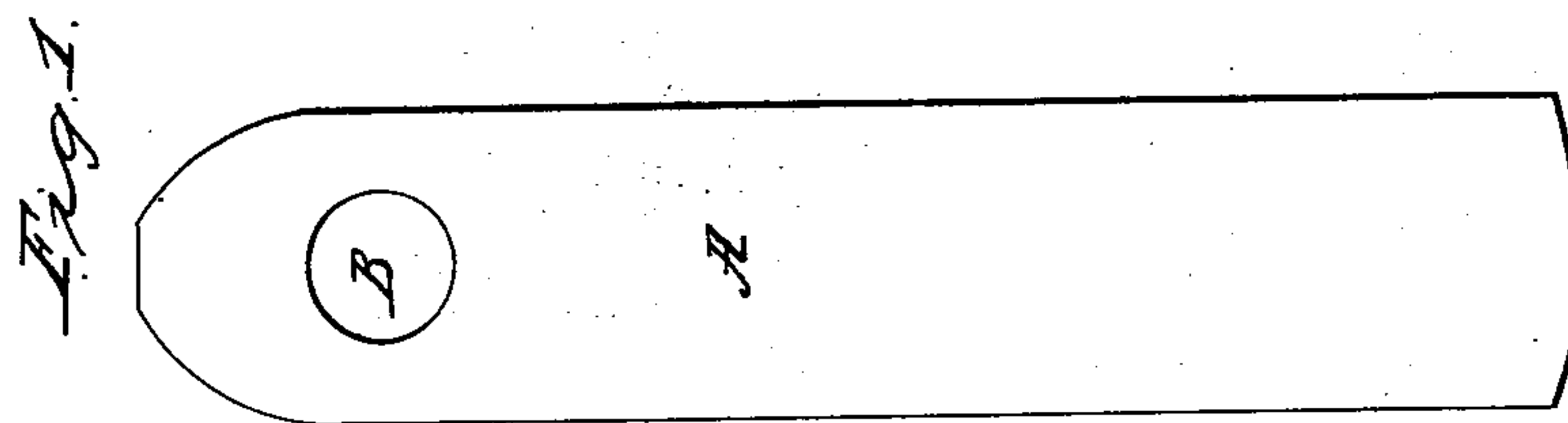
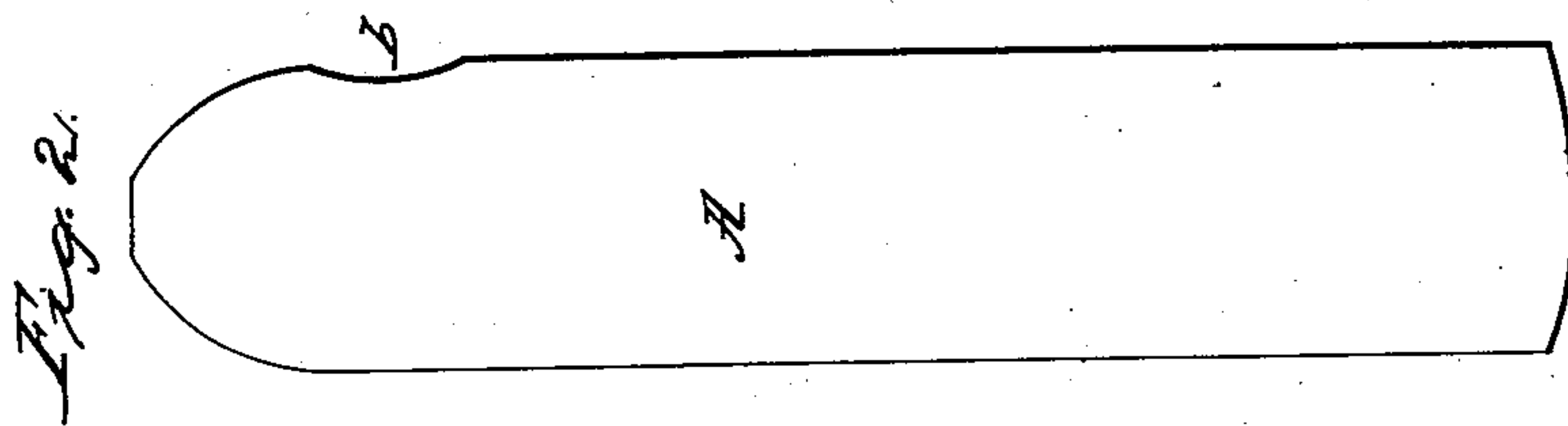
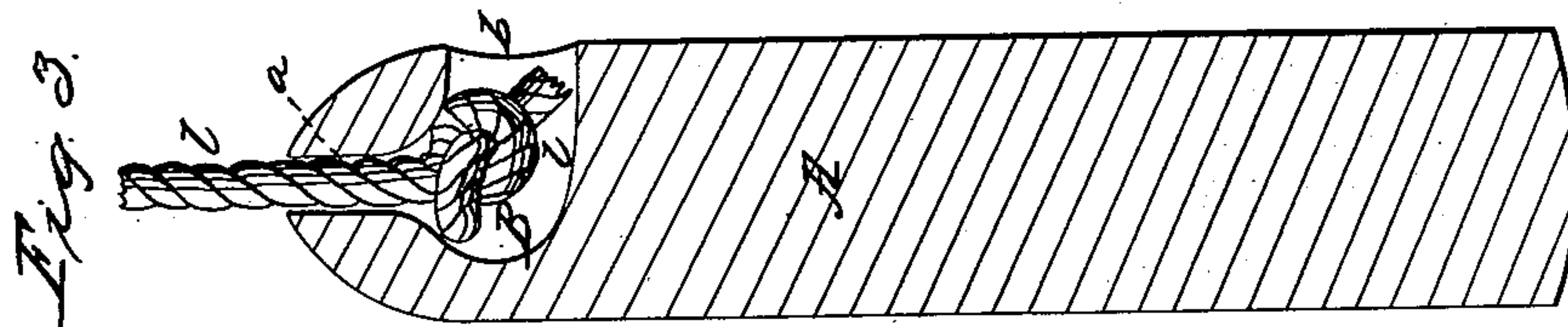
