No. 644,099. Patented Feb. 27, 1900.

J. R. ROSSETTER.

PLOW.

(Application filed Nov. 6, 1899.)

(No Model.)

Fig. 1.

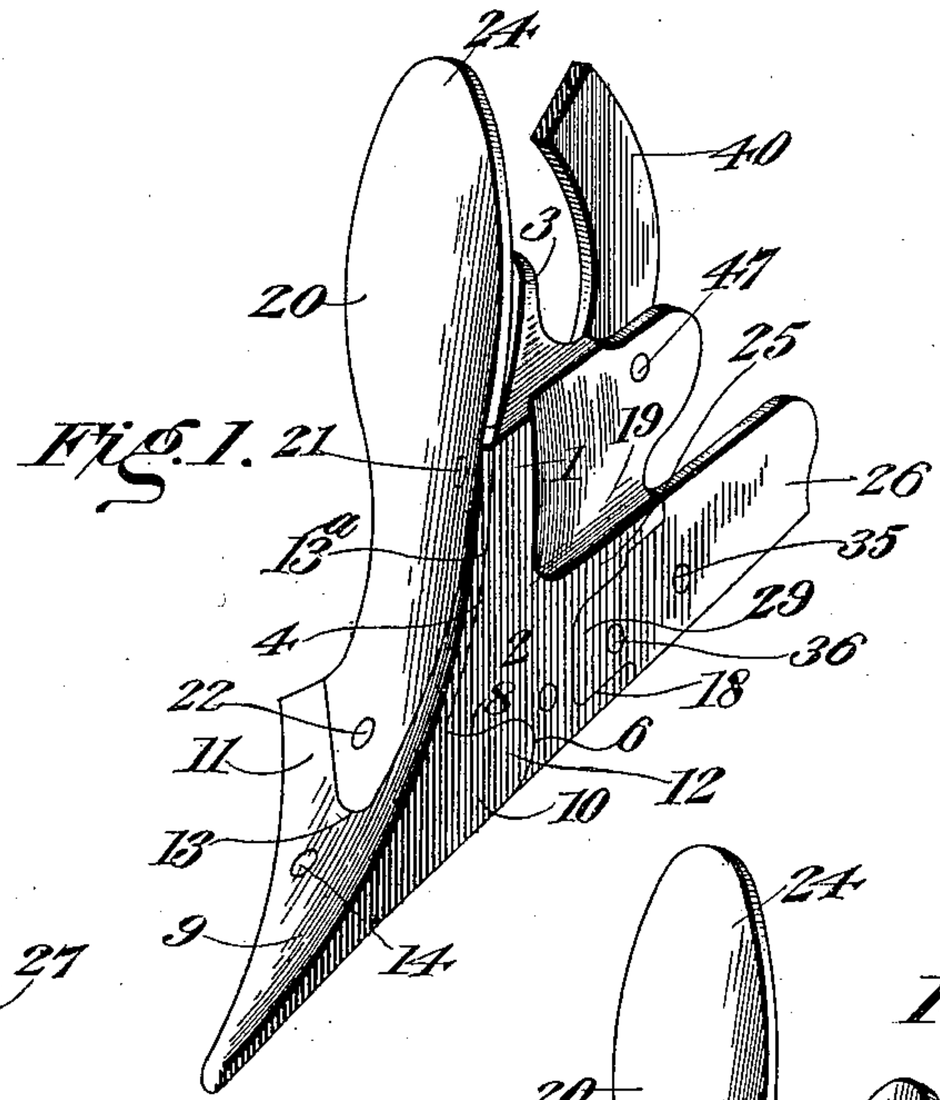


Fig. 5.

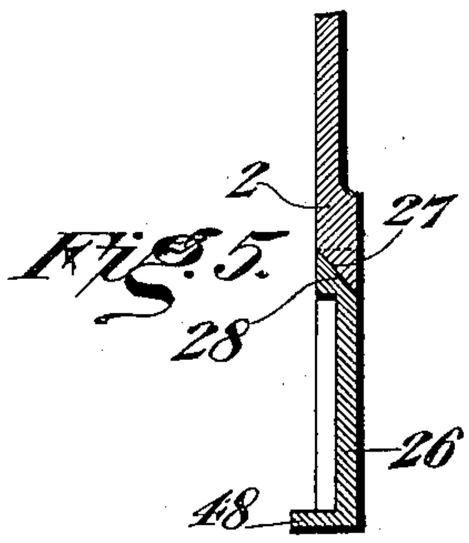


Fig. 2.

