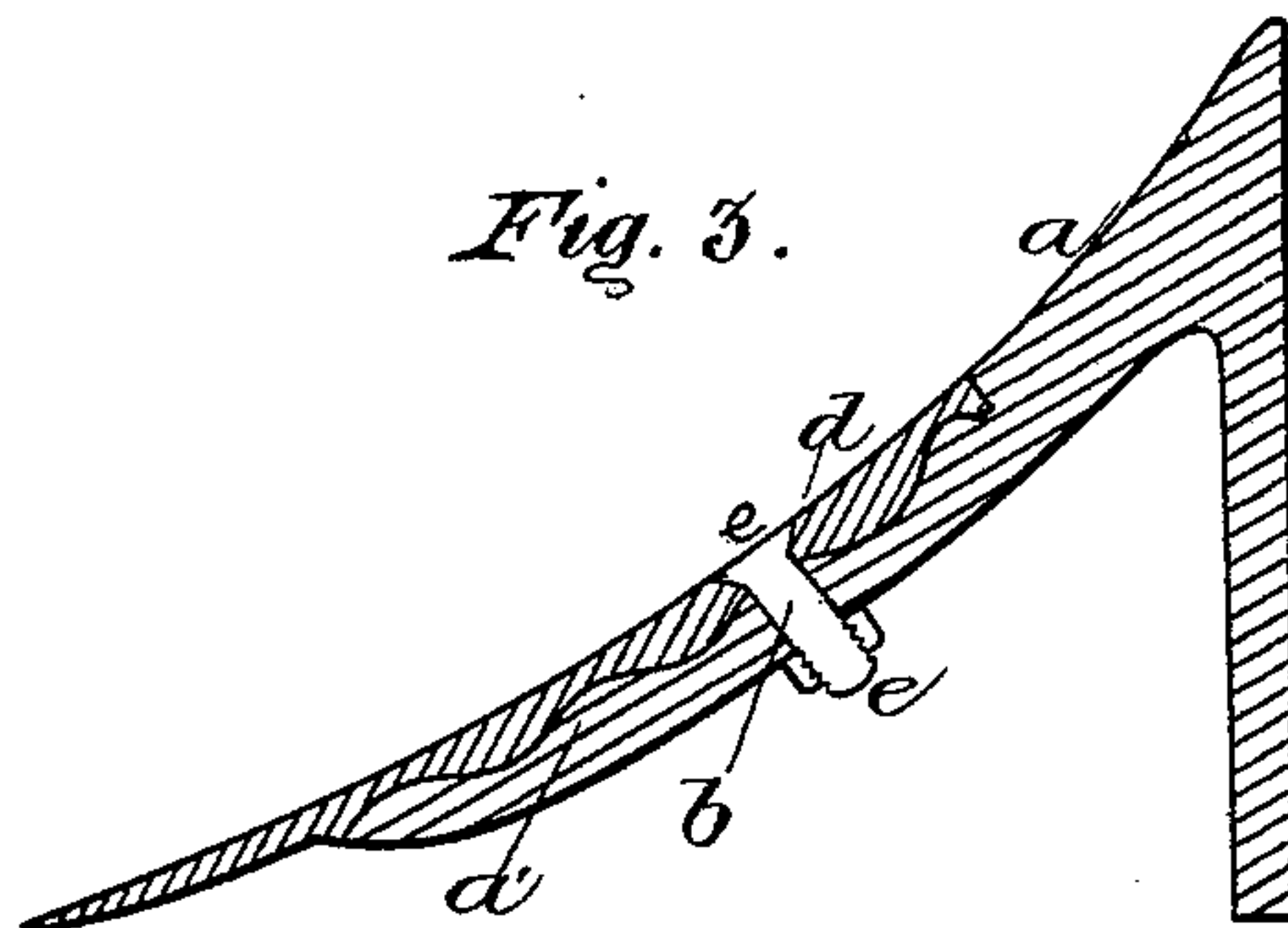
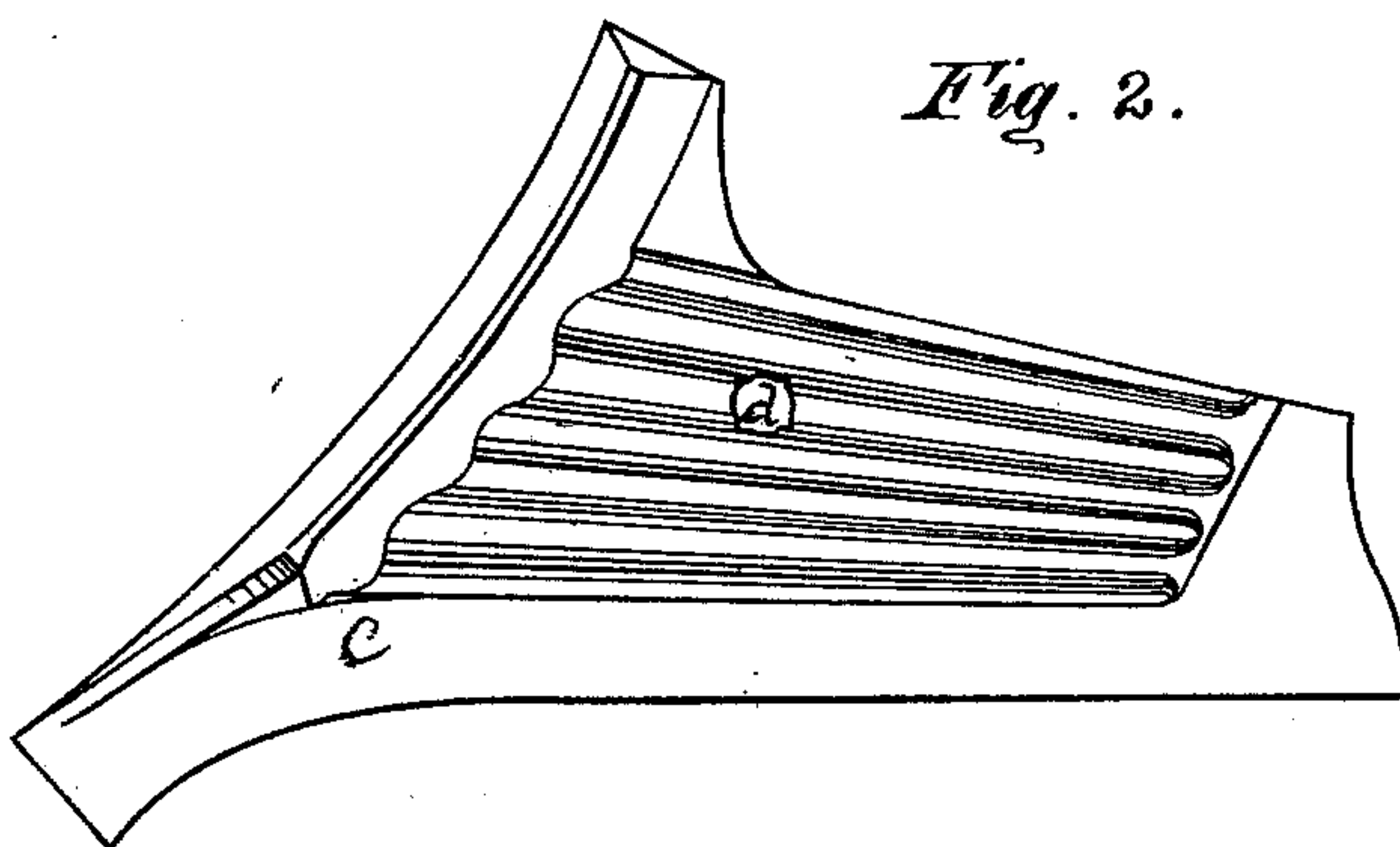
