

No. 652,153.

Patented June 19, 1900.

J. R. TRULL.

REVERSIBLE SELF SHARPENING PLOWSHARE.

(Application filed Jan. 6, 1900.)

(No Model.)

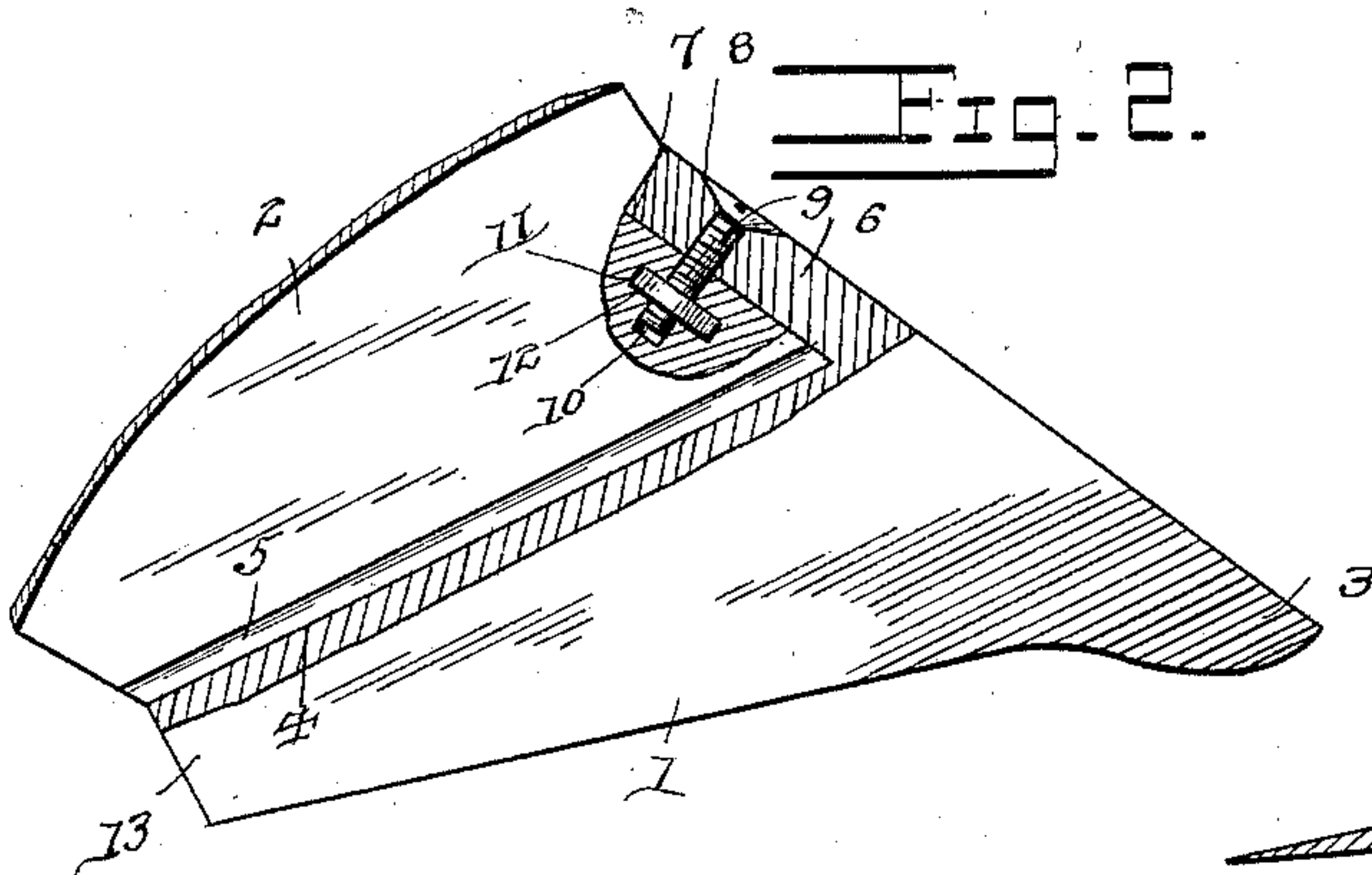
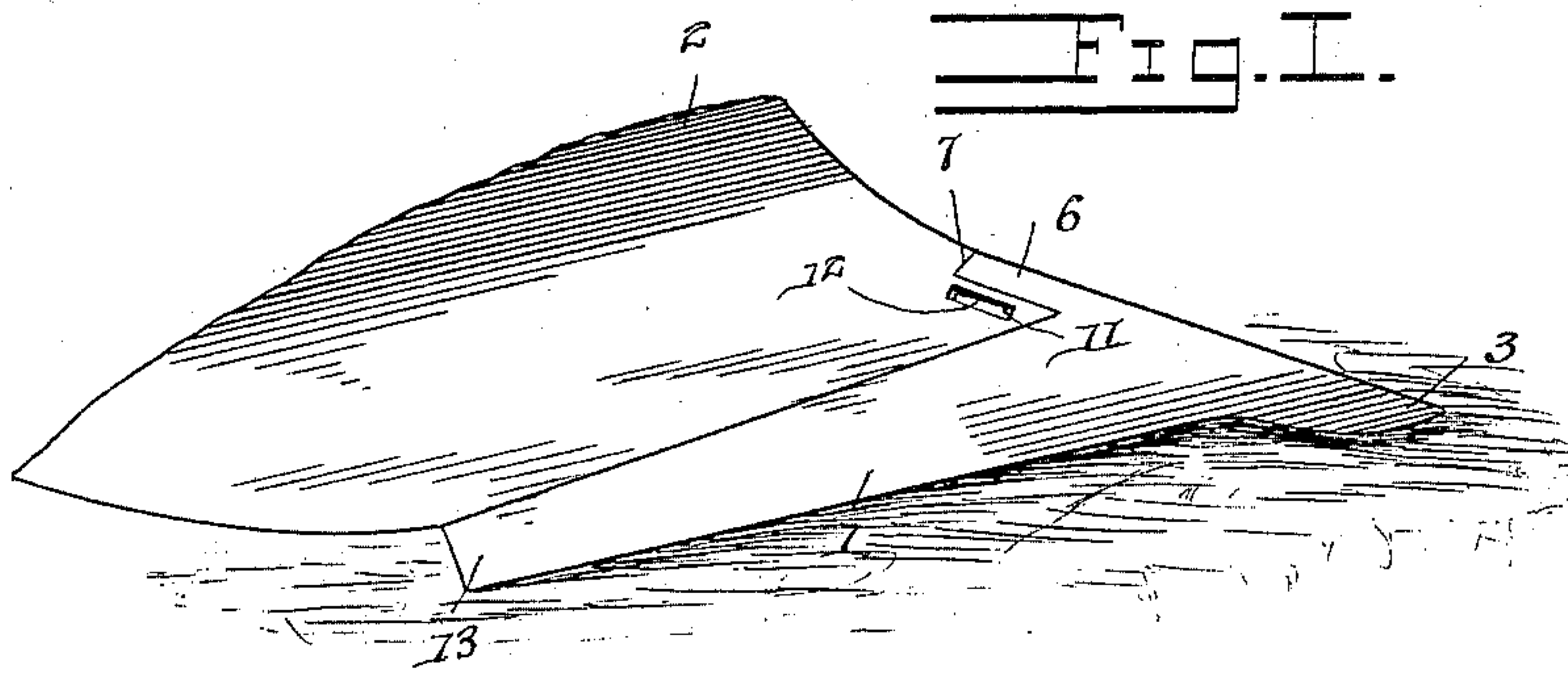


