

No. 642,425.

Patented Jan. 30, 1900.

J. BURRELL.
MOLDBOARD.

(Application filed Sept. 14, 1899.)

(No Model.)

Fig. 1.

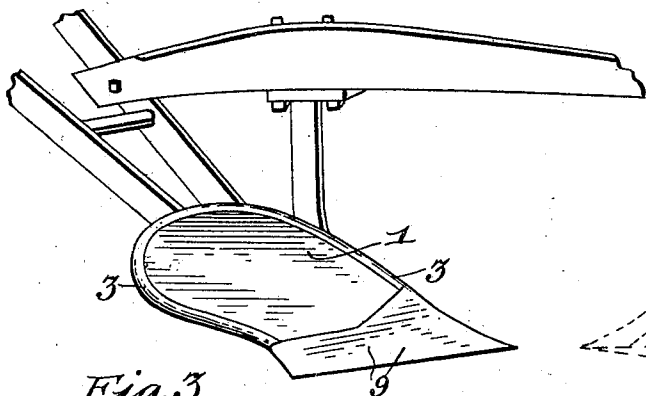


Fig. 2.

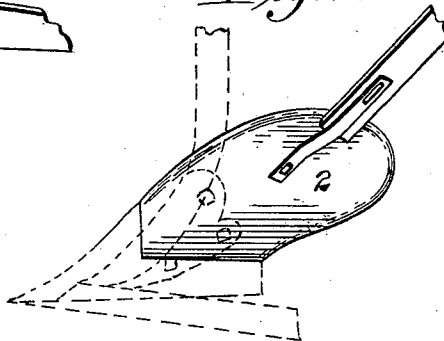


Fig. 3.

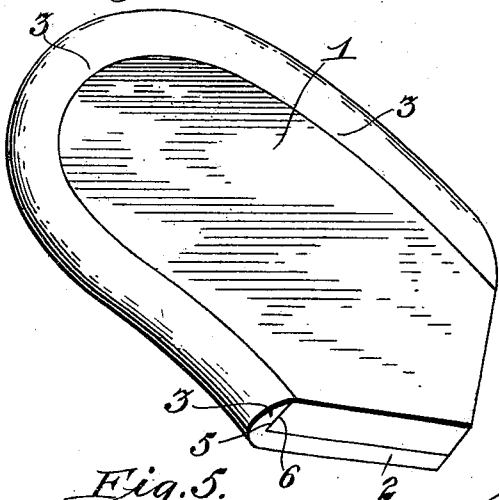


Fig. 4.

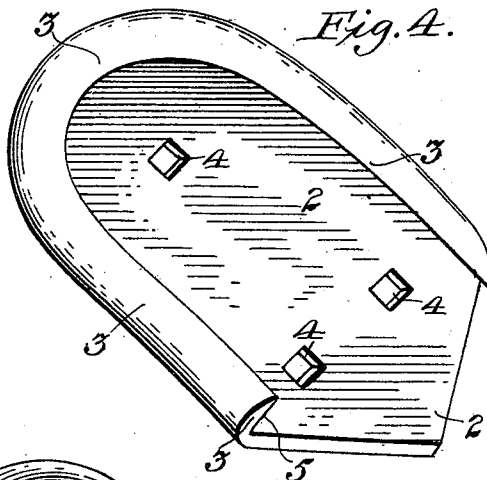


Fig. 5.

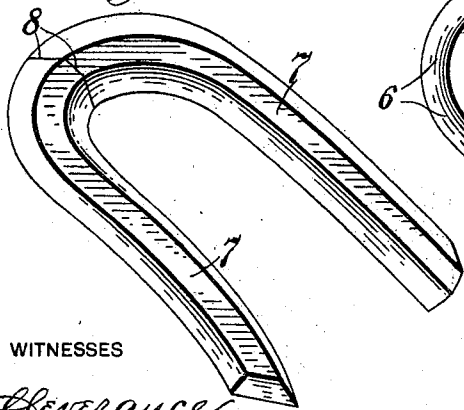
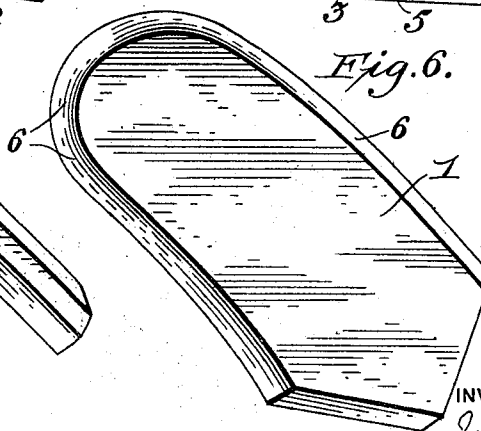


Fig. 6.



WITNESSES

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MOLDBOARD.

SPECIFICATION forming part of Letters Patent No. 642,425, dated January 30, 1900.

Application filed September 14, 1899. Serial No. 730,493. (No model.)