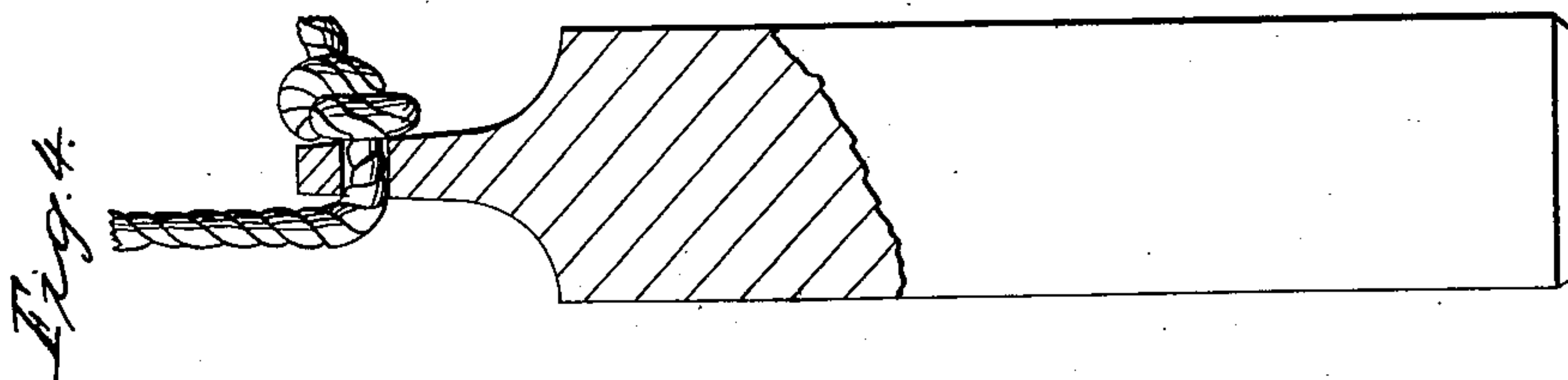
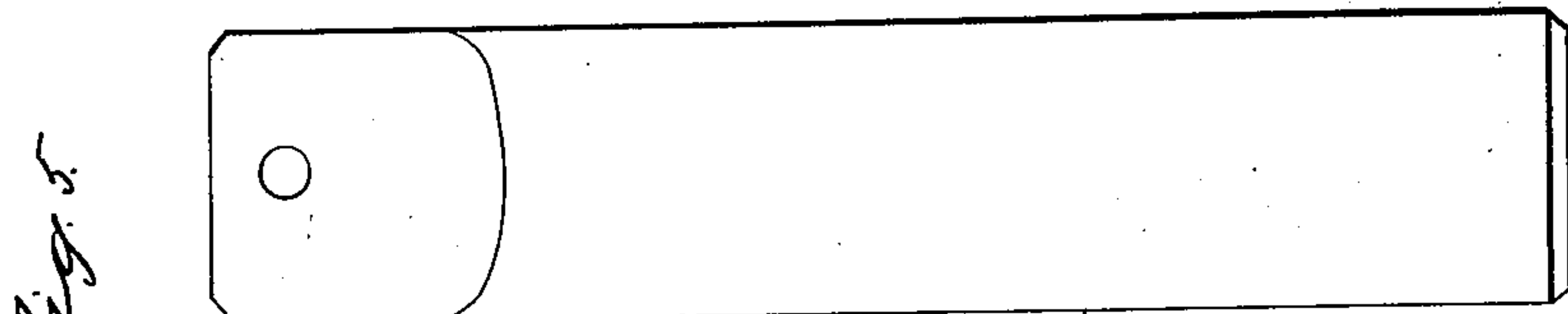