Fig. 3.

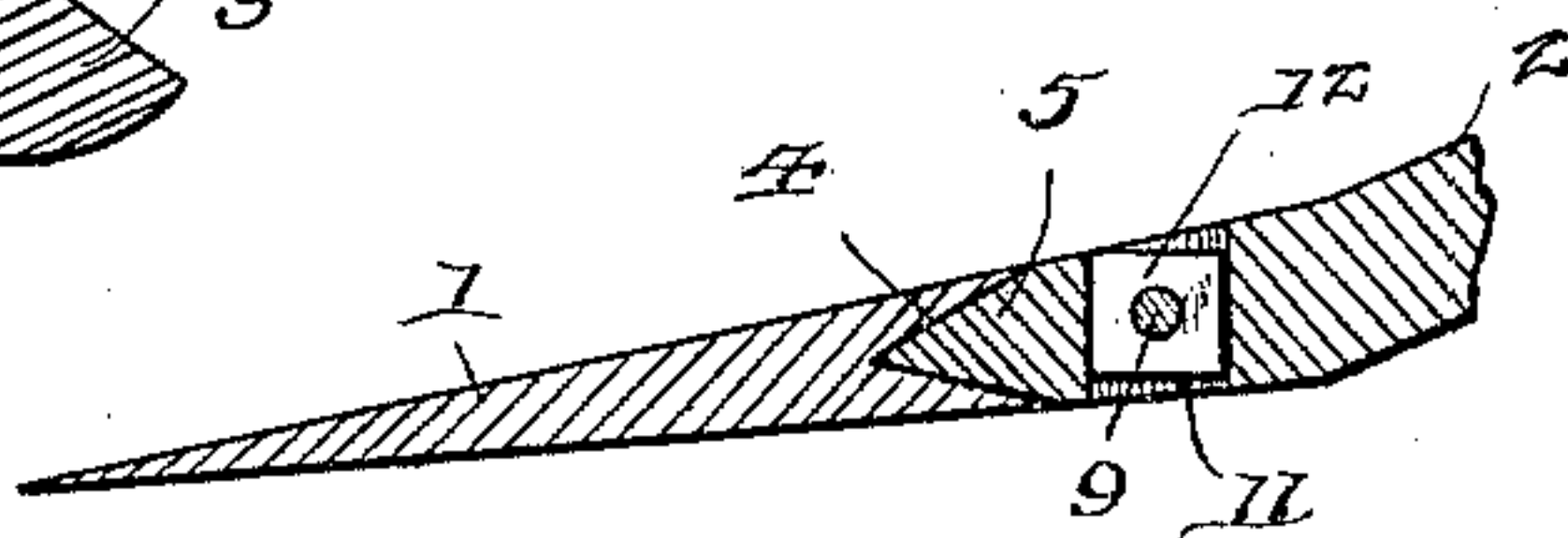
