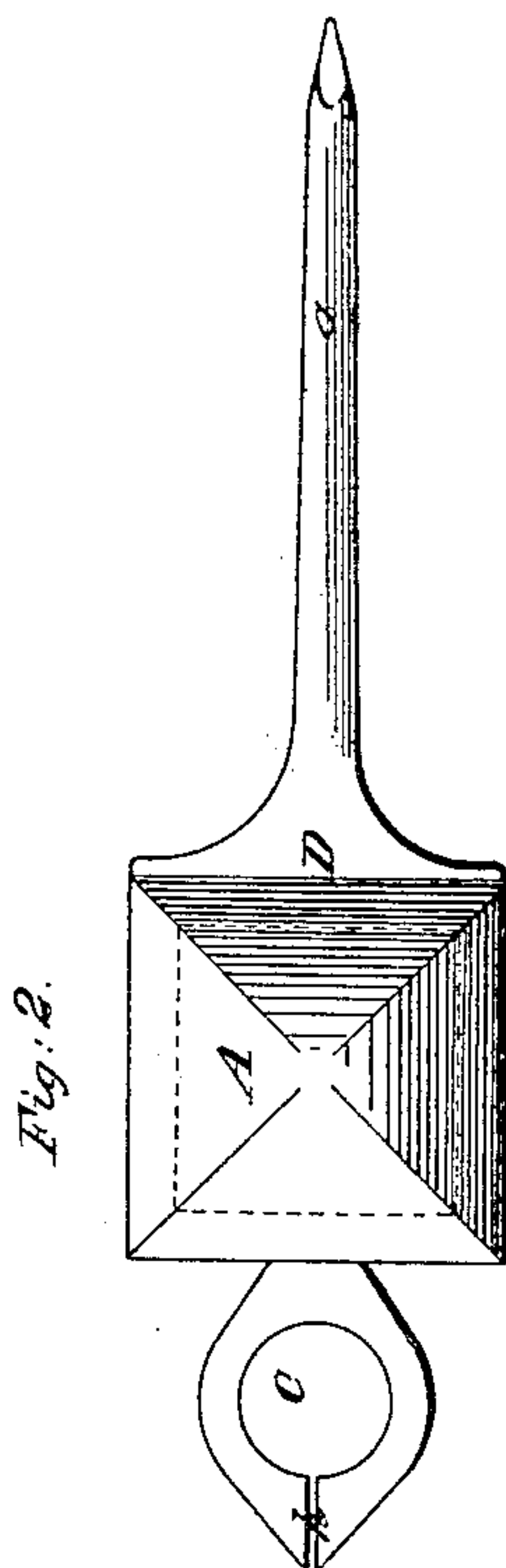