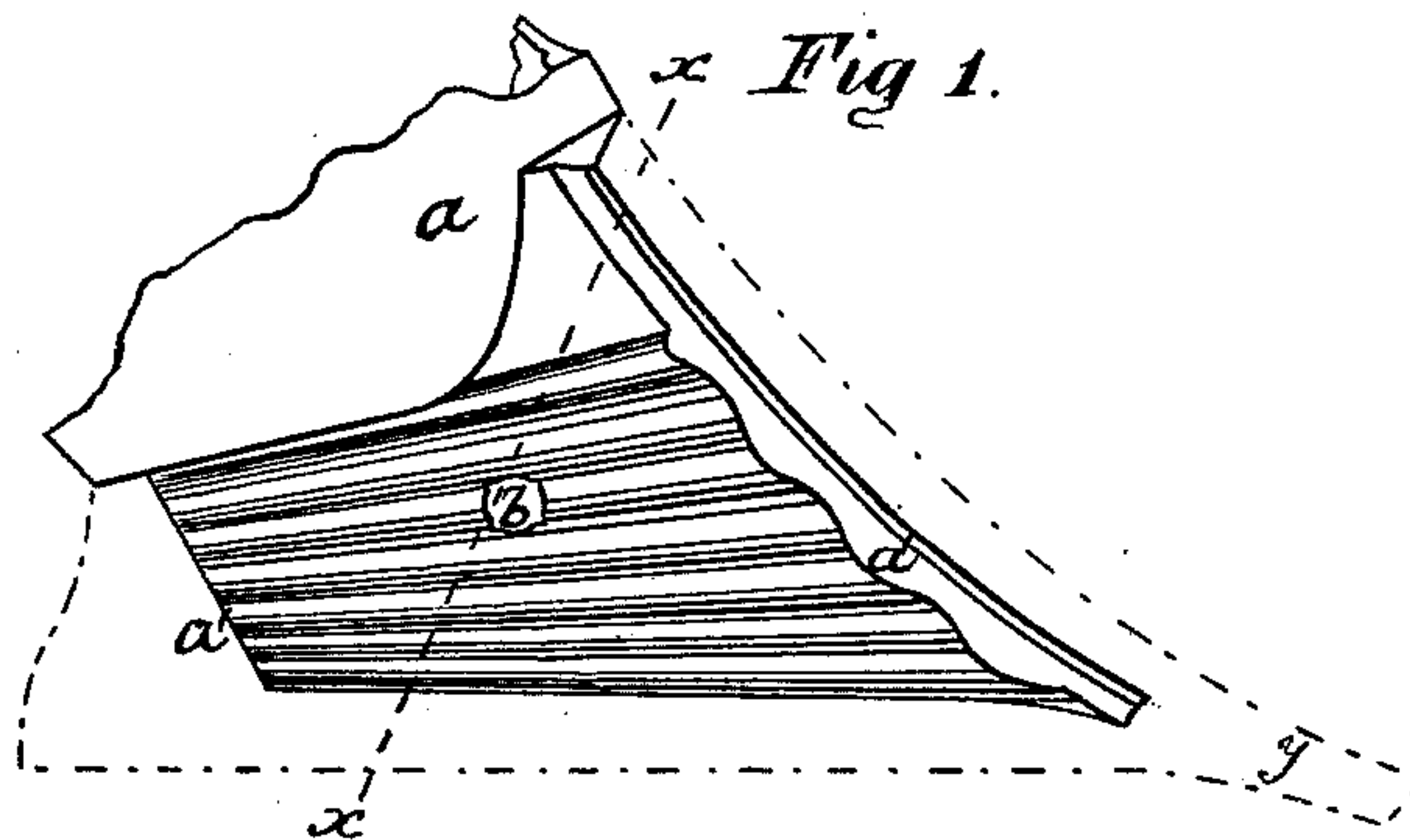