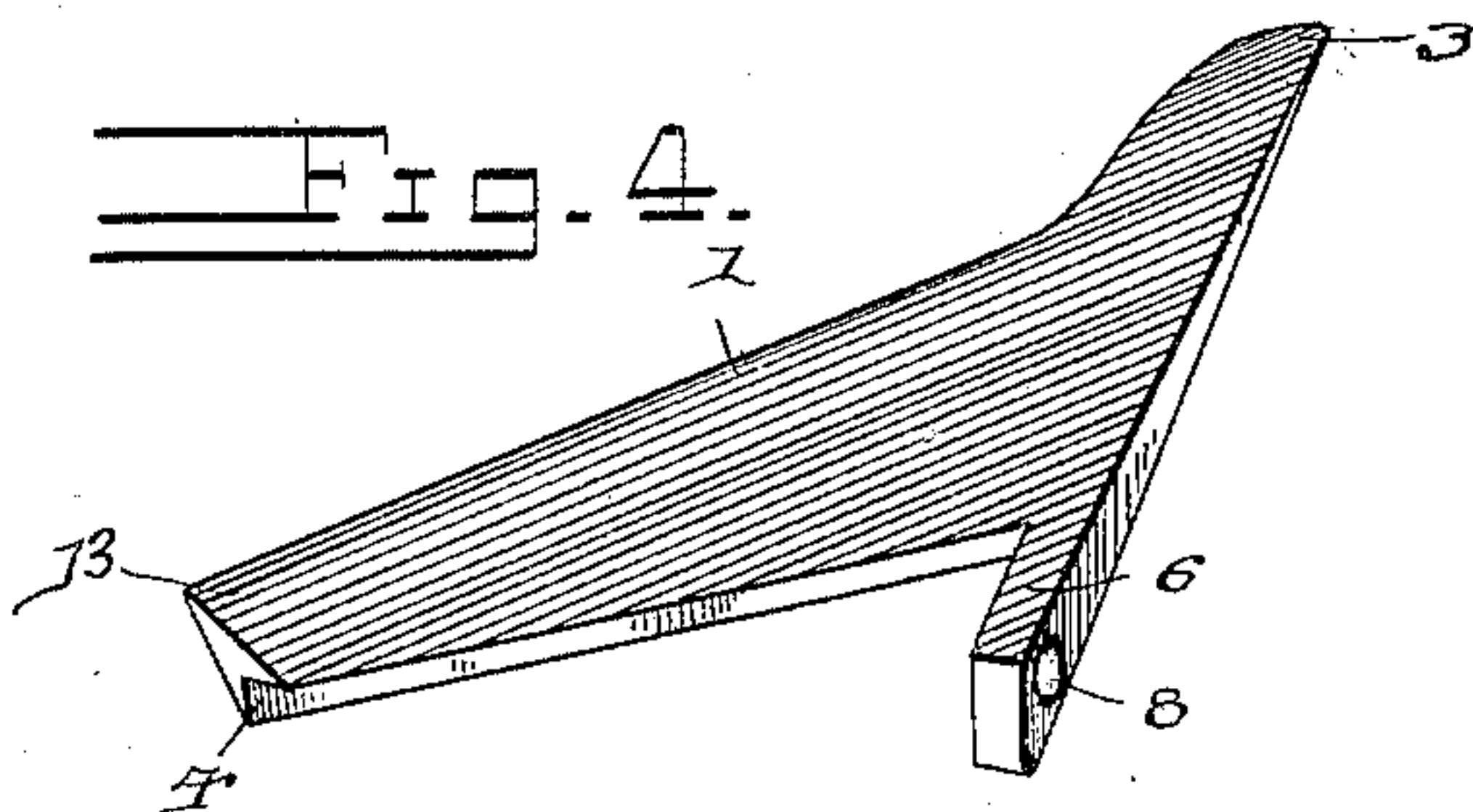


