(No Model.)

H. C. COLE.

SNOW SHOVEL.

No. 265,387. Patented Oct. 3, 1882.

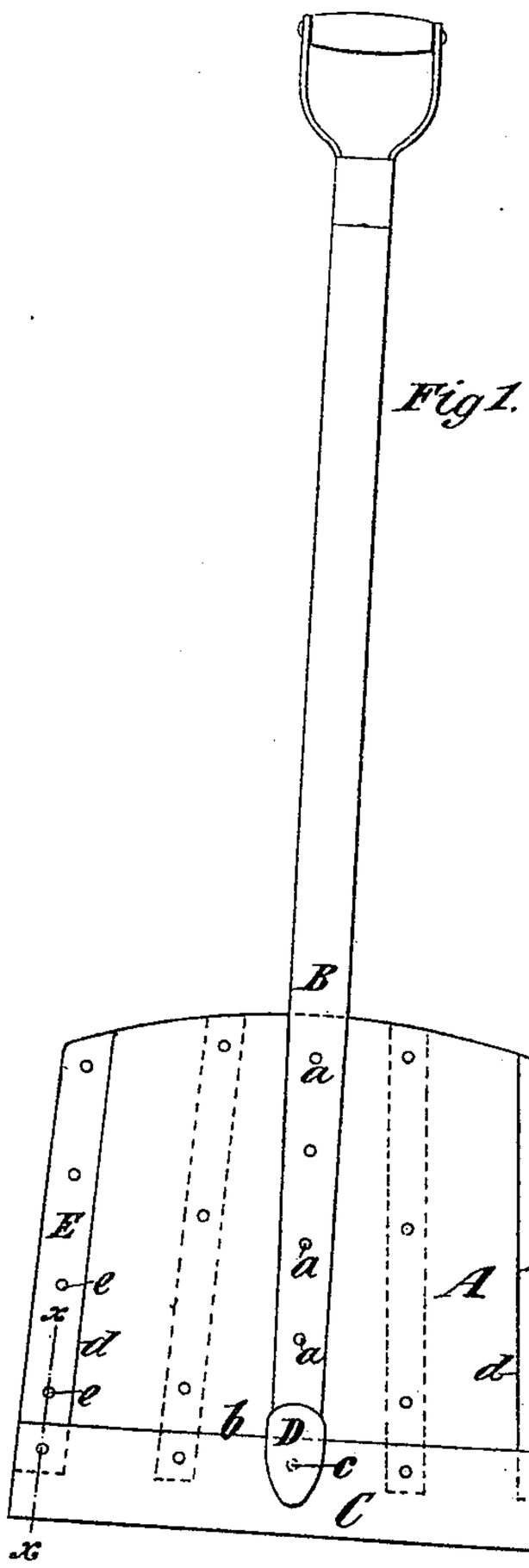

Fig 1.

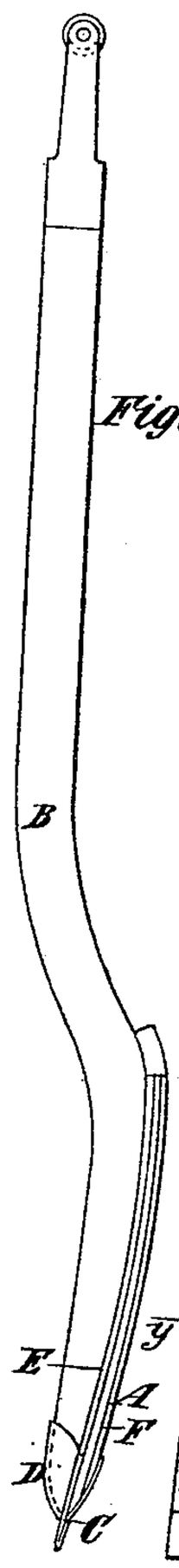

Fig 3.

