No. 724,415. PATENTED MAR. 31, 1903.

F. WIEGARD.

REVERSIBLE PLOW.

APPLICATION FILED DEC. 6, 1902.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.

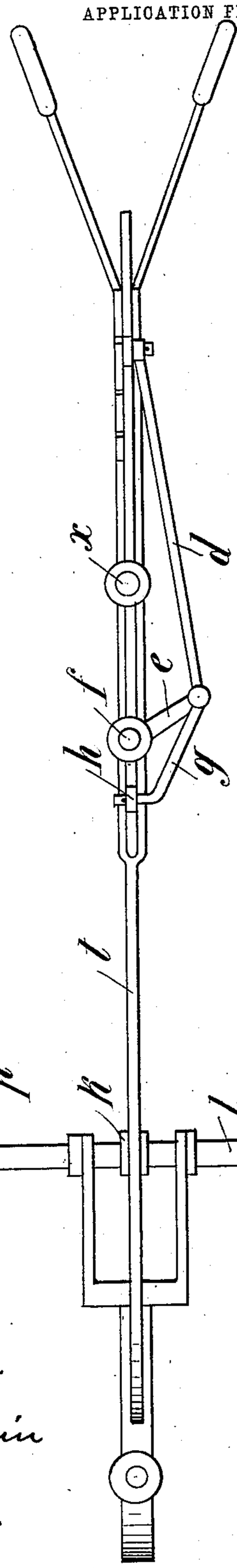


Fig. 4.

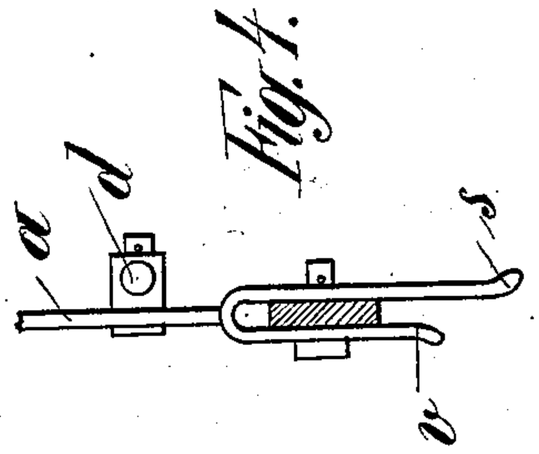
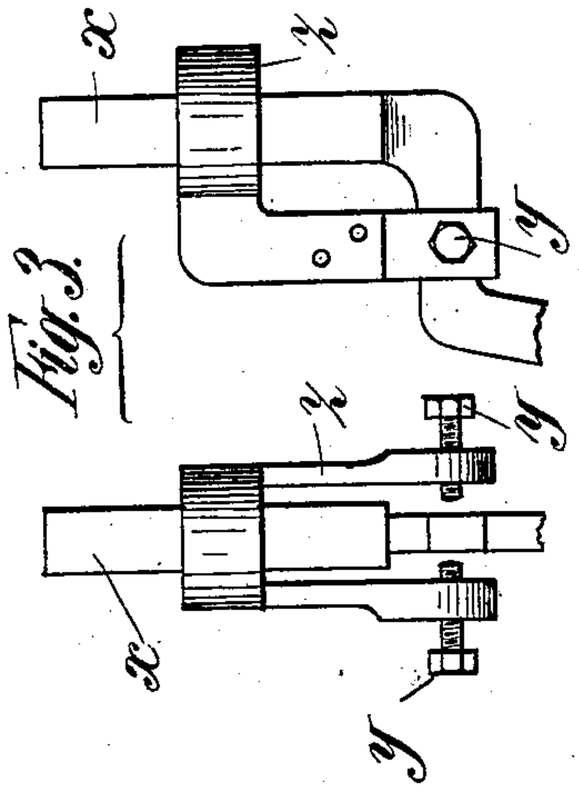


Fig. 3.



