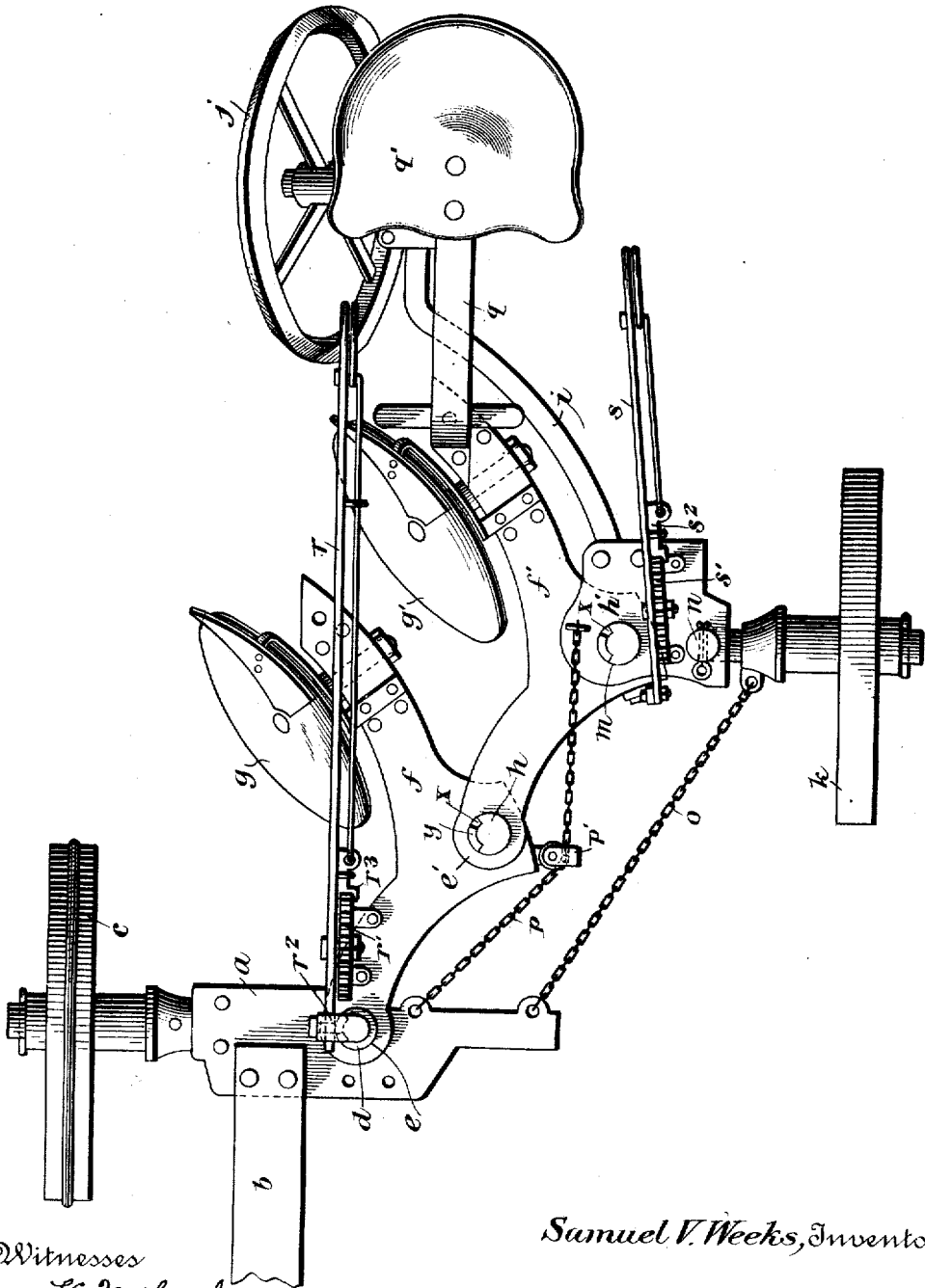


No. 829,560.

PATENTED AUG. 28, 1906.