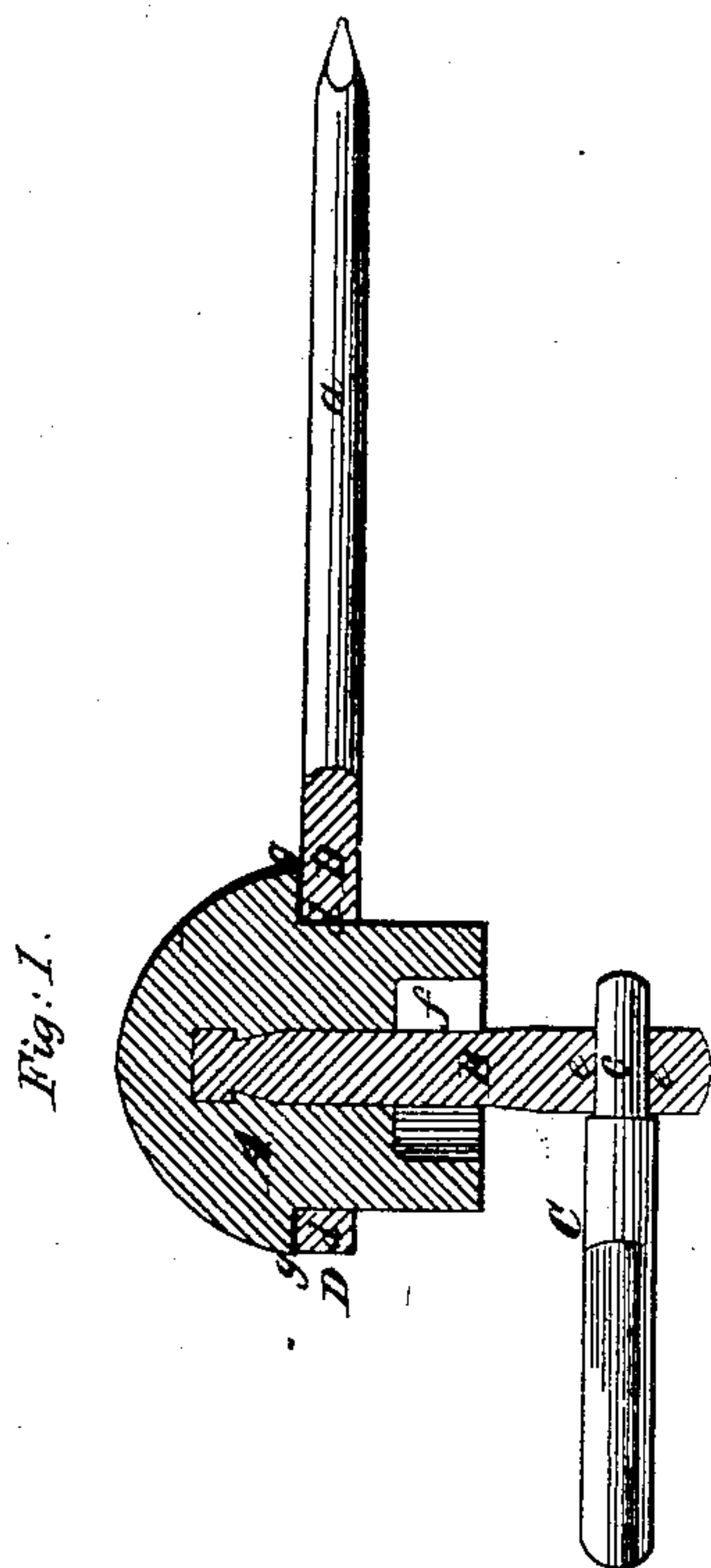
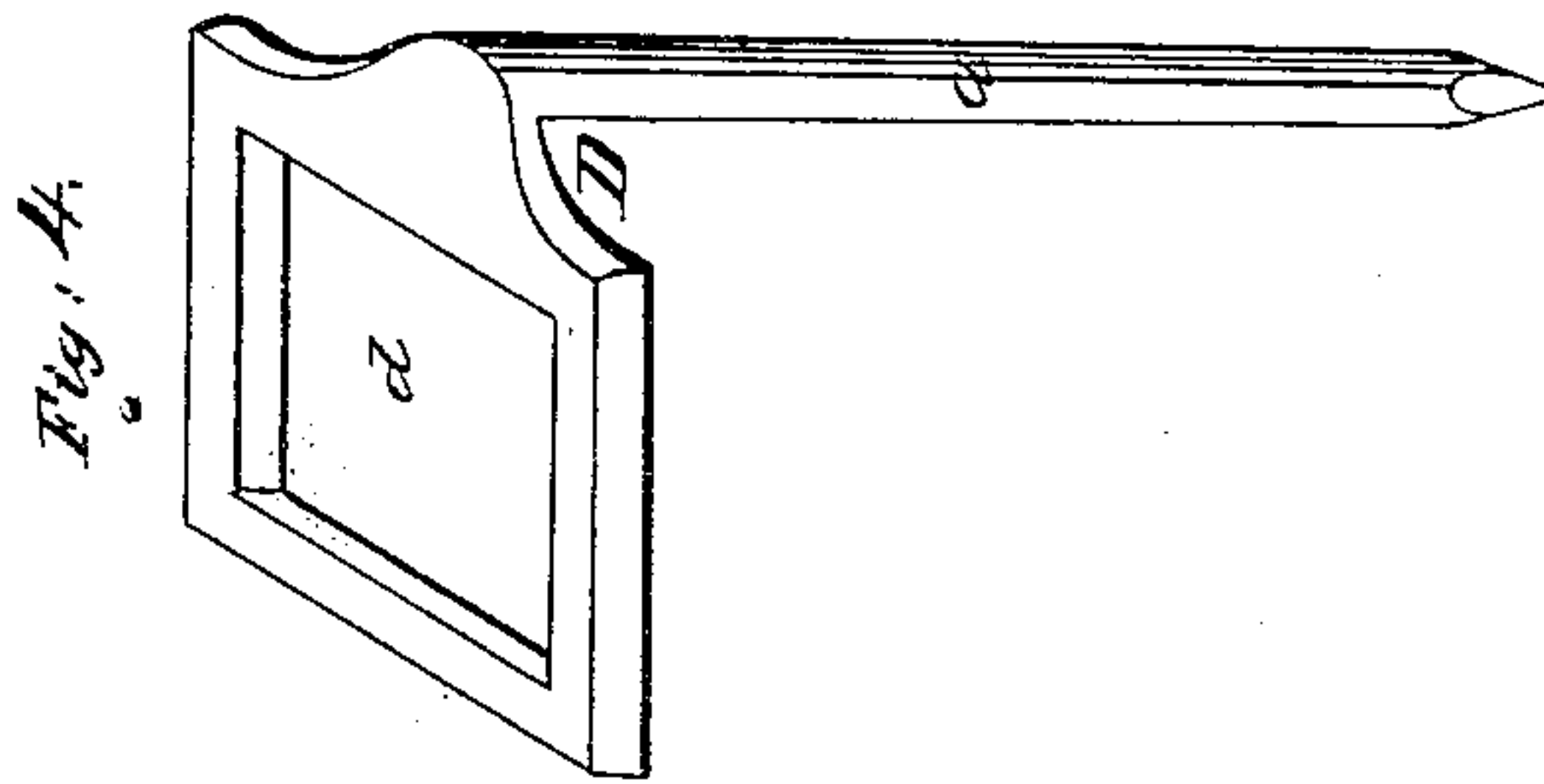