To all whom it may concern:

Be it known that I, JOHN BURRELL, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Moldboards; 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.

My invention relates to improvements in plows and moldboards therefor; and it consists of certain novel constructions, combinations, and arrangements of parts, as will be hereinafter specifically described and claimed.

In the accompanying drawings, Figure 1 represents a perspective view of a plow provided with a moldboard constructed in accordance with my invention. Fig. 2 represents a rear elevation of the same, showing the backing of the moldboard. Fig. 3 represents a perspective view of a moldboard constructed in accordance with my invention, the said moldboard being separate from the plow. Fig. 4 represents a perspective view of the metallic backing for the moldboard. Fig. 5 represents a detail view of the chill used in constructing the flange of the backing, and Fig. 6 represents a perspective view of the glass moldboard.

1 in the drawings represents a glass moldboard, 2 a metallic backing for supporting the same, and 3 a flange or cleat formed around the edge of the metallic backing for holding the glass moldboard in place.

My improved glass moldboard is so constructed that the glass is held in place upon the plow without applying bolts or rivets to the said glass, and yet in such a manner as to present a hard smooth surface to the earth which is being turned over by the plow.

To attach the glass moldboard to the plow without using bolts or rivets, I provide the same with a metallic backing, as 2, which may be provided with any desired number of bolt-holes, as 4 4, by which it may be secured to the standard of the plow or to other parts thereof. The metallic backing 2 is constructed with a flange or cleat 3, extending around the outer edges of the moldboard, the inner surface of the said flange being inclined, as

at 5, to correspond with the beveled edge 6 of the glass moldboard 1. The cleat or flange thus overhangs the beveled edge of the glass moldboard, so as to firmly hold the same in place. The flange 3 is preferably made hard by using a chill, as at 7, in molding the backing and flange. The chill 7 is preferably divided, as at 8, so that it can be readily removed from the mold after the backing has been cast. It is very important to make the flange or cleat of the backing of hard material, as there will be more or less wear upon the same, and the whole strain of holding the glass moldboard in place comes upon it.

The glass moldboard is constructed in any desired shape, and its outer edge is beveled, said beveled edge being adapted to slide beneath the overhanging flange 3 of the metallic backing. The other edges of the moldboard rest against the other parts of the plow, and the glass moldboard is thus held in place against the backing 2. As seen in Fig. 1 of the drawings, the glass moldboard at its free edge rests against the plowshare, as 9, so that it cannot slip out of the backing, and its upper surface is flush therewith, so as to present a smooth working surface.

It will be seen from the above description that I am enabled to make a very superior moldboard for plows and one which will have a hard and smooth surface for meeting the earth as the plow is used. Clay or sticky earth will not easily adhere to the surface of a glass moldboard, and the said moldboard will thus offer less friction and resistance to the ground in plowing. A glass moldboard will not rust as a metallic one will, which is a feature of great advantage.

I am aware that glass moldboards have been heretofore used, but some of these have been attached by means of bolts or rivets passing through the glass or embedded therein, which renders them very liable to breakage, and in others the standards of the plows have to be taken off to remove the glass moldboard. My improved moldboard is attached without applying any bolts or rivets to the glass itself, and yet is effectively held in position and can be removed when desired by simply taking off the plow point or share 9, but without the necessity of taking off the standards of the plow.

It will be apparent that I may construct my improved glass moldboard in many different shapes, according as it may be desired, for different plows without departing from the spirit
5 of my invention.

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

1. A plow comprising in its construction a
10 suitable framework and standards, a suitable metallic backing formed with an overhanging inclosing flange, a glass moldboard resting upon the said backing and extending partially under said flange so as to be held there-
15 by against lateral movement, and a plow-point which abuts against the lower edge of the glass moldboard so as to prevent the latter from slipping longitudinally, the upper surface of the glass moldboard and that of the
20 plow-point being practically flush, and fastening means for securing the metallic backing to the frame of the plow without passing through the glass moldboard, the construction and arrangement being such that the
25 glass moldboard can be removed without taking off the standards of the plow, substantially as described.

2. A plow comprising in its construction a

suitable framework and standards, a suitable
metallic backing formed with a hardened
30 overhanging inclosing flange, the inner surface of said flange being inclined, a glass moldboard having beveled edges around the greater portion of its periphery, said mold-
35 board resting upon the said backing and extending partially under the said flange in a dovetailed manner, so as to be held thereby against lateral movement, and a removable
40 plow-point which abuts against the lower edge of the glass moldboard so as to prevent the latter from slipping longitudinally, the upper surface of the glass moldboard and that of the plow-point being practically flush, and
45 fastening means for securing the metallic backing to the frame of the plow without passing through the glass moldboard, the construction and arrangement being such that the glass moldboard can be removed without
50 taking off the standards of the plow, substantially as described.

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

JOHN BURRELL.

Witnesses:

P. J. MURRAY,
FRANK P. SENN.