Witnesses:

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Inventor:

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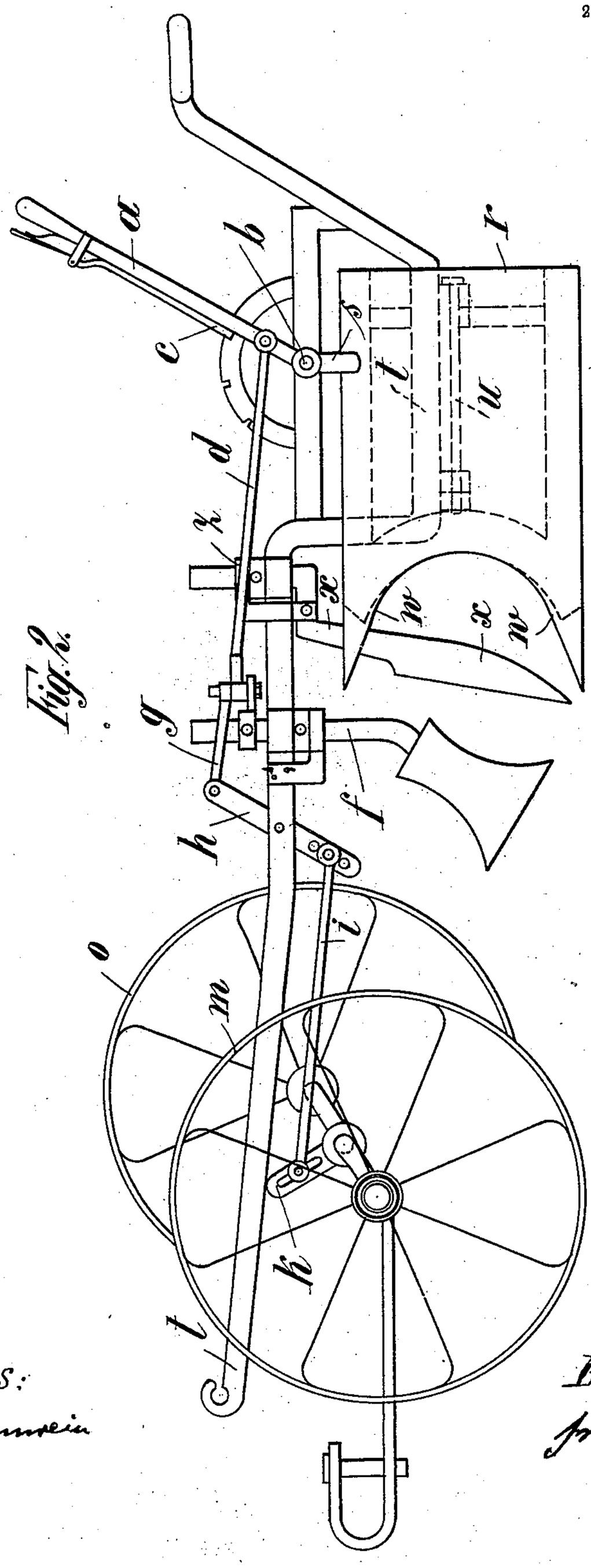
NO MODEL. 2 SHEETS—SHEET 2.

Fig. 2.



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Inventor:
Franz Wiegard.

UNITED STATES PATENT OFFICE.

FRANZ WIEGARD, OF KIRCHSPIEL OELDE, GERMANY.

REVERSIBLE PLOW.

SPECIFICATION forming part of Letters Patent No. 724,415, dated March 31, 1903.

Application filed December 6, 1902. Serial No. 134,183. (No model.)

To all whom it may concern:

Be it known that I, FRANZ WIEGARD, farmer, a subject of the King of Prussia, Emperor of Germany, residing at the borough of Kirchspiel Oelde, Westphalia, Kingdom of Prussia, German Empire, have invented a certain new and useful Reversible Plow, of which the following is a specification.

This invention comprises a simple arrangement of levers by means of which both the reversing of the plowing-frame as well as the reversing of the share may be accomplished by one manipulation, the arrangement being such that the parts will automatically adjust themselves in the well-known manner.

In the drawings I have shown an embodiment of my invention.