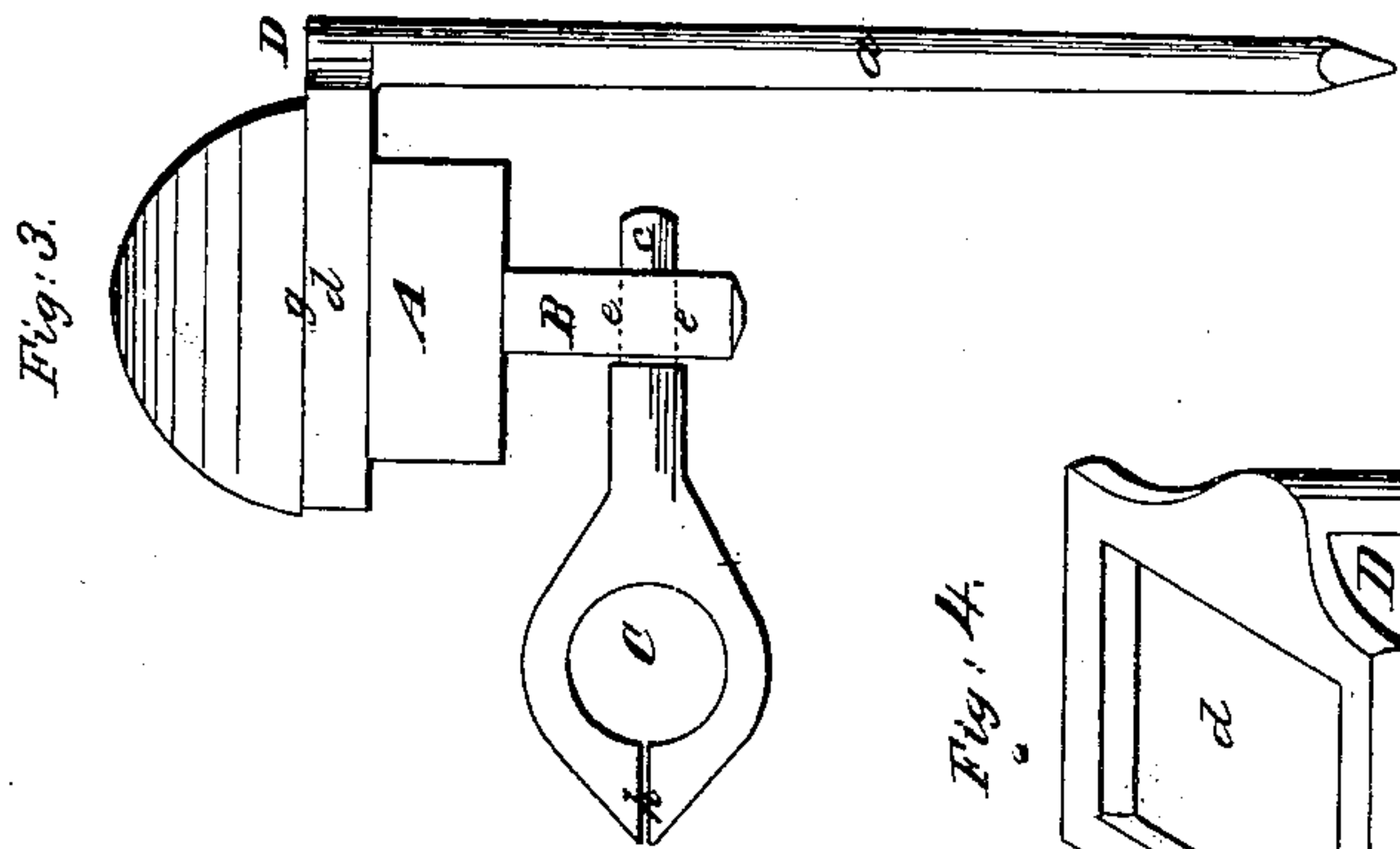