L. W. HALL.  
Plow-Point.

No. 220,373.

Patented Oct. 7, 1879.



Witnesses:  
*J. H. McEnough*  
*O. S. Barry*

Inventor:  
*L. W. Hall.*

# UNITED STATES PATENT OFFICE.

LEVI W. HALL, OF SYRACUSE, NEW YORK.

## IMPROVEMENT IN PLOW-POINTS.

Specification forming part of Letters Patent No. **220,373**, dated October 7, 1879; application filed August 29, 1879.

*To all whom it may concern:*

Be it known that I, LEVI W. HALL, of Syracuse, Onondaga county, State of New York, have invented certain Improvements in the Construction and Attachment of Plow-Points, of which the following is a specification.

Heretofore bosses, recesses, and projecting ribs and studs have been used upon the seats of plow-points and upon the face of the points corresponding thereto; but they are neither of the form nor purpose of my series of corrugations, by which invention I am enabled with less metal to give greater strength than by any device I now know.

My improvement in plow-points and attaching the same to the standard consists in providing the face of the standard, upon which the point is seated and rests, with a series of corrugations, and likewise corrugating the inner surface of the wing of the point, so as to correspond with and be a counterpart of the surface on which it rests, by which the parts are greatly strengthened and the point is securely and immovably fixed in place by a single bolt, as hereinafter described.

The following description of my improved plow-point, and the manner of attaching it firmly to the standard, so as to be readily removed and securely affixed by a single screw-bolt, refers to the annexed drawings, in which—

Figure 1 is an elevation of the lower part of the standard with the point removed, the place of the point thereon being indicated by the dotted lines *y*. Fig. 2 represents the inner or lower surface of the point, showing its counter form to its seat on the standard. Fig. 3 is a transverse sectional plane through the point and its seat, showing the interlocking of the corrugations that hold it immovably in place by the single bolt *e*.

The same letters of reference are used to indicate like parts in the several figures.

*a* is the lower end of the plow-standard, on the upper face of the wing of which, on the mold-board side, it is corrugated longitudinally and nearly horizontal, as clearly seen at *a'*.

A hole, *b*, is made through one of the projections or ribs *a'* of the corrugated surface for a bolt, *e*, to pass through.

The point *c* is made to exactly fit the seat on the standard, to which its under surface forms a counterpart, and having a hole through it at *d*, opposite the one *b* in the standard between the projecting ribs of the corrugation, which serve as bosses for strengthening it on each side of it in the line of the breaking strain.

This form of point and standard-seat gives them increased strength and a firmer union without increasing the weight of metal, and combines them together in a way to resist varied strains the point is subject to in a convenient and perfect way, by which it can be readily removed and replaced by the use of the screw-bolt *e*, with its nut underneath the standard.

Having thus fully described my improvements in constructing and attaching plow-points, I claim—

1. The plow-point *c*, having a series of longitudinal corrugations, substantially as shown and described, whereby a firm connection is obtained and greater strength with less weight of metal.

2. The plow-point *c*, constructed as described, in combination with a standard or seat having corresponding corrugations, as and for the purpose set forth.

LEVI W. HALL.

Witnesses:

J. J. GREENOUGH,  
J. P. MUNRO.