

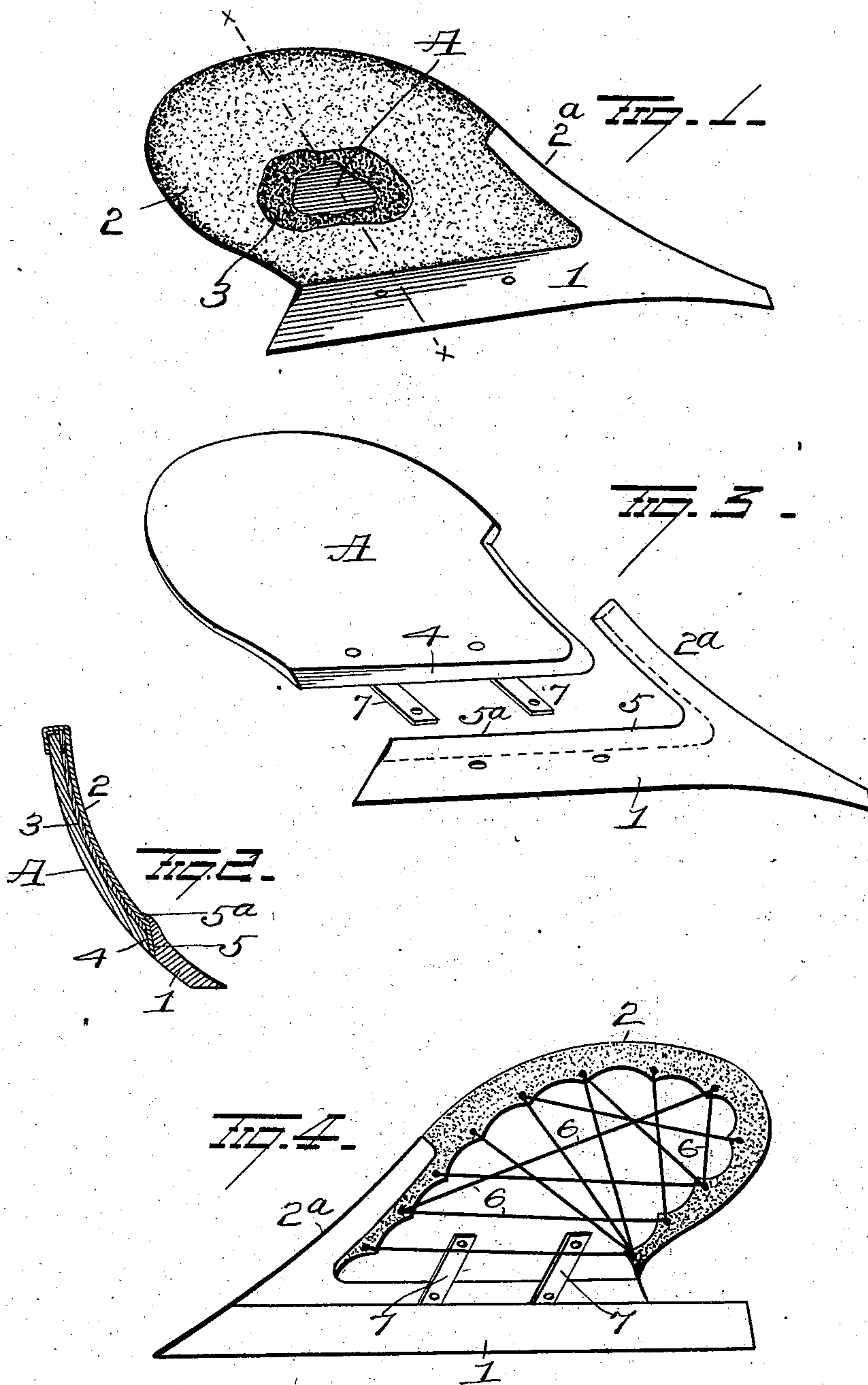
No. 724,598.

PATENTED APR. 7, 1903.

F. A. MILLS.
PLOW.

APPLICATION FILED OCT. 22, 1902.

NO MODEL.



WITNESSES
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FREDRICK A. MILLS, OF DALLAS, TEXAS.

PLOW.

SPECIFICATION forming part of Letters Patent No. 724,598, dated April 7, 1903.

Application filed October 22, 1902. Serial No. 128,323. (No model.)

To all whom it may concern:

Be it known that I, FREDRICK A. MILLS, of Dallas, in the county of Dallas and State of Texas, have invented certain new and useful

5 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 ap-

10 My invention relates to an improvement in plows, and is particularly designed as an improvement on the construction disclosed in my Patent No. 392,216, dated November 6, 1888.

15 In certain portions of the country the soil is composed of a stiff black loam, which when moist or wet adheres or sticks to the surface of the wearing parts of a steel plow or like implement, and in order to overcome this dif-

20 ficulty I covered the moldboard with a yielding covering of hide, as shown and described in the patent above referred to. Although this single thickness of hide upon the mold-

25 board did in a measure prevent the loam from adhering or sticking to the working parts of the plow, it did not, however, entirely do so, as in practice it was frequently found neces-

30 The object of my present invention is to provide a moldboard so as to afford not only a yielding surface to the soil, but likewise a slippery or moistened support on which said yielding surface rests or moves.