S. V. WEEKS.
CONVERTIBLE PLOW.
APPLICATION FILED APR. 26, 1905.



Witnesses
Jas. E. McEachran
Louis E. Julihn

Samuel V. Weeks, Inventor

By *E. G. Higgins*
Attorney

UNITED STATES PATENT OFFICE.

SAMUEL V. WEEKS, OF HIGHLAND PARK, TENNESSEE, ASSIGNOR TO THE
VOLUNTEER DISK PLOW COMPANY.

CONVERTIBLE PLOW.

No. 829,560.

Specification of Letters Patent.

Patented Aug. 28, 1906.

Original application filed June 26, 1903, Serial No. 163,265. Divided and this application filed April 26, 1905. Serial No. 257,497.

To all whom it may concern:

Be it known that I, SAMUEL V. WEEKS, a citizen of the United States, residing at Highland Park, in the county of Hamilton and State of Tennessee, have invented a new and useful Convertible Plow, of which the following is a specification.

This invention relates to a convertible plow of that general type disclosed in my co-pending application, Serial No. 163,265, filed June 26, 1903, of which the present application is a division.

The primary object is to provide in a plow of this character a frame comprising separate interchangeable furrow-opener-supporting beams detachably secured together and equipped with supporting-wheels adapted to support one of the beams or the frame including a plurality of such beams in order that the plow may be readily converted for use as a single plow or as a gang-plow including two or more units.

A further object is to dispense with the spacing-blocks, devices, and brackets usually employed by providing the interchangeable furrow-opener-supporting elements or beams with overlapping portions detachably secured directly together, so as to permit the conversion of a gang-plow into a single plow by detaching the superfluous beam or beams.

A further object of the invention is to facilitate the turning of sharp or square corners by automatically effecting the proper relative adjustment of the several supporting-wheels when the line of draft is changed, this end being attained in the present construction by establishing an operative connection between the shiftable wheel-supports and the draft appliance.

One embodiment of the invention by means of which the several objects are attained is illustrated in the accompanying drawing and will be hereinafter described and claimed.

In the drawing is disclosed a plan view of a plow constructed in accordance with my invention.

What may be termed a "front" wheel-frame *a*, having attached thereto a tongue *b* and supported by a front furrow-wheel *c*, is provided with an upstanding journal or post *d*. This post is received within a cylindrical socket *e*, formed at the front end of a furrow-opener-supporting beam *f* of angular form.

At its rear end the beam *f* supports a furrow-opener, which in the present instance is in the form of a disk *g*, although so far as the present invention is concerned any other character of plow element or furrow-opener may be substituted for the disk and supported in any desired manner from the rear end of the beam. At the angle of the beam *f* is located a vertical post *h*, similar to the post *d* of the front wheel-frame *a*. This post *h* is received within a cylindrical socket *e'* of a second furrow-opener-supporting beam or disk-carrying element *f'*, which is a duplicate of and interchangeable with the beam *f*. At its rear end the beam *f'* carries a furrow-opener *g'*, and at its angle rises a post *h'*, identical in construction and location with the post *h* of the beam *f*. The two beams and disks connected as specified constitute a gang; but it will of course be understood that this series of beams and furrow-openers may be extended indefinitely, it being merely necessary to provide any additional number of units constructed precisely like those described and connected in a similar manner. To the last beam of the series or gang, in the present instance the beam *f'*, is applied the rear wheel-frame *i*, supported at its front and rear ends by the land-wheel *k* and the rear furrow-wheel *j*. At the front end of the rear wheel-frame *i* is formed a socket *m*, which receives the post *h'* of the beam *f'*. The several posts *d*, *h*, and *h'* are each cut away at one side, as indicated at *x*, to accommodate a lug *y*, projecting inwardly from the socket within which the post is received. By reason of this arrangement the front wheel-frame is permitted to have limited pivotal movement independently of the beam *f* with the post *d* as an axis, each beam similarly having slight relative movement independently of the beam in rear thereof and the rearmost beam being similarly movable with reference to the rear wheel-frame *i*.

