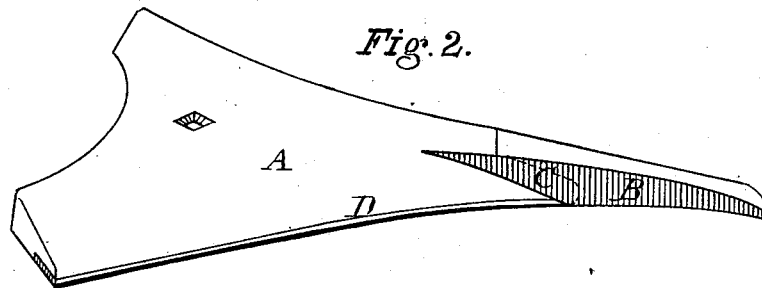
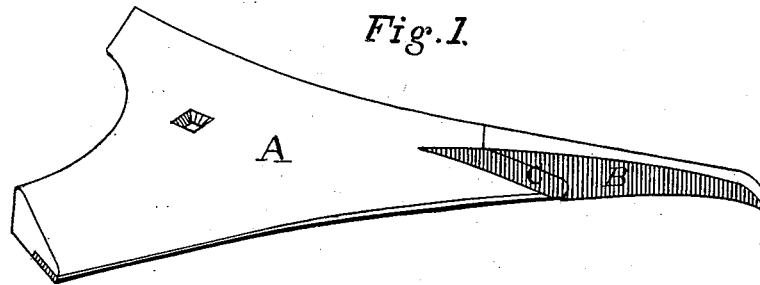


R. SMITH.  
PLOW-SHARES.

No. 195,200

Patented Sept. 11, 1877.



Attest

*S. M. Cornell*  
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Inventor

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# UNITED STATES PATENT OFFICE.

RICHARD SMITH, OF SHERBROOKE, QUEBEC, CANADA.

## IMPROVEMENT IN PLOWSHARES.

Specification forming part of Letters Patent No. **195,200**, dated September 11, 1877; application filed July 24, 1877.

*To all whom it may concern:*

Be it known that I, RICHARD SMITH, of Sherbrooke, in the Province of Quebec, Canada, have invented a new and useful Improvement in Plowshares, as will be more fully set forth in the following specification.

This invention relates to plowshares composed in part of cast-iron and in part of steel.

The object of my invention, which relates to plowshares, is to provide them with cutting-edges of more durable material than that in common use, and of a material that will admit of being sharpened and tempered at will.

I have represented such a share in the drawing herewith filed, in which is shown the share, the part B being made of steel, and, by preference, of the hooked form shown, in order that the amount of surface exposed to the action of the molten metal may be increased.

In constructing shares of this character the steel point B is forged to any dimensions required, and that portion thereof which is to be united to the share A is cleaned and tinned, as above described, and is then placed in the mold, and when the proper time has arrived molten metal is poured into said mold, and the surface of the point B which is to be united

to the share is fused to such an extent as to cause the two kinds of metal to be converted into one mass, in so far as relates to its practical purposes.

In Figure 2, I have shown a cutting-edge, D, as applied to the share, it being united to the cast metal in the same manner as is the point B, by being fused thereto in the manner described.

The advantage arising from this method of constructing plowshares is, that all the advantages of a steel share are obtained without the cost of an entire steel share, it being feasible to sharpen and retemper the parts at any time when it becomes necessary.

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

As a new article of manufacture, a plowshare composed of steel and cast-iron, united by a fusion of the surface of the steel, substantially in the manner and for the purpose set forth.

Sherbrooke, June 23, 1877.

RICHARD SMITH.

Witnesses:

L. C. HERRICK,  
JOSEPH M. JOHANNES.