E. EAGLES.
INSULATOR FOR LIGHTNING CONDUCTORS.
No. 39,613. Patented Aug. 18, 1863.



Witnesses:
J. W. Coombs
G. W. Reed

Inventor:
E. Eagles
per Munn & Co.
attys

UNITED STATES PATENT OFFICE.

EDWIN EAGLES, OF MAMARONECK, NEW YORK, ASSIGNOR TO HIMSELF
AND J. H. GUION, OF SAME PLACE.

IMPROVEMENT IN INSULATORS FOR LIGHTNING-CONDUCTORS.

Specification forming part of Letters Patent No. 39,613, dated August 18, 1863.

To all whom it may concern:

Be it known that I, EDWIN EAGLES, of Mamaroneck, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Insulators for Lightning-Conductors; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical sectional view of an insulator with my improvement adapted for the walls or sides of buildings. Fig. 2 is a plan view corresponding with Fig. 1. Fig. 3 is a side view of the insulator adapted to the roofs of buildings. Fig. 4 is a perspective view of the support which I use for roofs.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in a certain mode of combining the holder with the insulator, by which it is enabled to be set at any angle necessary to adapt itself to the direction of the conductor, so that the same insulator may be made to serve equally well for walls or roofs.

It also consists in a certain construction of the support by which it is better adapted to roofs.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A is the glass insulating-block, having firmly secured within it an iron pin, B, in the bottom of which is a socket or hole for the reception of the shank of the holder C, which receives the conductor, the said shank being at a right angle with the pin B.

D is the support for the insulator, made with a long shank, *a*, to be driven or screwed into the building.

The glass block A is made of square or other polygonal form in its horizontal section, that it may be incapable of turning within the eye *d* of the support D, which is made of corresponding form, and the said glass is made with a shoulder, *g*, to rest upon the support. It is also made with a cavity, *f*, in its bottom, to prevent rain or moisture which runs off its top and sides from collecting around the pin B and thereby destroying the insulation. The pin is secured in the glass by making its up-

per part with suitable notches or with a screw-thread, and placing it in the center of the mold in which the glass is to be cast and casting the glass around it.

The holder C consists of a fork having its prongs closed or nearly closed up, as shown at *h*, Figs. 2 and 3, to confine the conductor, and having the ends of its prongs pointed to catch lateral currents and convey them to the conductor. The shank *c* of this holder is fitted so tightly into the transverse hole or socket *e*, provided in the lower part of the pin B for its reception, that while it may be turned therein it will retain itself in place. It may be better to have a pin inserted through the shank *c* to secure the holder effectually.

By the above mode of combining the holder C with the insulator it will be readily understood that the said holder may be adjusted to suit any direction of the conductor, from vertical to horizontal, by simply turning its shank in the socket *e* of the pin B.

Fig. 1 shows the arrangement of the holder for vertical portions of a conductor, and Fig. 3 shows it arranged in a position of right angles to Fig. 1, to adapt it to a portion of a conductor passing over a roof.

The support shown in Figs. 3 and 4 differs from that shown in Figs. 1 and 2, and from all ordinary insulator-supports, in having its shank *a* at right angles to its eye *d*, which enables the block A and pin B to be kept in upright or nearly upright positions in passing over a roof, the eye *d* being allowed to assume a horizontal position when the shank *a* is driven or screwed into the roof.

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

1. The fitting of the shank *c* of the holder C to a socket or hole, *e*, in the pin B, which attaches it to the glass A, substantially as and for the purpose herein described.

2. The support D, having its eye *d* for the reception of the glass, set at a right angle to its shank or stem A, substantially as and for the purposes herein specified.

EDWIN EAGLES.

Witnesses:

JOHN W. TWOMBLY,
W. G. STEVENS.