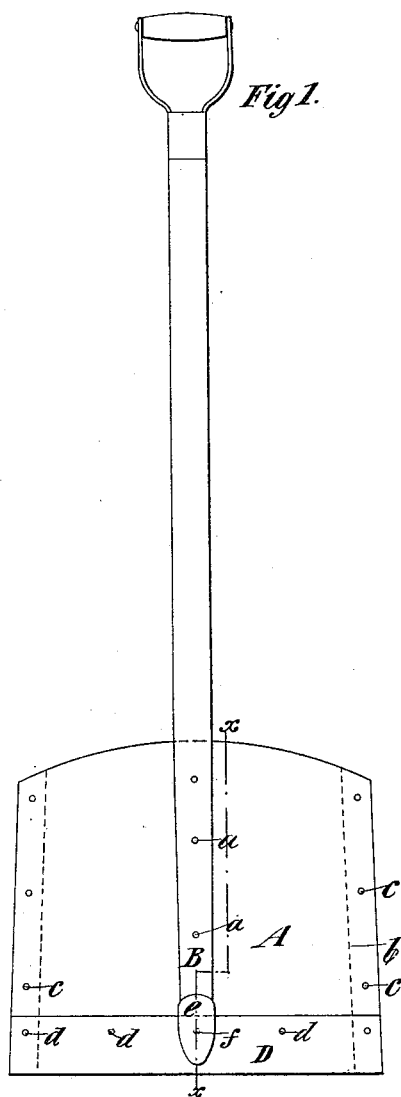


(No Model.)

H. C. COLE.  
MALT SHOVEL.

No. 266,775.

Patented Oct. 31, 1882.

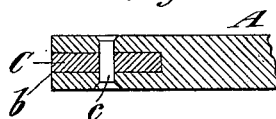


*Fig 1.*

*Fig 2.*



*Fig 3.*



*Witnesses:*  
*Thos W. Wagner*  
*Ed L. Brown*

*Inventor:*  
*Henry C. Cole*  
*by his Attorneys*  
*Brown & Brown*

# UNITED STATES PATENT OFFICE.

HENRY C. COLE, OF WALLINGFORD, VERMONT.

## MALT-SHOVEL.

SPECIFICATION forming part of Letters Patent No. 266,775, dated October 31, 1882.

Application filed July 8, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY C. COLE, of Wallingford, in the county of Rutland and State of Vermont, have invented a new and useful Improvement in Malt-Shovels, of which the following is a specification.

The object of my invention is to provide a strong, durable, and light shovel for handling malt, and in which no materials are used which will injure or impair the quality of the malt in any way.

The nature of my invention is clearly shown in the accompanying drawings, in which Figure 1 represents a front or top view of my improved shovel. Fig. 2 represents a sectional view on the dotted line *xx*, Fig. 1; and Fig. 3 represents a sectional view, upon a larger scale, of one edge portion of the blade.

Similar letters of reference designate corresponding parts in all the figures.

A designates the blade, and B the handle, of the shovel, which are both composed of wood, the grain of the blade extending transversely to the handle and from side to side of the blade. The handle extends across the upper or front surface of the blade, and is secured thereto by copper or brass rivets *a*, or other suitable fastenings. The blade and handle are both curved in a direction lengthwise of the handle, as shown in Fig. 2, so that the blade may work as nearly as possible in a horizontal plane when in use. In each side edge of blade A is formed a groove, *b*, extending the full length of the blade, and therein is inserted a strip of wood, C, which may be secured by copper or brass rivets *c*, inserted through the blade and strip C. The grain of the strip C extends transversely to that of the blade. The cutting-edge of the blade is protected or formed by a copper plate, D, which is approximately V-shaped or U-shaped in transverse section, and which laps over under the top and bottom surfaces, the plate being secured by copper or brass rivets *d*, inserted through the upper and lower edge portions of the plate. The plate D embraces the portion of the blade in which are the strips C, and the end rivets, *d*, pass through the strips, the blade, and the portions of the plate which cover or lap on both the under and upper sur-

faces of the blade. The handle B extends over the plate D, and the end thereof may be covered and protected, to prevent its splitting, by a copper or brass cap, *e*, which may form the head of a rivet, *f*, inserted through the handle or blade and both edge portions of the plate D. This cap may, however, be made separate from the rivet and secured in place by the rivet passing through it.

The shovel made in manner above described is very strong and yet light, and iron is used in no part of the shovel where it can come in contact with and injure the malt.

In my Letters Patent No. 138,076, dated April 22, 1873, is shown and described a snow-shovel the blade of which is protected by a V-shaped edge-plate, and which has metal plates inserted in its side edges and extending down into the said edge-plate. In this shovel the edge-plate is secured to the blade by rivets, which also pass through the plates, inserted in the side edges; but these rivets do not pass through that portion of the edge-plate which underlaps the blade, and unless the edge-plate is of considerable thickness its said portion will be apt to become bent and broken. In my present invention the rivets *d* pass through the blade, the strips which are inserted in the side edges, and both the upper and lower portions of the edge-plate, and as the latter is secured both at its upper and under portions to the blade it may be made of thin and soft metal, such as copper.

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

The malt-shovel herein described, consisting of the wood blade A, the handle B, the edge-plate D, of V-shaped transverse section, the strips C, inserted in grooves in the side edges of the blade and extending downward into a V-shaped edge-plate, and rivets D, inserted through the blade, the strips, and the portions of the edge-plate which lap on both the upper and under surfaces of the blade, substantially as herein described.

HENRY C. COLE.

Witnesses:

SEWARD J. AINSWORTH,  
JOHN D. MILLER.