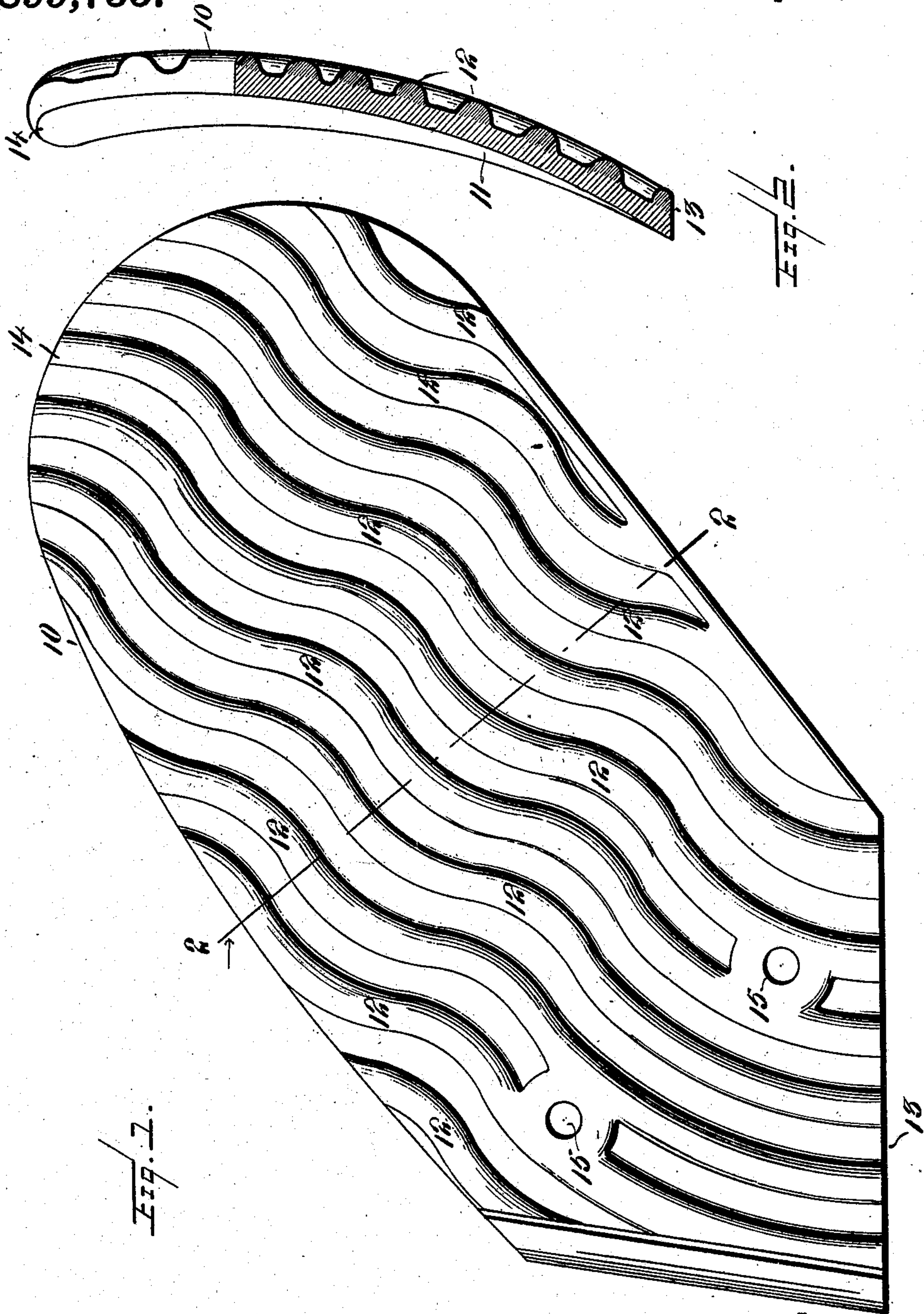


C. R. McGAHEY.  
PLOW MOLDBOARD.  
APPLICATION FILED AUG. 5, 1908.

899,755.

