATES PATENT OFFICE.

FRIEDRICH WILHELM FOERSTER, OF BURLINGTON, IOWA.

REVERSIBLE PLOW.

SPECIFICATION forming part of Letters Patent No. 283,387, dated August 21, 1883.

Application filed May 11, 1883. (No model.)

To all whom it may concern:

Be it known that I, FRIEDRICH WILHELM FOERSTER, a subject of the Emperor of Germany, residing at Burlington, in the county of Des Moines and State of Iowa, have invented a new and useful Reversible Plow, of which the following is a specification.

My invention relates to improvements in reversible plows in which the cutting apparatus is reversible, so as to throw its furrow-slice to the right or the left, as may be desired, and at the same time it furnishes a shovel-plow for tending crops planted in hills or rows. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved plow. Fig. 2 is a plan view. Fig. 3 is a perspective view of a modification. Fig. 4 is a detail.

Similar letters refer to similar parts throughout the several views.

The plow-beam A, plow-foot B, plow-tail a, with braces b and upright c, constitute the frame-work of the plow. To the under surface of plow-foot B there is fastened, by means of screws or otherwise, a strip of iron of suitable thickness, which comes up within an inch and a half to the front end of B, which strip may be used, or not, at pleasure, the purpose of the same being to make the plow run with greater ease in hardened soil. Plow-beam A has a perforation, c', through which upright D freely passes. D is pivoted in perforation d of plow-foot B. To upright D there is fastened, by means of screws or otherwise, the plowshare E.

Above plow-beam A one end of arm e is firmly fastened to D. The other end, by means of an elbow-joint, is fastened to rod f. Rod f is at g fastened to lever F, is at one end, by means of pin h, loosely joined to plow-beam A, passes from there upward, and slides to and fro in a groove formed for that purpose by means of strips i and i', and fastened in any simple way by means of an upright to plow-beam A and plow-tail a. Lever F has on one side lug k and on the other spring l.

Strip i' is provided with slots m, m', and m'', for the purpose of receiving lug k. Spring l furnishes sufficient pressure to keep lug k from

slipping out of the slots. On the opposite side from where rod f is fastened to lever F rod w is fastened to the same, which rod has its other end fastened to one extremity of arm o, forming an elbow-joint, by means of pin and perforation. Arm o is in its other extremity securely fastened to upright p, which upright passes freely through a hole in plow-beam A and is pivoted at q in plow-foot B. Upright p, about midway between the plow-beam A, and plow-foot B, has arm r, which, at its outer end, has pin s. Pin s passes freely through perforations in shafts t and t', of which shaft t is fastened by means of hinge x to mold-board G. and shaft t', by means of hinge x', to mold-board G'. Each of the shafts t and t' has several perforations, so as to make the range of the mold-boards larger and smaller. For the same purpose are more than one perforation to be formed in arm o. Mold-board G is also hinged at y and y' to plow-share E, and mold-board G' is hinged at z and z' to plowshare E.

Draft-rod u is a device pivoted to the under side of plow-beam A, by means of which the depth of the plowing is regulated. In case the plow is to be put on wheels, the draft-rod u is raised to the plow-beam and the plow-trace is fastened to hook v.

In order to change the reversible plow into a shovel-plow, plowshare E and mold-boards G and G' are separated from their frame-work, and in their stead shovel H, and mold-boards K and K' are fastened to the frame-work of the plow by means of pin w in plow-beam, pin w' in plow-foot, and shafts t t' upon pin s.

The operation of my reversible plow is as follows: When the lug k on lever F is in slot m, the furrow-slice is thrown to the right. In order to change this to the left, lever F is pressed forward to slot m'', thereby, by means of rod f, arm e, and upright D, plowshare E is reversed, and at the same instant, by means of rod w, arm o, upright p, arm r, pin s, and shafts t and t', the mold-board G is drawn in and mold-board G' is thrown out, so as to make the furrow-slice to fall to the left.

The reversible plow is changed into a shovel-plow by the means explained above. The working of the same is like any ordinary shovel-plow, except in this, that the mold-boards K and K', by means of the perforations

in shafts *t* and *t'*, can beset wider and narrower relatively to each other.

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

- 5 In a reversible plow, the combination, with the frame-work of the plow and the plow-share E, upright D, arm *e*, rod *f*, and lever F, of the mold-boards G and G', the shafts *t* and *t'*,

the arm *r*, the upright *p*, arm *o*, rod *u*, and lever F, substantially as and for the purpose set forth. 10

FRIEDRICH WILHELM FOERSTER.

Witnesses:

A. SAUERMANN,
T. V. PECK.