J. GRAVES.

SHOVEL.

No. 182,068. Patented Sept. 12, 1876.

Fig. 1.

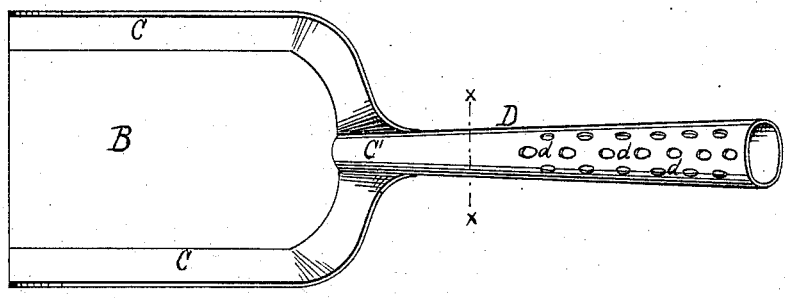
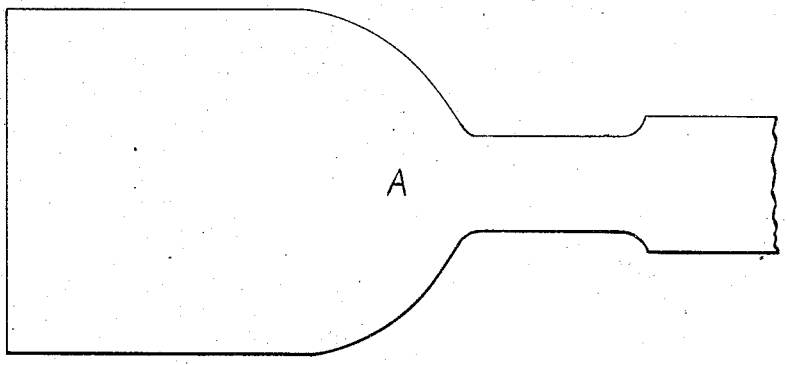


Fig. 2.

Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN GRAVES, OF NEW YORK, N. Y., ASSIGNOR TO ROBERT SEAMANS AND HENRY W. SHEPARD.

IMPROVEMENT IN SHOVELS.

Specification forming part of Letters Patent No. **182,068**, dated September 12, 1876; application filed August 11, 1876.

To all whom it may concern:

Be it known that I, JOHN GRAVES, of the city, county, and State of New York, have invented an Improved Shovel, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, and the letters of reference marked thereon, making part of this specification, in which—

Figure 1 is a top plan view. Fig. 2 is a vertical section on the line *x x*, Fig. 1. Fig. 3 is a plan view of the blank.

The object of my present invention is to construct a fire-shovel out of a single piece of sheet metal.

The nature of my invention consists in striking up or stamping out of a single piece of sheet metal a fire-shovel, the handle of which extends immediately from the plane or plate of the body of the shovel, the surplus stock which the contracting of the rim at its rear surface furnishes being worked up in imparting to the handle a half round or semicircular form, and which form gives great stiffness and strength to the handle, bracing it, as it were, in connection with the rim, at the point where the greatest strain is to be borne, and consequently where the greatest strength is required.

The construction and operation of my invention are as follows: A blank of the form shown at A, Fig. 3, is cut from a sheet of any suitable metal. Out of this blank piece is struck up or stamped a shovel, such as is shown in Fig. 1, the body, consisting of the plate B and rim C, and the handle D all being formed of a single piece of metal. The handle D, as will be seen by reference to the drawings, extends directly from the rear section of the plate B, and is in cross-section of the form shown in Fig. 2. In forming the rear section of the rim C there is surplus metal. I utilize this excess of metal in throwing up a handle of the form shown, and which half round or semicircular form, taken in connection with the fact that the handle proceeds immediately from the blade B, and is, as it were, braced for a considerable distance or to the depth of the rim by said rim, as shown at C′, Fig. 1, I secure an exceedingly strong and stiff attachment, rendering the handle far more permanently secured than is possible in those shovels in which the handle extends from the top of the rim.

By my invention iron as cheap as is known to the trade—as grade No. 22—can be used.

The upper or cylindrical section of the handle is provided with a series of perforations, *d d*, which serve to keep the handle cool, and which is a great convenience in handling.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

As a new article of manufacture, a fire-shovel constructed out of a single piece of metal, having its handle projecting directly from the blade, and the excess of metal left in forming the rim being worked up to impart a half round or semicircular form to the handle at its point of union with the blade, substantially as described.

In testimony whereof I have hereunto signed my name to this specification in the presence of two subscribing witnesses.

JOHN GRAVES.

Witnesses:
C. D. JONES,
H. H. SPELMAN.