

COMER & DENTON.

Lightning Rod.

No. 58,382

Patented Oct. 2, 1866.

Fig. 3.

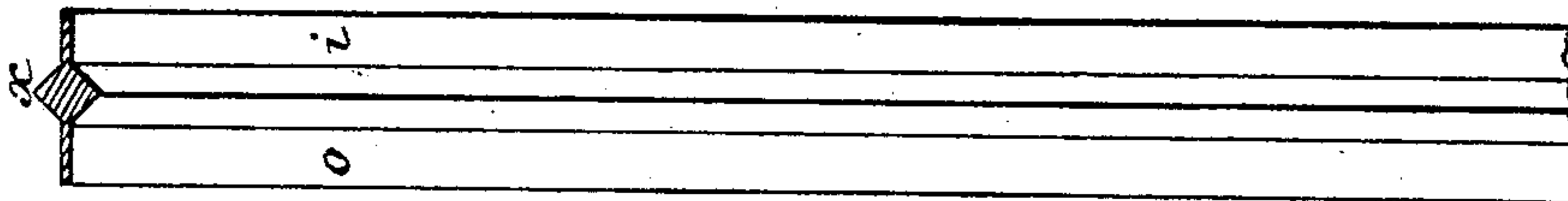


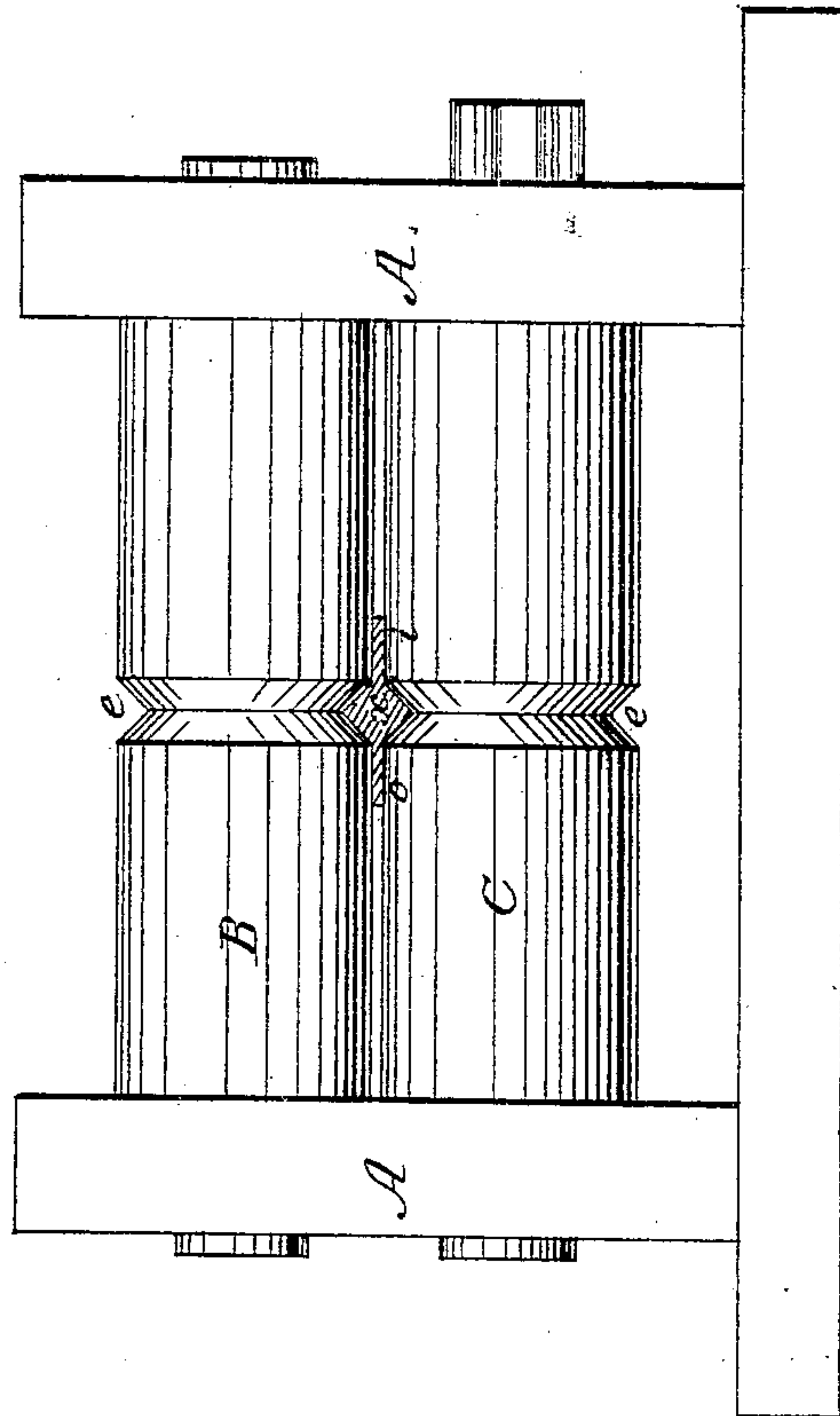
Fig. 2.



Fig. 4.



Fig. 1.



Witnesses.

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UNITED STATES PATENT OFFICE.

HENRY B. COMER AND JOHN DENTON, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN LIGHTNING-RODS.

Specification forming part of Letters Patent No. 58,382, dated October 2, 1866.

To all whom it may concern:

Be it known that we, HENRY B. COMER and JOHN DENTON, both of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful article of manufacture, to wit, an Improvement in Lightning-Rods; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of our invention consists in making a new article of manufacture—to wit, a lightning-rod consisting of a central core, from which extends two thin wings, said core and wings being made in one piece and twisted, the whole being constructed by the means and operating in the manner hereinafter described.

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

In the accompanying drawings, Figure 1 represents the rolls used for rolling our improved lightning-rod. Fig. 2 represents a transverse section of the rod before it is passed through the rolls. Fig. 3 represents the rod after it has passed through the rolls and before it is twisted. Fig. 4 represents a transverse section of the rod.

In the accompanying drawings, A represents the bearings or frame for the rolls B and C, which are furnished with grooves *e*. These rolls are driven by means of any known and suitable mechanism.

In rolling our lightning-rod we take rods of copper which are larger in diameter than the grooves in the rolls, and pass said rod through the rolls, which will cause it to spread out, as shown in Fig. 1, so as to form wings on either side.

x represents the core of the rod. *o* and *i* represent the wings on either side of the core *x*. After the rod comes from the rolls it is twisted, as in the usual manner.

The advantages of our improved lightning-rod consist in being able to make it of any desired size and length, thereby avoiding joints in it; also, in being able to make it very light, and at the same time very strong, stiff, durable, and cheap.

Having thus described the nature, construction, and operation of our improvement, what we claim as of our invention is—

A new article of manufacture—to wit, a lightning-rod consisting of a central core, from which extends two thin wings, said core and wings being made in one piece and twisted, the whole being made by the means and constructed in the form substantially as herein described, and for the purpose set forth.

HENRY B. COMER.
JOHN DENTON.

Witnesses:

JAMES J. JOHNSTON,
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