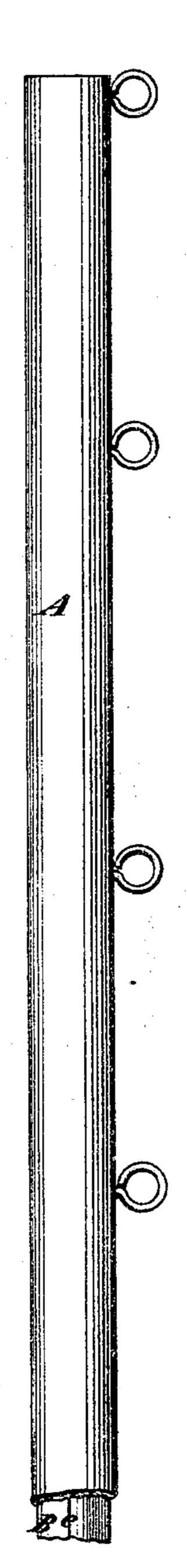
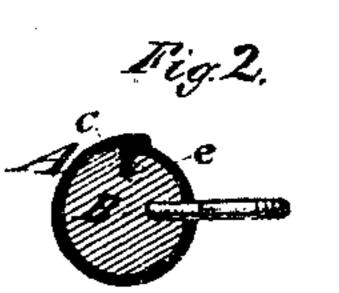
William E. Brock. Inp. 4 Tie Rod for Metallic Shutter Blinds

No. 122,807.

Patented Jan. 16, 1872.





Witnesses. Bredtsames R&Raluau

Inventor.

ME Brock

UNITED STATES PATENT OFFICE.

WILLIAM E. BROCK, OF NEW YORK, N. Y.

IMPROVEMENT IN TIE-RODS FOR SHUTTER-BLINDS.

Specification forming part of Letters Patent No. 122,807, dated January 16, 1872.

To all whom it may concern:

Be it known that I, WILLIAM E. BROCK, of the city, county, and State of New York, have invented a new and Improved Tie-Rod for Operating the Slats of Shutter-Blinds; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing form-

ing a part of this specification.

This invention is more especially intended for blinds which are constructed of metal or with metal exteriors for the purpose of making them fire-proof. It consists in a tie-rod formed of a sheet metal tube having an internal longitudinal rib, and provided with a wooden filling, which has formed in it a longitudinal groove for the reception of said rib, which is thus made to keep the wooden filling from turning. The strip, thus constructed, affords greater facility for the attachment to it of the staple-hooks, by which the rod is connected with the slats than a rod made of metal; the shanks of such staples or hooks being screwed into the wooden filling.

In the accompanying drawing, Figure 1 is an elevation of a rod made according to my invention, and Fig. 2 is a transverse section of

the same.

Similar letters of reference indicate corre-

sponding parts in both figures.

A is a metal tube formed of a strip of sheet metal, one edge of which is turned in perpen-

dicularly to the rest, and the whole bent into the form of a tube with the turned in edge forming an internal rib, a, along its interior. The tube, thus formed, is completed by soldering its longitudinal seam. B is the wooden filling which consists of a round stick or strip of wood having formed in it a longitudinal groove, e. This stick is so driven or inserted tightly into the tube A, from one end thereof that the groove e shall receive the rib a, and when in place will be prevented from turning by the said rib, and may be secured from longitudinal displacement by metal caps soldered on the ends of the tube.

One great advantage of this over other hollow metal tie-rods is, that the wood filling makes it less liable to be bent out of shape than a metal rod, and also affords a means of securely attaching the staples or hooks for connecting the rod with the slats by inserting the screwshanks of such staples or hooks through holes drilled or punched in the tube, and screwing

them into the wood filling.

What I claim as my invention, and desire

to secure by Letters Patent, is-

The tie-rod composed of a metal-tube A, provided internally with a rib, a, and grooved wooden stick B, substantially as herein set forth.

Witnesses: Fred. Haynes,

R. E. RABEAU.

W. E. BROCK.

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