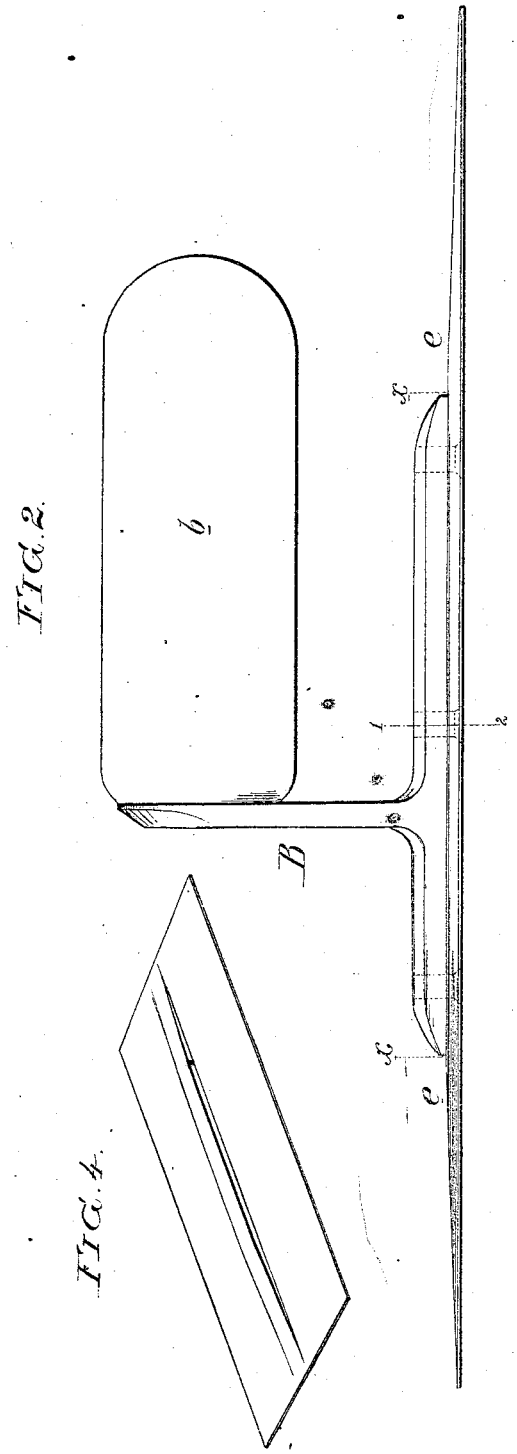
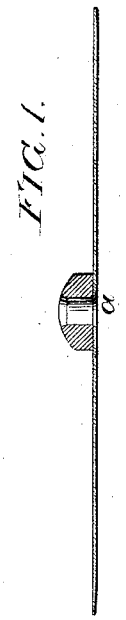
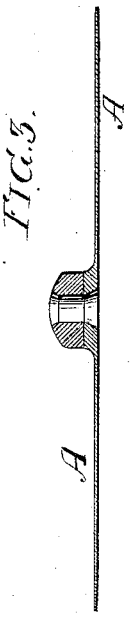
C. DISSTON

Plasterers' Trowel.

No. 162,355. Patented April 20, 1875.







Witnesses, Hubert Howson
Thomas McElwain

Charles Disston
by his Attys.
Howson and Sons

UNITED STATES PATENT OFFICE.

CHARLES DISSTON, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN PLASTERERS' TROWELS.

Specification forming part of Letters Patent No. **162,355**, dated April 20, 1875; application filed February 16, 1875.

To all whom it may concern:

Be it known that I, CHARLES DISSTON, of Philadelphia, Pennsylvania, have invented an Improvement in Plasterers' Trowels, of which the following is a specification:

The object of my invention is to make the blade of a plasterer's trowel thin enough to meet the requirements of these operatives, and at the same time to afford the means of permanently securing the blade to the handle; and this object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawing, in which—

Figure 1 is a transverse section of the blade of an ordinary trowel for plasterers; Fig. 2, a side view of my improved trowel; Fig. 3, a transverse section on the line 1 2, and Fig. 4 a perspective view of the blade.

In making plasterers' trowels, it has been usual to take a blade of steel of uniform thickness, rivet it to the frame B of the handle, and then grind and polish the surface. As it is essential that the blade should be thin, the countersunk heads *a* of the rivets, as shown in the sectional view, Fig. 1, had a very insecure hold of the blade, which was liable to be detached—a difficulty which I overcome in the following manner: The handle consists, as usual, of a metal frame, B, of malleable cast-iron, this frame having a tang onto which is driven the wooden gripe, *b*. The blade A, instead of being of uniform thickness, is reenforced by a longitudinal rib, *e*, situated midway between the opposite edges of the blades, the rib being of the same width as, or, if desired, wider than, the lower portion of the frame B. Instead of the rib terminating abruptly at the ends *x x* of the frame, I prefer to reduce it in thickness until it emerges into the upper surface of the blade, at or near each end of the same. This re-enforcing rib forms part of the blade, and may be most readily formed on the same by the process of rolling the blade and rib simultaneously. The frame B is fitted to the rib *e*, and is secured to the same, in the present instance, by three rivets. (Shown by dotted lines in Fig. 2.) It will be evident that the rib will permit the use of substantial heads for the rivets, which will have a more secure hold of the blade than of a blade which is of uniform thickness throughout, and in connection with which rivets with very slight heads must be used; at the same time the rib in no way interferes with the special requirement of the trowel, that is a thin blade.

I claim as my invention and as a new manufacture—

A plasterer's trowel having a blade re-enforced by a central longitudinal rib, *e*, adapted to the frame B of the handle, all substantially as set forth.

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

CHARLES DISSTON.

Witnesses:

HARRY SMITH,

HUBERT HOWSON.