Figure 1 is a plan view of the plow. Fig. 2 is a side view of the same. Fig. 3 represents in detail the fork for the cutter; and Fig. 4 is a side view of the lower part of the adjusting-lever *a*, with its two lateral jaws for fastening the body or mold-plate of the plow.

The reversing of the said parts is effected by the reciprocation of the lever *a*, of well-known construction, and which is fulcrumed at *b* in the frame of the machine. If after the release of the well-known thumb-latch *c*, which is jointed to the handle *a* and is spring-pressed, the lever *a* is moved in the forward direction, the movement is transmitted to the lever *e* by means of the pitman *d*, thereby causing the share *f*, which is secured to said lever *e*, to turn. At the same time the rod *g*, which is linked to the lever *e*, moves the upper leg of the lever *h* in the forward direction, and thus by means of the pitman *i* and the lever *k* a rotation is imparted to the axle *l*. The lever *h* may, for instance, be made to pass through a slot in the pole-beam *t* and is fulcrumed in said pole-beam. By the rotation of the axle *l* the wheel *m* is raised, as it is secured to the wheel-axle by a crank-shaped leg *n*, adjustable upon the axle *l*, and, on the other hand, the wheel *o* is lowered by a similar crank-shaped leg *p*, whereby after each reciprocation of the adjusting-lever *a* the wheels are adjusted so as to run in furrows and on plane ground, respectively, and by this means the adjustment may also be reversed, as may be required in the plowing operation.

If the lever *a* is in its rear position, the moldboard or body *r* of the plow is kept pressed against the pole-beam *t* by the jaw *s*. There are two such jaws *s* and *v*, one on each side of the moldboard *r*. These jaws project beyond the pivot *b* of the lever *a* and are rigidly secured to the latter, as shown in Fig. 4 of the drawings.

If the lever is moved to the middle of the adjusting-segment *j*, which is secured to the frame of the machine, the jaw *s* will release the moldboard *r*. Since the said board is now free to turn underneath the pole-beam *t* and upon the shaft *u* (shown in dotted lines in the drawings) and secured to the pole-beam *t*, it will turn over to the opposite side when the plow itself is turned to this side and will be retained against the pole-beam by the jaw *v*, provided on that side, after having moved the lever *a*. To make the mold-plate *r* engage the soil and throw it over, it may become necessary to depress or raise part of the frame somewhat, while the said plate is reversed. Upon reversing the said plate or plow-body *r* one of its pointed shares *w* will strike against the upper part of the colter or cutter *x*, the sharp edge of which by a short rotation in the journal in the pole-beam *t* is thereby adjusted in the right relative position to the plowshare. The colter *x* is preferably provided with an elbow-shaped-handle part rotatably journaled in a bracket *z*, which is suitably supported on the pole-beam *t* and is provided with two depending legs, between which the handle part of the colter is free to rotate, as shown in Fig. 3 of the drawings. Adjusting-screws *y* in said legs act as stops to limit the rotation of the colter *x*. The parts are retained or locked in their respective position by means of the jaws *s* and *v*, respectively, of the lever *a*, and by the plow-body or mold-plate *r*, respectively, which arrangement, being already known, is not claimed in this application.

It will appear from the above description of parts that by a very simple manipulation of the lever *a* the reversing and retaining or locking in operative position of all parts necessary in the plowing operation is effected,

and I am thereby also enabled to effect the reversing even during the propelling of the device from the post of the operator by one single handling and without inconvenience and without loss of time.

What I claim, and desire to secure by Letters Patent of the United States, is—

In a reversible plow the combination with a wheel-axle, a pole-beam, a longitudinally-arranged mold-plate or body, a plowshare and a colter rotatably journaled respectively in said pole-beam of a reversing-lever and connections of said lever with the rotatable plowshare and with an adjustable crank-arm secured to the wheel-axle, oppositely-turned crank-shaped wheel-carrying extensions of said axle, and extensions on the reversing-lever capable of engaging with the rotatable mold-plate or body, the paths of rotation of the mold-plate or body and of the colter intersecting each other.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

FRANZ WIEGARD.

Witnesses:
WILLIAM ESSENWEIN,
PETER LIEBER.