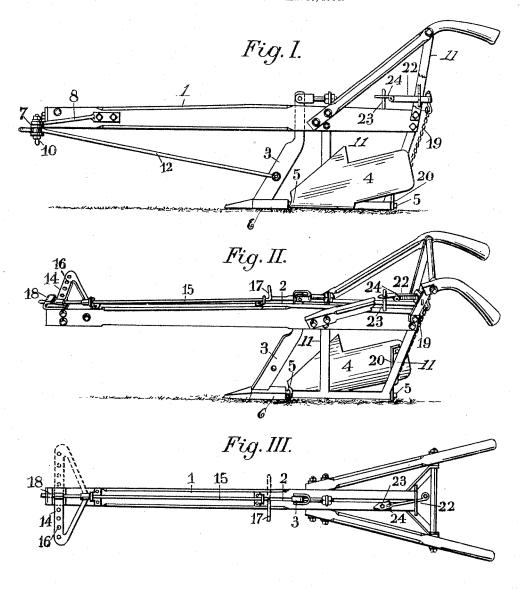
## E. J. RUBOTTOM. PLOW.

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Witnesses: C.A. Brandau Elmer Wickes

Inventor:

# UNITED STATES PATENT OFFICE.

### EMPHREY J. RUBOTTOM, OF FELTON, CALIFORNIA.

#### PLOW.

SPECIFICATION forming part of Letters Patent No. 783,594, dated February 28, 1905.

Application filed March 15, 1904. Serial No. 198,273.

To all whom it may concern:

Be it known that I, EMPHREY J. RUBOTTOM, a citizen of the United States of America, residing at Felton, in the county of Santa Cruz and State of California, have invented certain new and useful Improvements in Plows; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to plows and to certain improvements therein, whereby they are adapted to the various purposes that occur

in use.

My improvements consist in a means of strengthening the beam and colter for heavy draft in hard ground, in devices to reverse with quickness and precision the position of the moldboard, in adjustable devices to vary the plow from the line of draft in cultivating orchards and the like, and in other improved constructive features, as hereinafter specified.

The object of my invention is to provide a plow adapted to the various requirements of thusbandry by means of simple adjustments and changes that can be made by ordinary workmen and without the exercise of mechanical skill.

To these ends I construct plows as herein described and illustrated by drawings that form a part of this specification, the different figures showing as follows: Fig. I is a side view of one of my improved plows arranged for plowing in hard places, such as in beaten roads or breaking tenacious sod. Fig. II is a perspective view of my improved plow, showing the reversible clevis-bar and means for operating the same to shift the line of draft. Fig. III is a plan view of Fig. II, showing more clearly the devices to regulate the course of a cultivating-plow in respect to the line of draft.

The uses to which a plow must be directed, especially on large farms, are widely varied 45 and cannot well be provided for by having different plows for each purpose, nor is this necessary when the same construction can be modified with but little change or expense to serve all the requirements. This I attain by

the construction shown in the drawings now 50 to be referred to.

The beam 1 I make in two parts bolted together, thereby securing a stronger construction less liable to warp or spring and providing a central space 2 to receive the colter 55 3 or other parts that are inserted between the two members.

The moldboard 4 is made reversible for the purpose of plowing hillsides and pivoted to the share 6 and frame 11 at 5 5 in the manner de-60 scribed in my copending application for Letters Patent, Serial No. 120,147, filed August 18, 1902, for improvements in plows. The moldboard 4 is shown in its right and left positions in Figs. I and II.

In Fig. I the draft rod or bar 12 extends back and is bolted to the colter-bar 3, so the pulling strain is direct on the colter-bar near the surface of the ground and the beam is relieved of the heavy pulling strain. In this 70 form the plow can be employed for the heaviest work, such as plowing beaten roads, breaking sod, and the like. For ordinary agricultural plowing an ordinary clevis can be substituted for the draft-bar 12 and guide-75 bars 7 to operate in the usual manner. This being well understood, the parts do not require illustration here.

For orchard-plowing or in any case where furrows are to be made close to plants or at 80 one side of the path of the team that draws the plow I employ devices, as shown in Figs. II and III, consisting of a pivoted clevis-bar 14, mounted on an oscillating rod 15, provided with perforations 16, reversible from side to 85 side or right and left, as indicated by dotted lines in Fig. III, according to the course of the plow and position of the moldboard 4. The rod 15 extends back to within reach of the plowman and is provided with an angular 90 handle 17, by means of which the rod 15 can be drawn back to disengage the clevis-bar 14 from a strong socket-piece 18, after which the clevis can be turned over, as indicated in Fig. III, and is then drawn forward and locked in 95 the socket 18 by the tension of trace-chains, and when working is securely held there by the draft on the clevis 14. The moldboard 4

is held in its right and left positions by a chain 19, lever 22, and a friction-clamp, the latter consisting of a steel stud 23 and a pivoted clip 24, that fits loosely on the stud 23, but clamps or nips the same at any point by deflection of the clip 24 as soon as this latter is strained upward by the lever 22.

When changing from a right to a left hand plow, or the reverse, the clip 24 is released by pulling up the front or projecting end. This slackens the chain 19, attached to the moldboard 4 by a brace 20, and the moldboard 4 is swung beneath to the other side and the clip 24 again fastened. At the same time the clevis 14 is turned to the other side by means of the handle 17 and the plow is ready for plowing on the opposite side of a row of trees or like purposes. In this manner it will be seen that a single plow can be quickly modicied for the various uses that arise in practice by a few inexpensive accessories and that its usefulness or adaptation is not impaired

Having thus explained the nature and ob-25 jects of my invention and the manner of constructing and using the same, what I claim as new, and desire to secure by Letters Patent, is

thereby.

 In a plow, a beam, colter and share, a 3° reversible moldboard pivoted at the rear end of the share, a chain to hold the moldboard in its right and left positions, a lever 22 and friction-clip 24 to hold the chain and moldboard in the two positions, substantially as specified.

2. In a plow having a reversible moldboard, a beam, a colter-bar and share, a horizontally-pivoted clevis-bar reversible on its pivot to the right or left, a rod extending from said clevis-bar rearwardly along the beam, and a 40 handle on the rod within reach of the plowman for operating said clevis-bar, substantially as specified.

3. In a plow having a reversible moldboard, a beam, a colter-bar and share, a horizontally-45 pivoted clevis-bar reversible on its pivot to the right or left, and also mounted to slide back and forth, a socket-piece 18 in front of said clevis-bar under which the latter is receivable to hold it in either position, a sliding 50 and rotatory rod extending from said clevis-bar rearwardly along the beam, and a handle on said rod within reach of the plowman for operating said rod to reverse the clevis-bar and also to secure the latter in position when 55 reversed, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

#### EMPHREY J. RUBOTTOM.

Witnesses:

H. E. MAKINNEY, WILLIAM MURPHY.