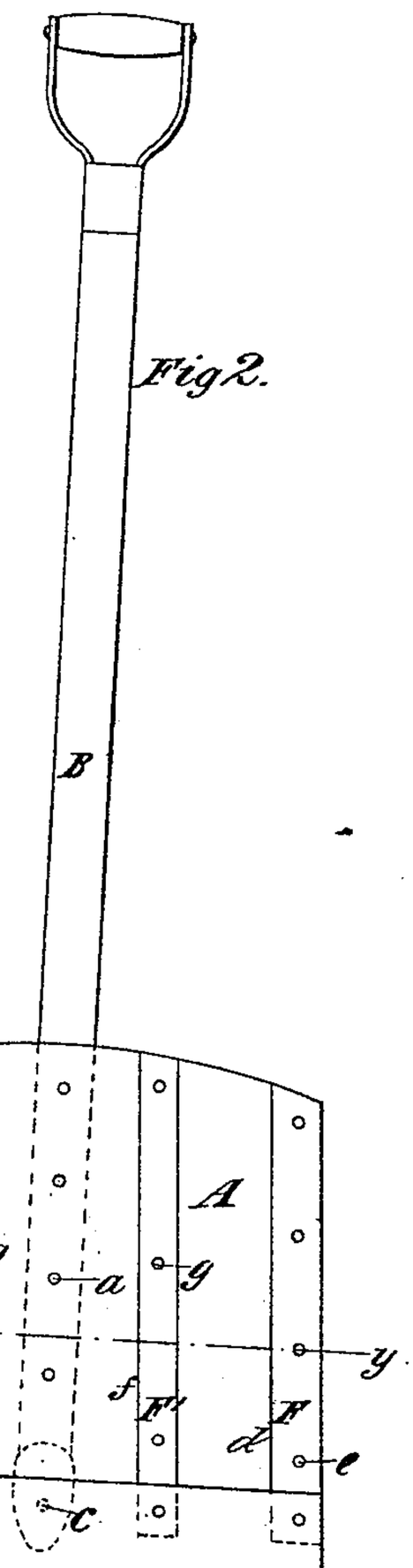

Fig 2.

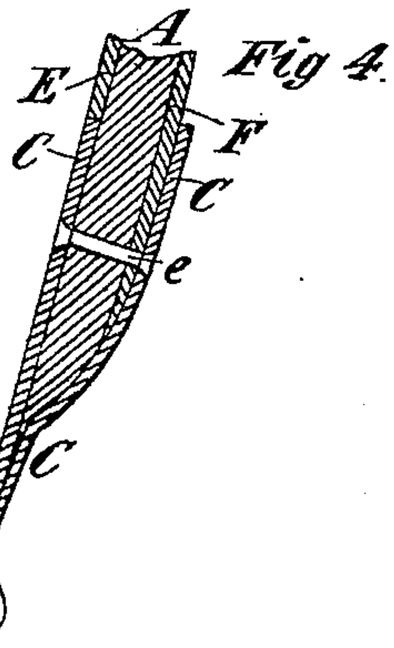

Fig 4.

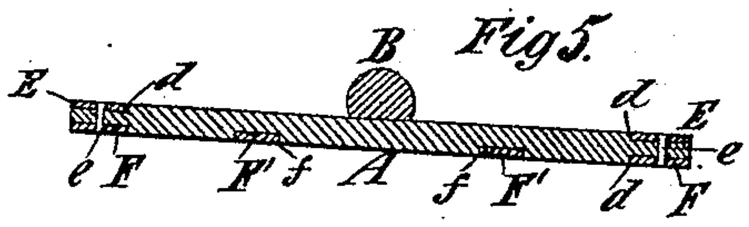

Fig 5.

Witnesses:
Chas. K. Hayner
Ed L. Moran

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

UNITED STATES PATENT OFFICE.

HENRY C. COLE, OF WALLINGFORD, VERMONT.

SNOW-SHOVEL.

SPECIFICATION forming part of Letters Patent No. 265,387, dated October 3, 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 Snow-Shovels, of which the following is a specification.

My invention relates to snow-shovels which comprise a blade of wood and a handle extending across and secured to the upper or front surface of the blade, the blade being preferably bent or curved in a direction lengthwise of the handle, and having the grain extending transversely to the handle.