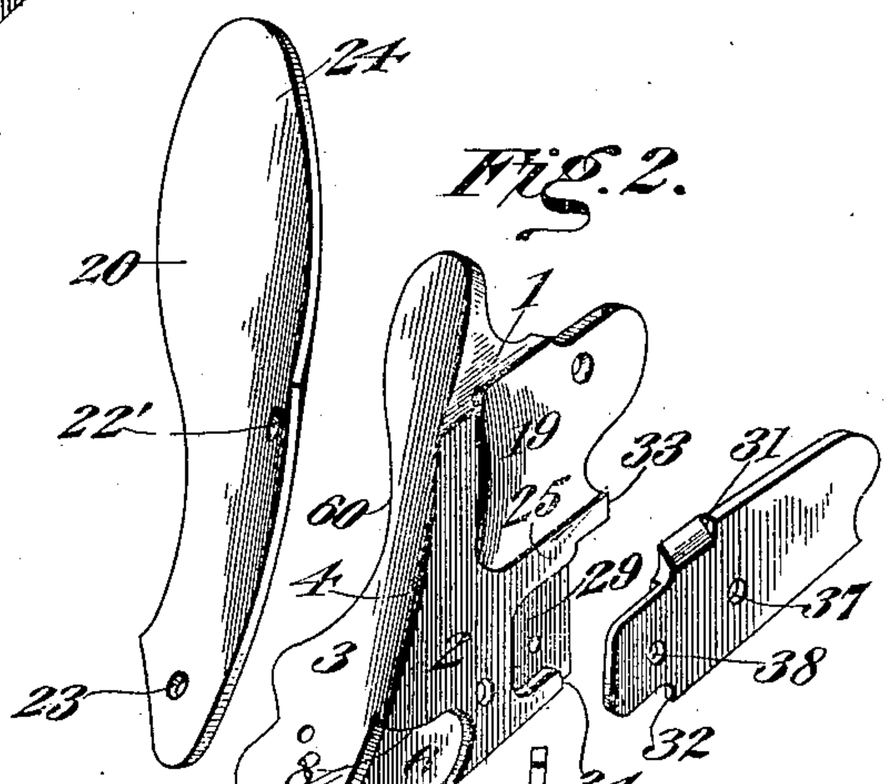


Fig. 3.

