F. M. HORN.

PLOWSHARE.

APPLICATION FILED MAY 25, 1917.

1,253,177. Patented Jan. 8, 1918.

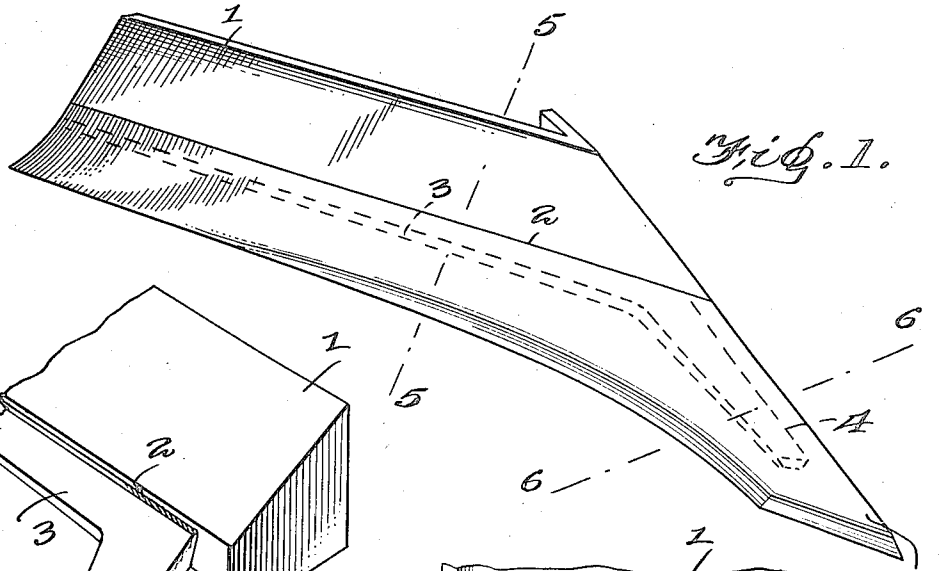



Fig. 1.




Fig. 2.

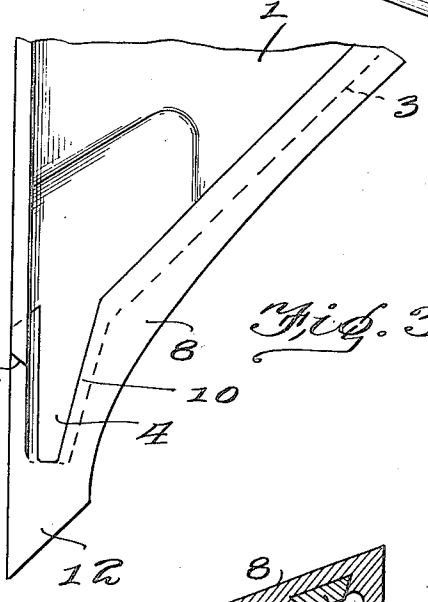



Fig. 3.

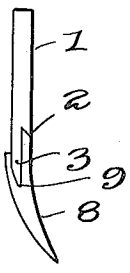



Fig. 4.

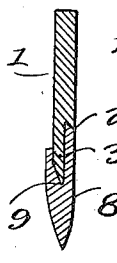



Fig. 5.

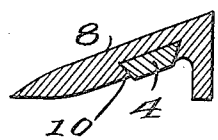



Fig. 6.

WITNESSES

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## PLOWSHARE.

1,253,177. Specification of Letters Patent. Patented Jan. 8, 1918.

Application filed May 25, 1917. Serial No. 170,968.

*To all whom it may concern:*

Be it known that I, FRANK M. HORN, a citizen of the United States, residing at Marmarth, in the county of Slope and State of North Dakota, have invented new and useful Improvements in Plowshares, of which the following is a specification.

This invention relates to plow shares and it consists in the novel features hereinafter described and claimed.

An object of the invention is to provide a plowshare having a body portion adapted to remain permanently attached upon the plow and a blade portion which may be readily detached from the body portion for sharpening, renewal or other purposes.

A further object of the invention is to provide means whereby the blade portion is securely held in position upon the body portion of the share without the use of bolts or similar securing devices, in other words the blade portion is held in position upon the body portion by the strains to which it is subjected while in use. Inasmuch as bolts or similar securing devices are not employed for holding the blade portion in position upon the body portion, the said blade portion may be readily detached from the body portion by moving the same in a forward direction with relation to the body portion.

In the accompanying drawings:—

Figure 1 is a perspective view of the share;

Fig. 2 is a fragmentary perspective view of an end of the body portion of the share;

Fig. 3 is an under plan view of an end portion of the share;

Fig. 4 is an elevation of one end of the share;

Fig. 5 is a transverse sectional view of the share cut on the line 5—5 of Fig. 1;

Fig. 6 is a similar view cut on the line 6—6 of Fig. 1.

The share comprises a body portion 1 which is provided at its upper side with an undercut shoulder 2 which terminates short of one end of the body portion 1. From the said shoulder 2 the portion 1 is extended into a ledge 3. The said ledge 3 at the inner end of the portion 1 is extended forwardly forming a tongue 4 which is provided with downwardly converging side walls and which tapers from its rear to its forward end. The land side portion of the body 1 is provided with a forwardly extending lug 5 which in turn is provided with a downwardly inclined upper surface 6 and a rearwardly inclined or disposed forward surface 7. The lug 5 is spaced from the tongue 4.

The share also includes a blade 8 which is provided with a groove 9 adapted to receive the forward portion of the ledge 3 and the rear edge of the blade 8 is beveled and fits snugly against the undercut shoulder 2 of the body portion 1. The blade 8 is provided at its underside and in the vicinity of one end thereof with a pocket 10 which snugly receives the upper portion of the tongue 4. The land side end of the blade 8 is provided with a beveled shoulder 11 which fits snugly against the surface 7 of the lug 5. The blade 8 is provided at its inner end with a chisel shaped extension 12 of usual form and the pocket 10 herein-before described extends under the said chisel end.

When the blade 8 is in position upon the body portion 1 and while the same is being used for cutting and turning the soil the said blade is subjected to the strain which is applied at the forward edge thereof and consequently the said blade is forced back into position against the forward portion of the body 1. In view of the fact that the body 1 is disposed at an angle to the line of draft of the plow the walls of the pocket 10 which engage the tongue 4 prevent the blade 8 from moving longitudinally with relation to the body 1 and the ledge 3 of the body 1 which enters the groove at the rear edge of the blade 8 holds the said blade against vertical movement with relation to the body 1.

From the foregoing description taken in conjunction with the accompanying drawing, it will be seen that a plow share of simple and durable structure is provided and that the same includes a detachable or demountable blade which when applied to the body portion of the share is held thereon against the usual strains to which it is subjected while plowing, without the use of bolts or other similar securing devices.

Having described the invention what is claimed is:—

A plow share comprising a body portion having at its upper side an undercut shoulder and provided with a ledge extending in advance of said shoulder, said ledge at one end being extended into a tongue which tapers from its rear to its forward end and which is provided with converging

side surfaces, the body portion being provided at its inner end with a lug having an inclined upper surface and an inclined forward surface, a blade having a groove adapted to receive the ledge and a beveled edge adapted to engage the undercut shoulder of the body, said groove at one end being extended into a pocket adapted to snugly receive the upper portion of the said tongue and the said blade having at its land side end a beveled shoulder adapted to fit snugly against the beveled forward end of the lug of the body portion.

In testimony whereof I affix my signature.

FRANK M. HORN.