35 With this end in view my invention consists in certain novel features of construction and combinations of parts, as will be hereinafter more fully described, and pointed out in the claims.

40 In the accompanying drawings, Figure 1 is a side elevation of the moldboard and share of a plow, showing the face side of these parts and covering in place thereon. Fig. 2 is a view in vertical section on the line *xx* of Fig. 1. Fig. 3 is a view similar to Fig. 1, the mold-

45 board and share being separated from one another; and Fig. 4 is a view in elevation taken from the opposite side of Fig. 1.

50 A represents a moldboard of any desired form, and 1 is the plowshare, with coulter 2^a integral therewith. On the face of the mold-

board, which in use comes in contact with the furrow-slice to turn it, the hides (preferably porpoise-hides) 2 and 3 are placed, the latter hide resting with its outer surface upon the 55 outer face of the moldboard, while the former rests on hide 3 with its outer surface exposed, thus bringing the flesh sides of the two hides together. The outer hide 2 overlaps the edge of the moldboard around its entire contour 60 and with the exception of where it is clamped between the beveled edges 4 and 5 of the moldboard and combined share and colter is firmly secured against accidental displacement by the cross-lacing 6, as clearly represented in Fig. 4 of the drawings. The hide 65 3 preferably conforms to the outer contour of the moldboard and is loosely supported in its operative position by the hide 2 and its overlapping outer edge.

70 Secured to the rear side of moldboard A and projecting beyond the lower beveled edge 4 thereof are the cleats 7, by means of which the share and colter is removably secured to said moldboard, the attachment being effected by bolts passing through holes formed 75 in the share and cleats, respectively.

The outer hide 2, as previously stated, not only overlaps the exposed outer edge of the moldboard, but also overlaps the beveled edge 80 4 thereof. Hence it will be apparent that the corresponding beveled edge 5 and protecting-lip 5^a of the combined share and colter when the latter is in its operative or normal position act, in conjunction with said beveled 85 edge 4, as a clamp for securely locking the lower edge of said hide at this point. This protecting-lip 5^a is preferably formed integral with the upper edge of the share, though it may be secured thereto by bolts, and over- 90 laps the hides for a short distance, thus protecting the lower edge from the possible contact with roots and stones, which would tend to dislodge the hide covering.

Instead of employing a moldboard having 95 its own cutting edge I prefer to employ a colter, which in the present instance I have shown integral with the share, by means of which the portion of hide 2 overlapping the front beveled edge of the moldboard is 100 clamped and locked against movement. The colter overlapping and resting in front of the

hide protects the latter from the wear which would otherwise fall on the hide were the latter exposed at the cutting edge of the plow.

While I have shown the beveled surfaces 4 and 5 plain or smooth throughout their entire length, it is evident that they may be roughened or serrated should it be found advisable to provide a more effectual clamp for locking that portion of outer hide 2 confined between said beveled surfaces.

As already stated, the employment of a second hide interposed between the moldboard and outer hide constitutes the important feature of my invention, as it not only provides a yielding surface for the outer hide, but the hide having more or less oil therein forms a surface over which the outer hide may creep or crawl, thus obviating undue friction between the two hides and between the outer hide and the soil. Hence it will be apparent that the soil will move readily along the outer hide, which latter, as well as the inner hide, is kept moist by the damp earth, which assists in preventing the latter from sticking to the working parts.

It is evident that my improvements are applicable not only to plows, but are likewise applicable to other farming implements—such as listers, center-bursters, cultivators, sweeps, &c.—and it is further evident that changes in the construction and relative arrangement of the several parts comprising my invention, might be made without avoiding my invention, and hence I would have it understood that I do not restrict the application of my improvements to plows, nor do I restrict myself to the particular construction and arrangements of parts shown and described; but,

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

1. The combination with the portion of a farming implement used to turn the soil, of a double thickness of hide covering the same.

2. The combination with a plow, of a mold-

board covered with a double thickness of hide.

3. In a plow, the combination, with a moldboard and a skin or hide covering therefor, of a skin or hide interposed between the first-mentioned hide and moldboard, and means for securing the hide covering the moldboard, substantially as set forth.

4. In a plow, the combination, with a moldboard, a skin or hide covering said moldboard, a skin or hide interposed between the moldboard and first-mentioned skin, of means for securing the outer hide to the moldboard, substantially as set forth.

5. In a plow, the combination, with a moldboard and a covering therefor, of a combined plowshare and colter, the adjacent edges of the moldboard and plowshare and colter being beveled so as to aline and firmly clamp the overlapping section of the covering and means for securing the upper edge of the outer hide to the moldboard, substantially as set forth.

6. In a plow, the combination, with a moldboard having cleats projecting beyond its lower edge, a combined share and colter provided with bolt-holes for its attachment to the moldboard, of a hide or covering for the outer face of said moldboard, a portion of said hide being clamped between the adjacent edges of the moldboard and combined share and colter, and lacings for securing the remaining portion of said hide to the moldboard, substantially as set forth.

7. The combination with a portion of a farming implement which turns the soil, of two layers of hide covering the same, said layers of hide having their flesh sides disposed in contact with each other.

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

FREDRICK A. MILLS.

Witnesses:

R. WEBSTER,
FRANK SWOR.