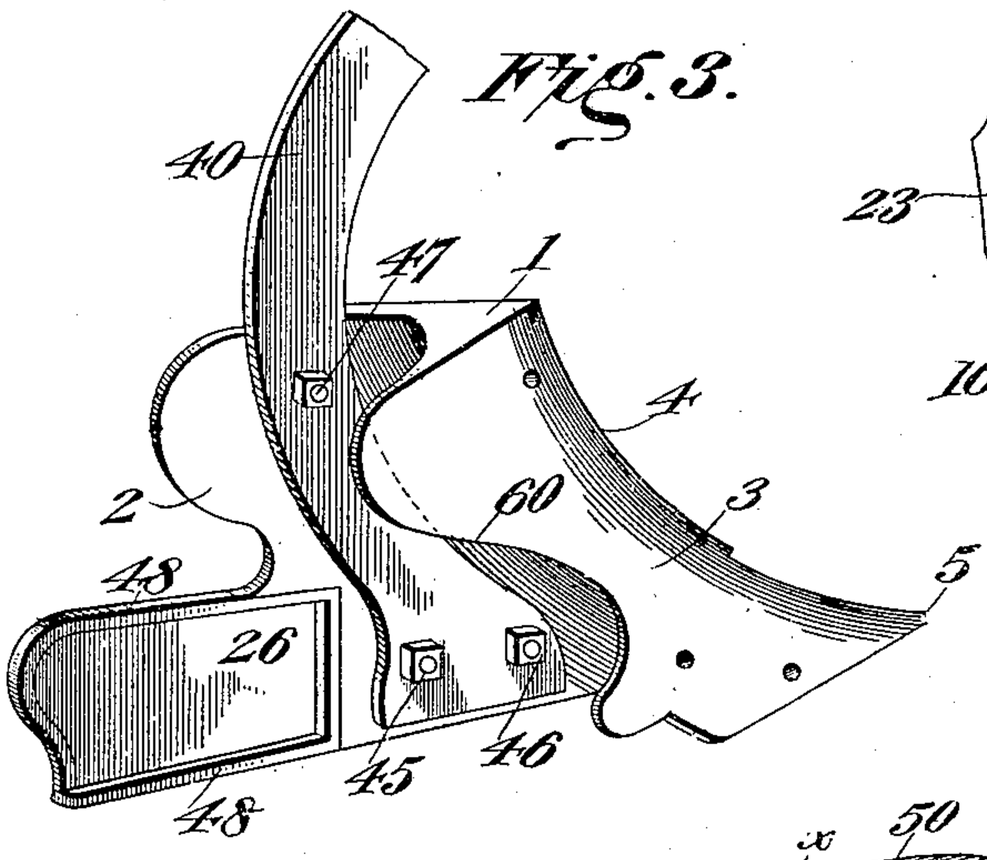
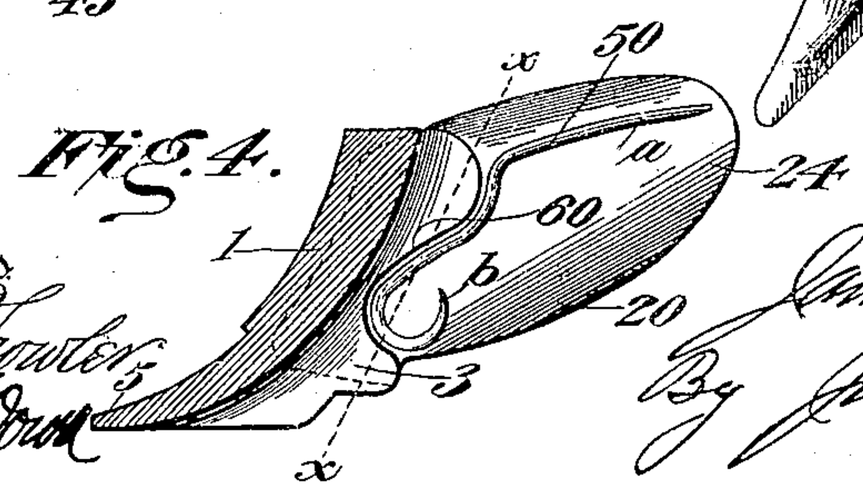


Fig. 4.



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UNITED STATES PATENT OFFICE.

JAMES R. ROSSETTER, OF CLARKSVILLE, TENNESSEE.

PLOW.

SPECIFICATION forming part of Letters Patent No. 644,099, dated February 27, 1900.

Application filed November 6, 1899. Serial No. 735,982. (No model.)

To all whom it may concern:

Be it known that I, JAMES R. ROSSETTER, a citizen of the United States, residing at Clarksville, in the county of Montgomery and State of Tennessee, have invented certain new and useful Improvements in Plows; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to plows; and it consists, substantially, in such features of improvement as will hereinafter be more particularly described.

Hitherto in some instances it has been usual to manufacture some of the parts of a plow quite thick, by which to overcome the liability to distortion or breakage of either the said parts or the bolts or other fastenings which secure the same together, and particularly is this true with respect to plows which are made of "chilled" metal. As a resultant disadvantage of a plow so constructed the parts do not fit together as perfectly and securely as is desired and the plow as a whole is much more expensive to manufacture and is not as easily or cheaply repaired when broken, besides being less efficient in use and more difficult to control or manipulate. Furthermore, on account of the increased thickness given to some of the parts of the plow the said parts cannot be given that accuracy of form or shape essential to a perfectly-operating plow, and thus the disadvantages are increased rather than diminished.