Fig. 4.



Witnesses  
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By his Attorneys,

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# UNITED STATES PATENT OFFICE.

JAMES RILEY TRULL, OF GARDEN CREEK, NORTH CAROLINA.

## REVERSIBLE SELF-SHARPENING PLOWSHARE.

SPECIFICATION forming part of Letters Patent No. 652,153, dated June 19, 1900.

Application filed January 6, 1900. Serial No. 573. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES RILEY TRULL, a citizen of the United States, residing at Garden Creek, in the county of Haywood and State of North Carolina, have invented a new and useful Reversible Self-Sharpening Plowshare, of which the following is a specification.

The invention relates to improvements in plowshares.

One object of the present invention is to improve the construction of plowshares and to provide a simple and comparatively-inexpensive one designed for use on ordinary sidehill-plows and for reversible sidehill-plows and capable of being reversed or changed from a right-hand plow to a left-hand one to bring its faces alternately at the bottom, whereby it will be sharpened as it is worn away and will obviate the necessity of sharpening it by hand.

A further object of the invention is to lighten the construction and simplify the means for securing a plowshare to a moldboard and enable it to be readily removed therefrom, so that it may be quickly changed from a right-hand plow to a left-hand one, or vice versa.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a plowshare constructed in accordance with this invention and shown applied to a right-hand moldboard. Fig. 2 is a plan view, partly in section. Fig. 3 is a sectional view taken transversely of the plowshare. Fig. 4 is a detail perspective view of the plowshare, showing the opposite face thereof.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a reversible plowshare consisting of an approximately horizontally arranged blade extending diagonally or at an angle across the front of a moldboard 2 and having its upper and lower faces of the same shape, whereby it is adapted to be reversed to arrange it on either a right or left hand plow and to adapt it for use on reversible sidehill-plows. The blade, which is provided

with a point or projection 3, has a straight inner edge, and it tapers in cross-section, as clearly shown in Fig. 3, and it is provided at its back or rear edge with a groove 4, triangular in cross-section, to receive a correspondingly beveled or tapered edge 5 at the front of the moldboard. The beveled or tapered front edge 5 is substantially triangular in cross-section, the moldboard being beveled at both its upper and lower faces, and the point 3 projects forward and has a straight side edge, which forms the continuation of the straight edge at the inner end of the plowshare.

The plow share or blade is provided at its inner end with a rearwardly-disposed arm or lug 6, rectangular in cross-section and fitting in a corresponding recess 7 of the adjacent edge of the moldboard. The rearwardly-disposed arm or lug 6 is provided with a countersunk perforation 8 for the reception of a screw or bolt 9, which projects into a bore or opening 10, arranged at right angles to the recess 7 and intersecting a slot 11. Within the slot 11, which extends parallel with the recess 7, is arranged a nut 12, which is engaged by the screw or bolt 8, and when the latter is tightened the plow share or blade is securely fastened to the moldboard and may be readily removed by simply withdrawing the screw. The slot 11, which preferably extends entirely through the moldboard, has parallel end walls which conform to the configuration of the adjacent edges of the nut, whereby the latter is locked against rotation when the bolt is screwed tight.

The blade or plowshare tapers in width, its rear end 13 being narrower than its front end, and the said rear end is provided with a straight edge, as clearly shown in Fig. 2. The screw or bolt 8 is arranged at a slight angle to the rear edge of the blade or shaft, and with the interlocked edges it is capable of firmly holding the plow share or blade in position.

The upper and lower faces of the plow share or blade are of exactly the same shape, as clearly illustrated in Figs. 1 and 4 of the accompanying drawings, and it will be readily apparent that the said plow share or blade may be readily employed on either a right or left hand plow and is capable of being



changed from one to the other to bring its faces alternately at the top and bottom, so that they will be uniformly worn away and the plow share or blade automatically sharpened. The plow share or blade, which may be reversed in this manner until it is practically worn away, will always be sharp, and it may be constructed of a minimum amount of metal, and it is securely fastened to the moldboard by a single bolt or screw.

Although the lug or arm 6 is shown at the inner or front end of the plowshare only, yet it will be readily understood that such a lug or arm may be employed at the outer or rear end also, if desired.

What is claimed is—

1. A plowshare consisting of a blade designed to be arranged across the front of a moldboard in approximately a horizontal position, and having similar upper and lower faces, whereby it is adapted to be reversed and changed from a right-hand plow to a left-hand plow, an arm extending from the back of the blade, and means for securing the arm to the moldboard, substantially as described.

2. A plowshare consisting of a blade designed to be arranged at an angle across the front of a moldboard in approximately a horizontal position and having similar upper and lower faces, whereby it is adapted to be re-

versed and changed from a right-hand plow to a left-hand plow, said blade being provided at its rear edge with means for interlocking it with a moldboard, an arm extending from the back of the blade, and a fastening device for securing the arm to the moldboard, substantially as described.

3. In a device of the class described, the combination with a moldboard provided at its front with an oppositely-beveled edge and having a recess at one side, said moldboard being provided adjacent to the recess with a slot and having an opening intersecting the same, of a reversible plowshare having a grooved rear edge to receive the beveled edge of the moldboard and provided with a rearwardly-extending arm fitting in the said recess, said plowshare having similar upper and lower faces and adapted to be changed from a right-hand plow to a left-hand plow, a bolt passing through the arm, and a nut arranged in the said slot and engaged by the bolt, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JAMES RILEY TRULL.

Witnesses:

CHARLES M. TRULL,  
JOHN M. CAMPBELL.