The crank-axle *n* of the land-wheel is swiveled in the rear wheel-frame *i*, as shown, and is connected, as by a chain *o*, to the adjacent end of the front wheel-frame *a*. The rear wheel-frame is connected at the inner side of its axis to the front wheel-frame by a chain *p*, which may be given direction by a suitable guide *p'*, adapted to be detachably connected to any one of the several beams, but shown connected to the beam *f*. It will

be noted that in making a turn to the left the front wheel-frame will turn slightly before being arrested by the engagement of the stop y with the rear shoulder on the post d .

5 The front wheel-frame and the beam f will then swing in unison with the post h as an axis, the beam f' being then similarly swung relative to the rear wheel-frame, and all of these elements of the plow-frame assuming

10 their normal relation, as shown in the drawing, as soon as the turn is completed. In making a turn to the right, however, there is no relative movement of the elements of the plow-frame, since the lugs y are normally in

15 engagement with the front walls of the cut-away portions x of the several posts. The vertical adjustment of the frame comprising the beam elements relative to the front and rear wheel-frames is effected by means of

20 levers r and s . The lever r is fulcrumed on a toothed segment r' , adapted to be bolted, clamped, or otherwise secured to whichever of the beams occupies the most advanced position. In the present instance this seg-

25 ment is shown attached to the beam f .

At its front end the lever r has loose pivotal connection with a bracket r^2 , secured to the post d . Obviously by swinging the lever r the beam f may be raised or lowered

30 relative to the front wheel-frame, the lever being secured in its adjusted position by means of a latch r^3 , carried by the lever and engaging the segment. The lever s is fulcrumed upon a toothed segment s' , secured

35 to the rear wheel-frame adjacent to its front end, the front extremity of the lever having loose pivotal connection with whichever beam occupies the rearmost position—for instance, the beam f' . The lever s is equipped

40 with a latch s^2 , which engages the segment s' . By the manipulation of this lever the rear end of the beam may be raised and lowered relative to the rear wheel-frame. The spring q' of the driver's seat q is bolted or otherwise

45 secured to the rear end of the rearmost beam, as shown in the drawing, when the plow is organized as a gang, and is similarly attached to the single furrow-opener-support-

50 ing beam when the device is converted into single plow.

It will be observed from the foregoing that I have produced a plow including a frame comprising separate interchangeable overlapping furrow-opener-supporting beams detachably secured directly together and carried by supporting-wheels, all of which are capable of attachment to one of such beams alone or to the frame including a plurality

of such beams to permit conversion from a gang to a single plow or vice versa. It is to be understood, however, that while the present embodiment of the invention is thought at this time to be preferable I reserve the right to effect such changes, modifications, and variations of the illustrated structure as may come fairly within the scope of the protection prayed.

What I claim is—

1. In a convertible plow, separate interchangeable furrow-opener-supporting beams having overlapping portions flexibly and detachably connected to permit conversion from a single plow into a gang-plow and vice versa and to enable the beams to move laterally relative to each other when the device is organized as a gang-plow, and means for limiting such relative movement of the beams.

2. In a convertible plow, a frame comprising separate interchangeable furrow-opener-supporting beams detachably and flexibly connected, stops for limiting relative lateral movement of the beams, and supporting-wheels, all of which are capable of attachment both to one of the beams alone or to a frame including a plurality of such beams.

3. In a convertible plow, front and rear wheel-frames, a front furrow-wheel supporting the front wheel-frame and a rear furrow-wheel and a land-wheel supporting the opposite ends of the rear wheel-frame, and separate interchangeable furrow-opener-supporting beams connecting the wheel-frames and also directly connected to each other.

4. In a convertible plow, a front wheel-frame disposed directly across the line of draft, a rear wheel-frame disposed obliquely across the line of draft, a supporting-wheel for the front wheel-frame, a plurality of supporting-wheels for the rear wheel-frame, and a plurality of separate interchangeable furrow-opener-supporting beams detachably secured together and connecting the front and rear wheel-frames, each of said beams being adapted for attachment to a plurality of similar beams or to either the front or rear wheel-frame or both, whereby the plow may be converted from a gang to a single plow or vice versa.

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

SAMUEL V. WEEKS.

Witnesses:

JOHN H. SIGGERS,
BLANCHE J. KALDENDACK.