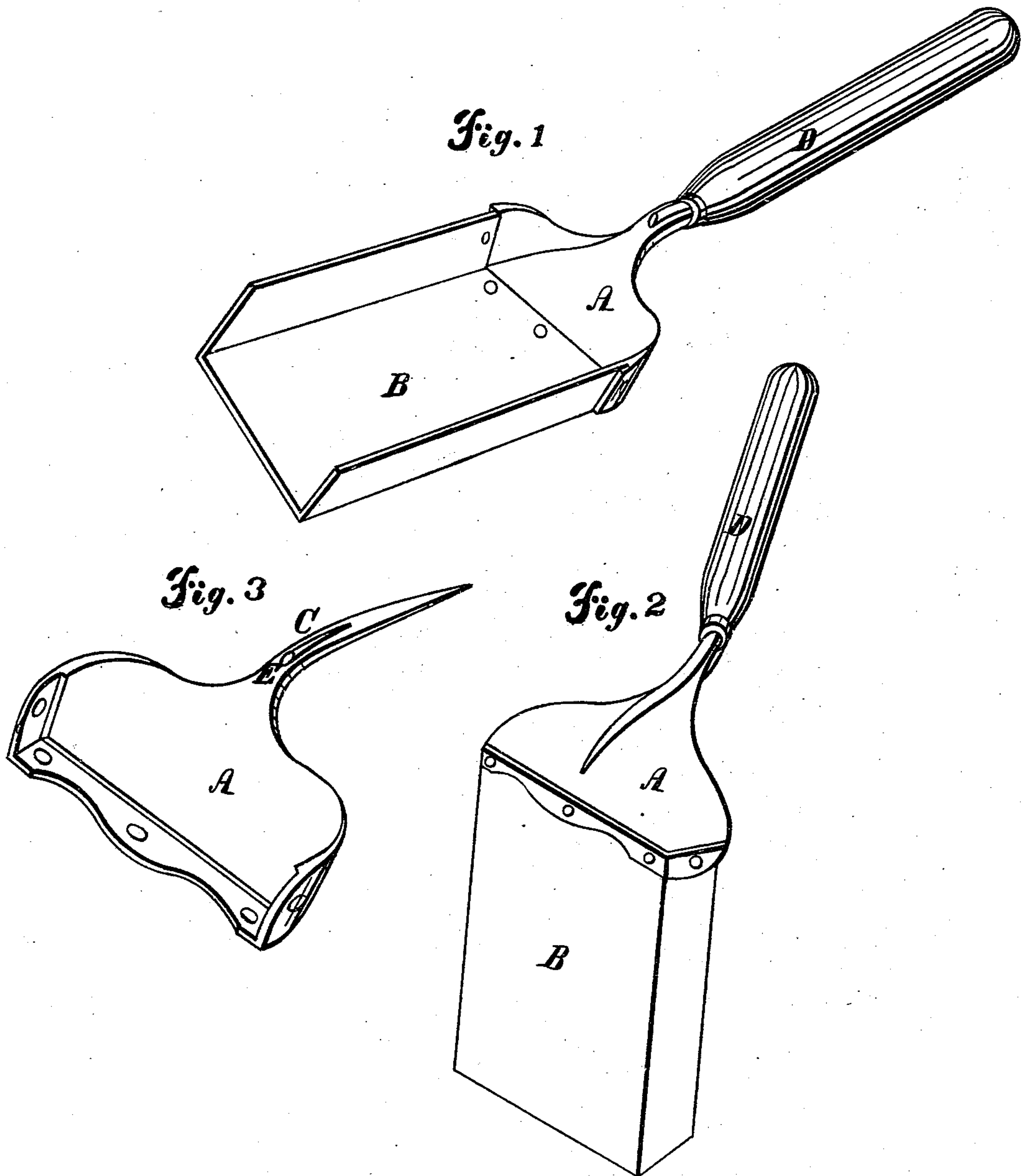


M. G. FAGAN.
Coal Shovel.

No. 94,094.

Patented Aug. 24, 1869.



Witnesses:
Charles Killum
Henry F. Thayer

Inventor:
Michel G. Fagan

United States Patent Office.

MICHEL G. FAGAN, OF TROY, NEW YORK.

Letters Patent No. 94,094, dated August 24, 1869.

IMPROVEMENT IN COAL-SHOVELS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, MICHEL G. FAGAN, of the city of Troy, in the county of Rensselaer, and State of New York, have invented certain new and useful Improvements in the Construction of Coal-Shovels; and do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, making a part of this specification, in which—

Figures 1 and 2 are perspective views of the top and bottom respectively of my improved shovel, and

Figure 3 is a perspective view of the cast neck of the same detached from the body.

Letters of like name and kind refer to like parts in each of the figures.

My invention relates to the construction of a shovel, having a neck of cast or malleable iron attached, to which is a body of sheet-metal; and

It consists in the peculiar form of said neck and its shank, by means of which the maximum of strength is secured with the minimum of metal.

In the annexed drawing—

A represents the neck, made of cast or malleable iron, the general form of which may be varied, as desired, having its front edge extended forward sufficiently to enable the attachment thereto of the end of the straight portion or body B, for the reception of which said front edge is rabbeted out to a depth corresponding with the thickness of the metal composing said body.

Suitable corresponding holes are provided in the edges of the neck and body, which are firmly secured together by means of rivets, forming a complete shovel.

The rear end of the neck terminates in a tapering

or pointed shank, C, upon which the handle D is driven in the usual manner.

In order that the smallest possible quantity of metal may be used in the construction of said shank; and at the same time sufficient strength insured, a rib, E, is cast upon opposite sides thereof, that upon the lower side being extended downward and forward upon the neck, as seen in fig. 2.

The ribs, also, serve to hold the handle more firmly in place, and prevent its turning.

By means of this construction, I am enabled to furnish a shovel that is lighter, more durable, and cheaper than any heretofore constructed, and believe that when once introduced into market, its general adoption is certain.

I am aware that shovels having a cast-iron neck, united to a sheet-metal body, have been known and used before, and therefore do not claim, broadly, such a construction.

Having thus fully set forth the nature and merits of my invention,

What I claim as new, and desire to secure by Letters Patent, is—

As a new article of manufacture, the within-described coal-shovel, consisting of the cast neck A, sheet-metal body B, and shank C, provided with the ribs E E, all constructed and arranged substantially as and for the purpose specified.

In testimony whereof, I have hereunto set my hand, this 5th day of March, 1868.

MICHEL G. FAGAN.

Witnesses:

CHARLES D. KELLUM,
HENRY F. THAYER.