The principal object of my invention is to provide a snow-shovel of the above-described kind for railway-track clearing, and which has its blade so braced and stayed with metal that it will be capable of withstanding the rough usage to which it would be subjected by striking against the rails, &c.

To this end my invention consists in the combination, with the blade and handle of the kind above described, of metal plates or braces applied to the blade in a novel manner, and in a novel combination of parts hereinafter described and claimed.

In the accompanying drawings, Figure 1 represents a front or top view of my improved shovel. Fig. 2 represents a back or bottom view thereof. Fig. 3 represents an edge view of the shovel. Fig. 4 represents a sectional view of a portion of the edge on the dotted line *x x*, Fig. 1, on a larger scale; and Fig. 5 represents a horizontal section through the blade and handle on the dotted-line *y y*, Fig. 2.

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

A designates the blade, which is slightly curved, as seen in Fig. 3, so that it can work as nearly as possible in a horizontal plane, and which has its grain extending from side to side thereof.

B designates the handle, which extends across the upper or front surface of the blade, and is secured thereto by rivets *a* or other fastenings.

C designates the cutting-edge, which consists of a piece of metal V-shaped in transverse section, and lapping over the top and bottom surfaces of the blade A. The top portion of the cutting-edge C fits in a rabbet, *b*, in the top surface of the blade, so that its top surface is flush with the top surface of the blade, as best shown in Fig. 4.

The lower end of the handle B may be covered and protected by a cap, D, to prevent its splitting, and the cap may form the head of a rivet, *c*, inserted through the handle and the blade and the top and bottom portions of the cutting-edge C; or the cap may be a separate piece and the rivet be inserted through it also.

The blade A has rabbets *d* formed in its top and bottom surfaces at the side edges, and in these rabbets are plates or strips E F, of metal, the plates or strips E being applied to the front or top surface of the blade and the plates or strips F to the back or bottom surface thereof. The plates or strips E only extend to and butt against the edge of the top portion of the cutting-edge C, as shown in Fig. 3; but the plates or strips F extend nearer to the edge of the blade, and are overlapped by the under portion of the cutting-edge C, as shown in Fig. 4. The strips or plates E F are secured to the blade A by rivets *e* or other fastenings inserted through each pair of strips or plates and the interposed blade, as shown in Fig. 5. In the bottom surface of the blade are grooves *f*, which are intermediate between the strips or blades F, and extend lengthwise of the blade, and in these grooves are fitted plates or strips F′, (here shown as two in number,) which are secured by rivets *g*. The bottom surfaces of the plates or strips F′ are flush with the bottom surface of the blade A, and they, as well as the plates or strips F, form wearing-surfaces which protect the under surface of the blade. The blade is very securely braced and stayed in all directions by the plates or strips E F F′, which extend transversely to or across the grain, and also protected against wear, and the shovel is particularly adapted to withstand the rough usage to which it is liable when used for clearing railway-tracks.

I am aware that it is not new to brace and stay the wood blades of snow-shovels by metal plates or strips, and hence do not claim the same, broadly.

I am also aware that it is old to provide the point or lower edge of a wood snow-shovel

blade with a V-shaped edge-plate, and therefore do not make any broad claim therefor.

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

1. The combination, with the wood blade A, the grain of which extends from side to side, and which is grooved or rabbeted on its bottom surface from end to end, of metal plates or strips inserted and secured in the grooves or rabbets, extending transversely to the grain of the wood, and having their outer surfaces flush with the bottom surface of the blade, substantially as specified.

2. The combination, with the blade A, having the rabbets *d* in its top and bottom surfaces and the grooves *f* in its bottom surface, of the pairs of plates or strips E F and the intermediate plates or strips, F′, substantially as herein described.

3. The combination, with the wood blade A, having the grain extending from side to side, of the cutting-edge C, lapping over the top and bottom surfaces of the blade, the plates or strips E, rabbeted in the top surface of the blade transversely to the grain and abutting against the top portion of the cutting-edge, and the plates or strips F F′, rabbeted and grooved into the bottom surface of the blade transversely to the grain, substantially as specified.

HENRY C. COLE.

Witnesses:
JOHN D. MILLER,
SEWARD J. AINSWORTH.