It is the object of the present invention to overcome the above and additional disadvantages in a plow, substantially as will hereinafter more fully appear when taken in connection with the accompanying drawings, in which—

Figure 1 is a view in perspective of a plow embodying the parts thereof constructed and arranged in accordance with my invention. Fig. 2 is a group in perspective of the several parts which go to make up the plow illustrated in the preceding figure. Fig. 3 is a view in perspective of the plow-saddle, showing the construction of the same and also indicating the manner in which the lower extremity of the plow-standard is fastened or secured thereto. Fig. 4 is a view of the saddle minus the standard and showing the location and form of the internal strengthening-rib for obviating breakage of either the said saddle or moldboard at the points most liable thereto. Fig. 5 is a sectional view in detail to more clearly indicate the form of connection between the forward end of the landside of the plow and the saddle.

In carrying my invention into effect I provide what I term a "saddle," which in reality is the main body of the plow, and this saddle is constructed as nearly as possible in conformity with the general shape which it is intended the plow as a whole shall possess—that is to say, the said saddle is constructed in the main of two side portions intersecting each other or coming together forwardly of the plow and terminating with an approximately-sloping forward edge, the lower extremity of which tapers forwardly in an approximate point. One of the side portions of the said saddle is constructed to receive a part of the removable plow-point and the other side of the saddle is constructed to receive another part of the said removable plow-point and also constructed to partially receive and serve as a support for the moldboard, which latter is likewise removable. The first-mentioned side portion of the saddle is, furthermore, constructed of special form adapting it to receive the forward end of the landside of the plow, and the means which I employ for securing the forward end of the landside in place renders the point of union of the same with the plow most secure and strong, besides enabling the detachment or removal of the landside for any purpose whenever desired. The lower extremity of the plow-standard is secured on the opposite side of the aforesaid second-named portion of the plow-saddle by the same means which fastens or secures the forward end of the landside in place, and the construction and arrangement of my improved plow in entirety are such as produce the most desirable results and advantages.

Having furnished a general statement of the construction and arrangement of the parts making up the plow, I will now refer specifically to the drawings, showing the several parts in detail.

1 designates the body of my improved plow

as a whole and which for convenience I have herein termed a "saddle." This saddle is constructed in one piece and comprises two side portions 2 and 3, which join each other or come together forwardly of the plow and merge into an approximately-narrow edge 4, and at the lower forward extremity the said side portions terminate in an approximate point 5. The said side portion 2 of the saddle is recessed at 6, which recess 6 extends rearwardly a suitable distance and terminates with a flange or shoulder 7, the latter extending either straight or diagonally across the side portion 2, but preferably being of the shape of a double reverse-curve 8, so as to constitute with a part of the removable or detachable plow-point 9 an interlocking joint 9^a. (See Fig. 2.) The said removable or detachable plow-point 9 is formed with wings 10 and 11, substantially at right angles to each other, and the said wing 10 is formed with a tongue or projection 12 of practically the same shape as the rearward or inner edge of the recess 6 of the side portion 2 of the saddle and which tongue or projection enters the said recess when the plow-point is properly fitted in place. The said wing 11 is formed with a deep notch or recess 13 and it overlaps and rests upon the lower forward side portion of the saddle 1 for a suitable distance. (See Fig. 1.)

Intermediate of the two wings of the point 9 is a vertically-extending curved rib 13^a, which extends along the upper forward edge 4 of the saddle and rests thereon, and between the inner vertical edge of said rib and the notch or recess 13 the moldboard 20 of the plow is held in position laterally, said moldboard also resting upon the upper surface of the side portion 3 of the saddle and being secured in place by means of bolts 21 and 22, Fig. 2, passing through openings 22' 23 therein. The moldboard is of the same general character or shape usually employed; but in this case the upper part 24 thereof is widened and projects above the upper edge of the saddle. To fasten the plow-point in place upon the saddle, a suitable bolt or rivet 14, Fig. 1, is employed, which passes through an opening 16 in the portion 3 of the saddle and is secured in any suitable manner, as by a nut or pin. (Not shown.)

