

S. D. Nelson.

Making Shovels.

No 28,293.

Patented May 15, 1860.

Fig. 2.

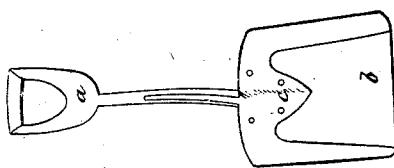
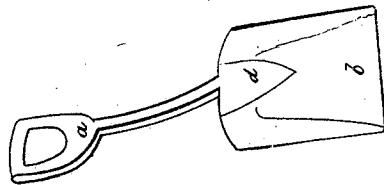


Fig. 3



Fig. 1



Witnesses:

James J. Johnston  
George P. Clark

Inventor:

Samuel D. Nelson

# UNITED STATES PATENT OFFICE.

SAMUEL D. NELSON, OF PITTSBURG, PENNSYLVANIA.

## IMPROVEMENT IN MANUFACTURE OF SHOVELS.

Specification forming part of Letters Patent No. 28,293, dated May 15, 1860.

*To all whom it may concern:*

Be it known that I, SAMUEL D. NELSON, of the city of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Shovels; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in embedding the back-strap in the back of the shovel-blade by making a concavity in the back of the blade equal to the thickness of the back-strap, and also in curving the raised sides of the shovel-blade for the purpose of adding stiffness and strength to it.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction.

In the accompanying drawings, Figure 1 is a perspective view representing the back of the shovel. Fig. 2 is a perspective view representing the front or face of the shovel. Fig. 3 is a cut or sectional view, representing the raised and curved sides of the blade.

*a* is the handle. *b* is the blade. *c* is the con-

vex surface, which is opposite to the concave in the back of the blade, in which the back-strap is embedded. *e* is the raised and curved sides of the blade. The handle and back-strap are secured to the blade with rivets. The concaved, convexed, and curved surfaces are obtained by the use of suitable swages or dies. By embedding the back-strap in the blade of the shovel it will not be liable to wear off or become loose from the blade. By curving the raised sides of the blade great stiffness and strength are added to it, thereby making a light, stiff, and strong shovel-blade.

Having thus described the nature and construction of my improvement in shovels, what I claim as of my invention, and desire to secure by Letters Patent of the United States, is—

The shovel as a new article of manufacture, having the back strap embedded in the back of the shovel-blade, arranged and constructed as herein described, and for the purpose set forth.

SAMUEL D. NELSON.

Witnesses:

JAMES J. JOHNSTON,  
GEORGE P. STECK.