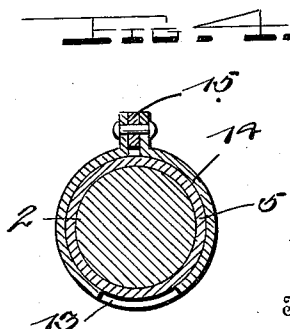
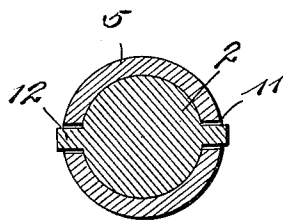
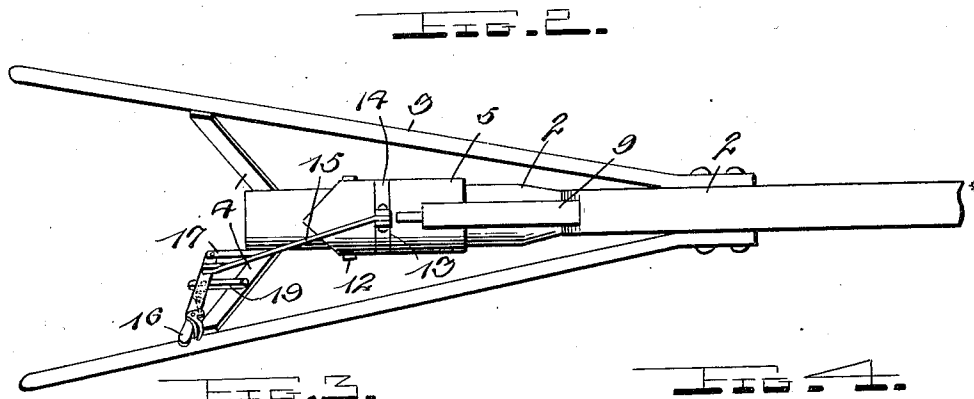
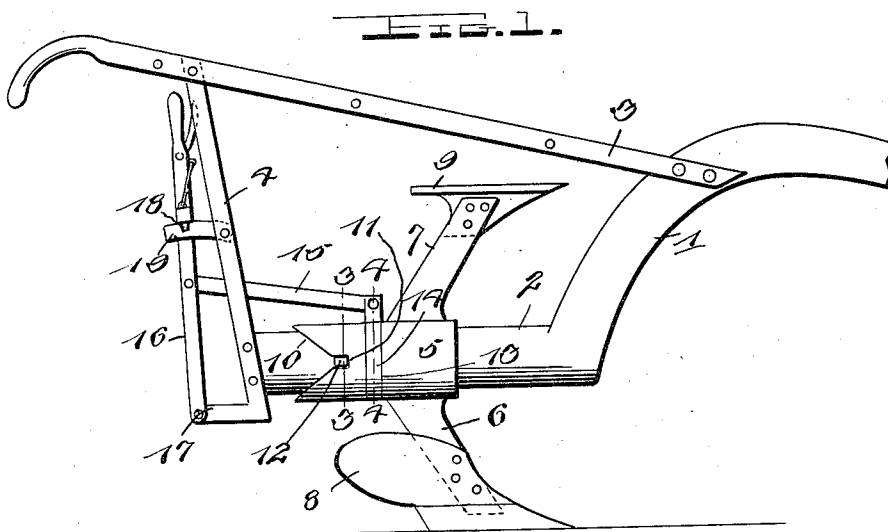


R. B. FRY.
 PLOW.
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PLOW.

1,036,215.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ROBERT BRUCE FRY, a citizen of the United States, residing at Hickory, in the county of Catawba and State of North Carolina, have invented certain new and useful Improvements in Plows, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to new and useful improvements in plows and more particularly to a reversible plow and my object is to provide a device of this character which may be readily and quickly reversed to be
15 operated as a right and left hand turning plow or a turning plow and sub-soiler.

A further object of the invention resides in providing an improved means for locking the respective feet in their effective and in-
20 effective positions, and a still further object of the invention resides in providing a device which is extremely simple and durable in construction, inexpensive to manufacture and one which will be very efficient and use-
25 ful in operation.

With these and other objects in view the invention consists in the novel features of construction, combination and arrangement of parts as will be hereinafter referred to
30 and more particularly pointed out in the specification and claims.

In the accompanying drawing forming a part of this application, Figure 1 is a side elevation of the plow with my improvement
35 applied thereto. Fig. 2 is a top plan view thereof. Fig. 3 is a transverse section as seen on line 3—3, Fig. 1; and Fig. 4 is a similar view as seen on line 4—4, Fig. 1.

In describing my invention, I shall refer
40 to the drawing in which similar reference characters designate corresponding parts throughout the several views and in which 1 indicates a beam of the usual type used on plows of this character, the rearward
45 portion of which is bent downwardly and terminates in a longitudinally extending cylindrical portion 2 and extending rearwardly from the beam at the bent portion thereof are the handle members 3 which are

braced by means of the arms 4 which are
50 secured to the extreme rear end of the cylindrical portion of said beam. In carrying out the idea of the reversible plow, I have provided a metallic sleeve portion 5 which
55 is loosely mounted on the cylindrical portion 2 of said beam, said sleeve having formed at diametrically opposite points thereon, the outwardly extending feet 6 and 7. These feet may be provided with
60 any form of plows or other ground treating implements but in the drawing I have provided the same with turning and sub-soiling
65 plows 8 and 9 respectively, said plows being secured to the feet in the usual or any approved manner.