As will be observed, the side portions 2 3 of the saddle 1 are approximately at right angles to each other, and by reference to Fig. 2 it will also be observed that the said portion 2 is still further provided with a depression or recess 18, extending inwardly or forwardly from the rear edge thereof. Also by reference to both Figs. 1 and 2 it will be further seen that the upper part of the outer surface of the said portion 2 of the saddle is sunken or depressed at 19, which leaves what may be termed a "rib" or "ledge" 25 on the side, the said rib or ledge furnishing an increased thickness of material at this particular point of the saddle, and it is in this increased or thickened portion of the said saddle that the said recess 18 is formed. The purpose of this construction is to obtain a simple and secure means of attachment of the landside 26 with the saddle. Thus, as seen in the sectional view, Fig. 5, the under side of the rib or ledge 25 is beveled at 27 inwardly and upwardly, while at 28 the landside 26 is formed with a corresponding beveled portion which engages therewith when the inner reduced end or tongue 29 of the said landside is properly inserted and pushed forwardly into the said recess 18. When so inserted, the shoulders 31 and 32 on the landside abut against corresponding shoulders 33 and 34 on the saddle, and the said landside is securely fastened in position by means of bolts 35 36, Fig. 1, passing through corresponding openings 37 38, Fig. 2, in both the landside and the said portion 2 of the saddle. By this construction the landside is rendered easily attachable and removable, and the most secure fastening is obtained therefor with less liability to breakage from strain or other causes.

The standard of my improved plow is designated at 40, and while the same can be constructed and attached or secured to the plow or saddle in different ways I prefer to curve the said standard forwardly and secure the same at the bottom to the inner side of the portion 2 of the saddle by means of the same bolts 35 and 36 which secure the forward end of the landside in place. Thus, as shown in Fig. 3, said bolts appear and they are provided with nuts 45 46 to firmly hold the said standard in place. As an additional security I also sometimes employ an additional bolt and nut, as shown at 47.

On the inner side or surface of the landside a suitable strengthening-rib 48 is preferably employed around the edge, and I also employ a similar strengthening-rib 50 on the inner side of the moldboard. It has been common to provide the latter with strengthening-ribs variously arranged; but in the present instance the said rib 50 is designed to extend at least twice across the point or line of direction—*i. e.*, vertical—in which breakage is most liable to take place. Thus the said rib follows the curved or concaved rear edge 60 of the side portion 3 of the saddle, thence extends across the upper part of the moldboard at *a*, and curves around and upwardly at *b*. The dotted line *x x* in Fig. 4 indicates the approximate line of possible breakage, and it will be seen that the rib 50 crosses such line at least twice, and thereby strengthens the plow at this point.

It will be understood that I do not confine myself to the precise details of construction and arrangement shown and described.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a plow, a saddle constructed of two side portions at an angle to each other, and a removable or detachable plow-point secured

in place with one side of the same flush with one side of said saddle, the other side of said saddle being constructed to partially support a moldboard.

2. In a plow, a saddle constructed of two side portions at an angle to each other, a removable or detachable plow-point secured in place with one side of the same flush with one side of the saddle, and the other side thereof overlapping the other side of the saddle, and a removable or detachable moldboard partially received by the overlapping portion of the plow-point, and also partially supported by the second-named portion of the saddle.

3. In a plow, a saddle constructed of two side portions at an angle to each other, and a removable or detachable plow-point secured in place with one side of the same flush with one side of the saddle, the other side of said saddle being formed to partially support a moldboard, and the said first-mentioned side portion of the saddle being constructed at its rear to receive the forward end of a landside.

4. In a plow, a saddle having in one side a forwardly-extending recess the upper side of which is beveled, and a landside having a tongue fitting said recess, and beveled corresponding to the side of the latter.

5. In a plow, a saddle having a rear concaved edge on one side, and a moldboard secured to that side of the saddle and having a strengthening-rib following the general direction of the said concaved edge.

6. In a plow, a saddle constructed of two side portions at an angle to each other, a removable or detachable plow-point with one part flush with one portion of the saddle, and another part of the same overlapping the other portion of said saddle, a moldboard secured to the saddle flush with the overlapping portion of the plow-point, and a landside fitting the first-named portion of the saddle at the rear thereof.

7. In a plow, the saddle having the two side portions, the removable plow-point having the wing portions and intermediate rib, and formed with the notch or recess, a moldboard having its lower end received by said recess, and a landside, substantially as described.

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

JAMES R. ROSSETTER.

Witnesses:
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T. J. MUNFORD.