Patented Sept. 29, 1908.



WITNESSES:

*W. F. Roy*  
Alfred T. Sage.

INVENTOR

Calvert R. McGahey

BY

*E. B. Stocking*

Attorney



# UNITED STATES PATENT OFFICE.

CALVERT R. McGAHEY, OF LYNCHBURG, VIRGINIA, ASSIGNOR TO LYNCHBURG FOUNDRY COMPANY, OF LYNCHBURG, VIRGINIA, A CORPORATION OF VIRGINIA.

## FLOW-MOLDBOARD.

No. 899,755.

Specification of Letters Patent.

Patented Sept. 29, 1908.

Application filed August 5, 1908. Serial No. 447,060.

*To all whom it may concern:*

Be it known that I, CALVERT R. McGAHEY, citizen of the United States, residing at Lynchburg, county of Campbell, and State of Virginia, have invented certain new and useful Improvements in Plow-Moldboards, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to a mold board for plows, and particularly to a construction thereof having a chilled wearing surface and unchilled ribs upon the back thereof.

The invention has for an object to provide a novel and improved construction and disposition of these ribs extending upon undulating or compound curved lines diagonally from the plow engaging edge of the board to the upper portion thereof, thus disposing these ribs in the line of strain upon the moldboard and preventing cracking by chilling in a straight line, while forming an elastic and flexible back free to expand and contract in the cooling of the mold board so as to obviate longitudinal strain due to the increased shrinkage from the length of the moldboard.

Other and further objects and advantages of the invention will be hereinafter fully set forth and the novel features thereof defined by the appended claims.

In the drawing:—Figure 1 is an elevation of the rear of the moldboard; Fig. 2 is a section on line 2—2, Fig. 1.

Like numerals refer to like parts in the several views of the drawing.

The numeral 10 designates the moldboard which is of the usual metallic construction having the curved chilled wearing surface 11 and the ribs 12 upon the back thereof. These ribs are not chilled and extend in waved lines diagonally from the point engaging edge 13 of the board longitudinally thereof to the upper edge 14 thus disposing the ribs undulatingly across the line of strain both of longitudinal shrinkage and in the use of the board wherein the turned soil exerts a pressure upon a line extending longitudinally between the edges 13 and 14 thereof. The ribs are each of undulating form or outline preferably extending upon a compound curve so as to prevent any straight line of shrinkage and to distribute the strain over the surface of the board upon which there is no straight or direct line between the ribs in which crack-

ing due to shrinkage or strain may occur. The board is provided with the usual securing apertures 15 which may be formed between adjacent ribs, as shown in Fig. 1.

This construction eliminates the internal strain produced by the sudden contraction of the chilled wearing surface of the moldboard as the projections or ribs being removed therefrom are not chilled and cool more slowly forming a bond or tie which supports the chilled surface during the cooling period and prevents cracks from forming within the chilled surface of the moldboard, and the undulating line of these ribs produces an elastic and flexible back which is free to contract and expand in cooling with the greatest elasticity and does not permit any straight line of cracking extending longitudinally of the board. Such longitudinal strain by the increased shrinkage in the length of the board is neutralized by the disposition of these ribs which extend in the line of strain diagonally from the plow engaging point to the upper edge and owing to their compound curve also effect a lateral supporting of the chilled surface as well as a longitudinal support extending in the line of strain. The invention therefore presents an important improvement over the straight ribs heretofore used which are not extended directly in the line of strain nor formed of undulating outline to effect a lateral support. These ribs are formed in casting the mold board in the usual manner and may therefore be economically produced while effecting materially improved results in the art.

Having described my invention and set forth its merits, what I claim and desire to secure by Letters Patent is:—

1. A moldboard having upon its back a series of ribs extending undulatingly across the longitudinal line of strain upon said board.

2. A mold board having upon its back compound curved ribs extending from the point engaging end of the board diagonally to the opposite end thereof.

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

CALVERT R. McGAHEY.

Witnesses:

WM. C. IVEY,  
JAS. R. CASKIE.