As stated, the sleeve 5 on which these feet
6 and 7 are formed is loosely carried on the cylindrical portion 2 of the beam, whereby it is capable of a sliding and a rotatable
70 movement thereon, but I have provided a means to lock said sleeve in position which will effectively dispose the plows carried on the feet 6 and 7 in position to engage the
75 soil. To this end, the rear end of the sleeve 5 is cut away in Y-shape at diametrically opposite points thereon as shown at 10, said
80 cut away portions terminating in notches 11, while the cylindrical portion 2 is provided at diametrically opposite points thereon with the lugs 12 adapted to be entered in
85 said notches 11. These notches 11, while being disposed at diametrically opposite points on the sleeve 5 are arranged intermediate of the feet 6 and 7 and as the lugs 12
90 which are adapted to enter said notches are arranged in a horizontal plane, it will be appreciated that when the lugs are properly seated in the notches, the one foot with the plow thereon will be effectively disposed below the beam, while the other will be in-
95 effectively disposed thereabove.

In order to provide for the sliding movement of the sleeve 5 on the cylindrical portion 2, said sleeve is provided with an annular groove or the like 13 which is adapted
95 to receive therein a yoke or clamping collar 14, said collar being so engaged in the groove as to permit rotative movement of

the sleeve with respect thereto and at the same time sufficiently disposed therein to cause sliding movement of said sleeve when said collar is moved rearwardly or forwardly. This yoke-like member or collar 14 has connected therewith the one end of a stem or rod 15, the opposite end of the latter being pivotally engaged with a lever 16, which lever is fulcrumed at its lower end on an integral and rearwardly extending projection 17 formed on the lower end of one of the handle braces 4. It will thus be seen that as said lever 16 is moved forwardly or rearwardly, said sleeve 5 with the feet and plows thereon will be correspondingly moved forwardly or rearwardly and when moved to a forward position, said sleeve may be rotated on the cylindrical portion 2 of the beam to permit one plow or the other to be effectively disposed. After the sleeve has been rotated to dispose the proper plow in position, the sleeve is drawn rearwardly so as to dispose the lugs 12 in the notches 11 of said sleeve, whereby rotation of said sleeve is positively prevented, and in order to lock the same in its adjusted position, the lever 16 is provided with a spring held detent 18 which is adapted to engage the teeth of a ratchet 19 extending from one of said handle braces 4. Thus after the sleeve 5 has been drawn rearwardly to lock the lugs 12 in the notches 11, whereby rotative movement of the sleeve will be prevented, the detent may be engaged with the ratchet to positively lock the same in its adjusted position throughout the use thereof.

From the foregoing description of the construction of my plow, the operation thereof will be readily understood and it will be seen that I have provided a simple and inexpensive reversible plow which will be very efficient and useful in operation.

While I have particularly described the elements most well adapted to perform the functions set forth, it is obvious that various changes in form proportion and in the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the principles of the invention.

Having thus described this invention, what I claim is:—

1. A reversible plow comprising a beam, the rearward portion of which is cylindrically designed, a sleeve slidably and revolvably mounted on the cylindrical portion of said beam, the rear end of said sleeve being cut away and Y-shaped at diametrically opposite points thereon, said cut-away portions terminating in notches, a pair of oppositely disposed feet formed on said sleeve, lugs formed on the cylindrical portion of said beam at diametrically opposite points thereon, means to manually slide said sleeve

on the beam to dispose the lugs on the latter in the notches of the former, and additional means to retain the sleeve in its locked position.

2. A reversible plow comprising a beam, the rearward portion of which is bent downwardly and terminates in a cylindrical portion, a sleeve slidably and revolvably mounted on said cylindrical portion of the beam, said sleeve being provided with notches in its rear end at diametrically opposite points thereon, and also provided with an annular groove, a pair of oppositely disposed feet formed on said sleeve, lugs formed on the cylindrical portion of the beam at diametrically opposite points thereon, a yoke-like member engaged in the groove of said sleeve, a lever fulcrumed on an extension of the beam, and connecting means between said lever and said yoke member, whereby said sleeve may be slidably moved on the beam to dispose the lugs thereon in the notches of said sleeve.

3. A reversible plow comprising a beam, the rearward portion of which is cylindrically designed, a sleeve slidably and revolvably mounted on the cylindrical portion of the beam, said sleeve having the rear end thereof cut away in V-shaped portions at diametrically opposite points thereon, said cut away portions terminating in notches, oppositely disposed feet formed on the sleeve intermediate of the notches therein, lugs formed on the cylindrical portion of said beam at diametrically opposite points thereon and adapted to enter the notches of said sleeve, said sleeve being also provided with an annular groove therein, a yoke-like member engaged in the groove of said sleeve, a lever fulcrumed on an extension in said beam, connecting means between the lever and said yoke-like member to cause said sleeve to be moved on the beam upon the movement of the lever, and means to lock said lever in various adjusted positions.

4. In a reversible plow, the combination with a beam having a rear portion thereof curved downwardly and terminating in a cylindrical portion, handle members secured to the beam at the curved portion thereof, bracing arms for said handle members secured to the rear end of said cylindrical portion of the beam, and a rearward extension formed on the lower end of one of said bracing arms; of a sleeve slidably and revolvably mounted on the cylindrical portion of the beam, the rear end of said sleeve being provided at diametrically opposite points thereon with notches, said sleeve being also provided with an annular groove therein forward of said notches, oppositely disposed feet formed on the sleeve intermediate of said notches, lugs formed on the cylindrical portion of the beam and adapted to be re-

ceived in the notches of said sleeve, a yoke-like member arranged in the groove of said sleeve to permit rotation of the latter with respect thereto, a lever fulcrumed at its lower end on the extension of one of said bracing arms, a connecting rod between said lever and the yoke-like member to move said sleeve upon the movement of the lever, and means to lock said lever in its adjusted positions. 10

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

ROBERT BRUCE FRY.

Witnesses:

J. C. SHUFORD,
L. H. WARLICK.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."