*H. Lanergan,
Sash Weight.*

N^o 42,090.

Patented Mar. 29, 1864.



*Witnesses:
W. D. Hall Jr.
Frederick Curtis*

*Inventor:
Henry Lanergan
by his attorney
R. H. Eddy*

UNITED STATES PATENT OFFICE.

HENRY LANERGAN, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN WINDOW-SASH WEIGHTS.

Specification forming part of Letters Patent No. 42,090, dated March 29, 1864

To all whom it may concern:

Be it known that I, HENRY LANERGAN, a resident of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Window-Sash Weight; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figures 1 and 2 are side views, and Fig. 3 a vertical section, of it.

The nature of my improvement consists in constructing the weight-knot chamber opening out of it laterally, and provided with a rope-passage leading out of it in the axis of the weight.

In the drawings, A denotes the weight, of which B is the knot-chamber, and *a* its rope-passage. The said knot-chamber, opens out of the side of the weight, as shown at *b*, and is for the purpose of holding a knot to be made on the end of the rope or line by which the weight is to be connected with a window-sash. The opening *b* of the knot-chamber is to be of a size sufficient to allow the knot to be drawn into the chamber, which should be large enough to contain the whole of the knot, in order that no part of it may project from it. The rope-passage *a* is to be of a diameter or width equal to or a little greater than the diameter of the line *l*, on which the knot is made, and is to be arranged with its vertical axis coincident with that of the weight A. Under these circumstances the weight A will hang perpendicularly when suspended by its rope.

In applying the rope to the weight, a knot is first to be made in or at one end of the rope,

after which the other end of the rope is to be passed into the opening *b* and through the chamber B and the passage *a*. The rope is next to be drawn through the passage *a* until the knot may be wholly drawn into the chamber B.

The ordinary construction of a sash-weight is represented in side views in Figs. 4 and 5, the weight being made somewhat tapering at top, and having a rope-hole made through the tapered part. In the application of a rope to such a weight, the knot, if against the hole, will cause the weight to tip more or less or hang out of plumb, in which case, it, as well as the knot, is apt when in use to bear and rub against the sides of its groove in the window frame. With my improved counterbalancing-weight the knot is wholly within the weight, and the axis of the suspension-rope is directly within the vertical line passing through the center of gravity of the weight. Consequently the weight will always hang plumb or vertically, and neither it nor the knot while in use will be likely to be borne against the sides of the weight groove or chamber of the window-frame.

I claim—

The improved window-sash weight, as made with the knot-chamber B, the rope-passage *a*, and the opening *b*, arranged together and within such weight, substantially in manner as described.

HENRY LANERGAN.

Witnesses:

R. H. EDDY,
F. P. HALE, Jr.