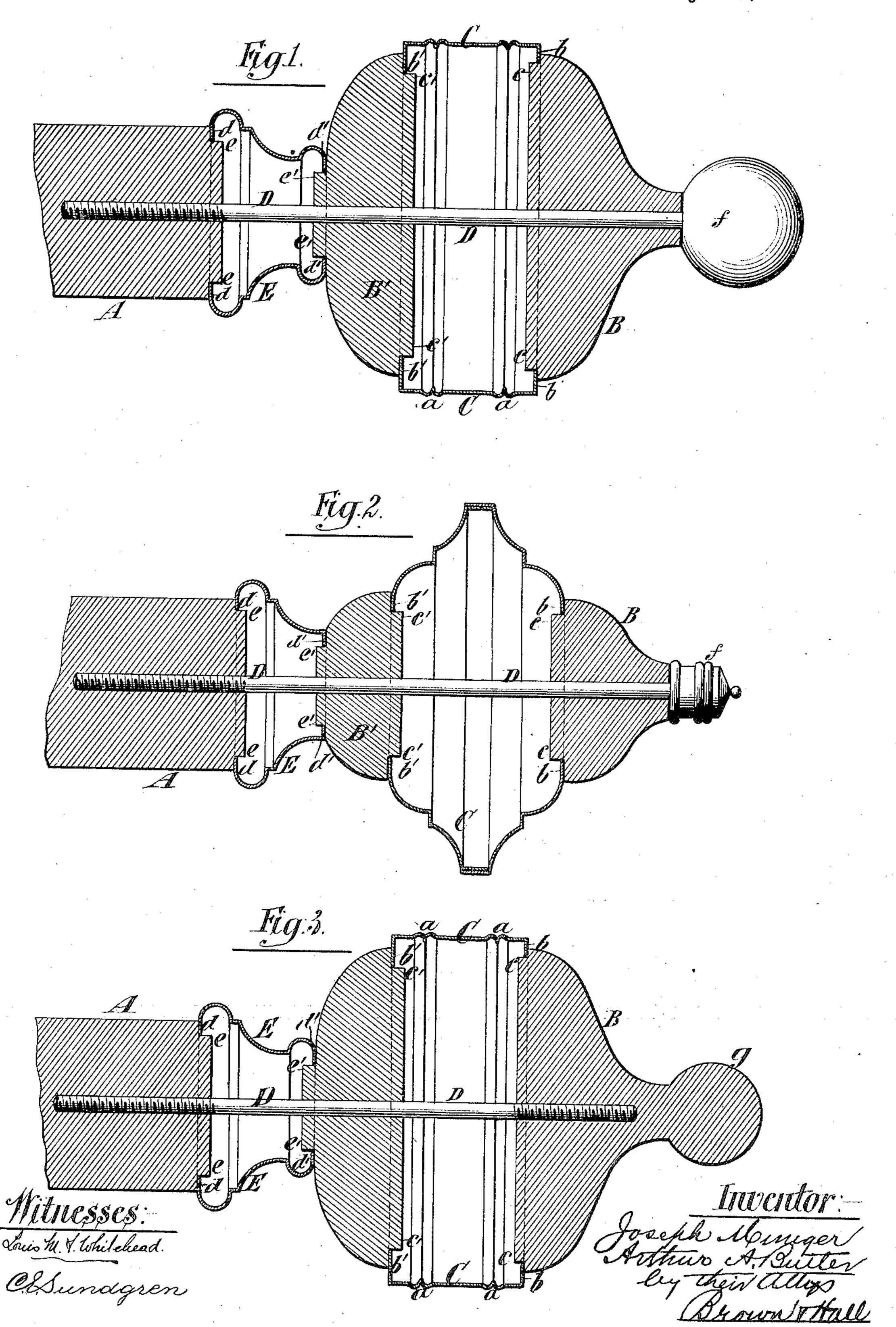
## J. MUNGER & A. A. BUTLER.

CURTAIN POLE TIP.

No. 302,665.

Patented July 29, 1884.



## UNITED STATES PATENT OFFICE

JOSEPH MUNGER, OF WATERBURY, CONNECTICUT, AND ARTHUR A. BUT-LER, OF NEW YORK, N. Y., ASSIGNORS TO THE SCOVILL MANUFACTURING COMPANY, OF WATERBURY, CONNECTICUT.

## CURTAIN-POLE TIP.

SPECIFICATION forming part of Letters Patent No. 302,665, dated July 29, 1884.

Application filed June 9, 1884. (No model.)

To all whom it may concern:

Be it known that we, Joseph Munger, of Waterbury, in the county of New Haven and State of Connecticut, and Arthur A.Butler, of the city and county of New York, in the State of New York, have invented a new and useful Improvement in Curtain-Pole Tips, of which the following is a specification.

Our invention relates to curtain-pole tips which are composed of separable pieces of wood and metal secured together and to the end of

the pole by a screw-threaded rod.

Our invention consists in novel combinations of the several parts of a pole-tip with a curtain-pole, and in the combination, with a pole and pole-tip and a screw-threaded rod, whereby they are secured together, of a metallic socket fitted at its one end to the pole and at its other end to the pole-tip, and forming a connection between them, as hereinafter described.

In the accompanying drawings, Figure 1 represents a longitudinal section of the end portion of a curtain-pole and a pole-tip emportion of a curtain-pole and a pole-tip emportion of a curtain-pole and a pole-tip emportion, the screw-rod being extended entirely through the tip, and having a head which forms a terminal to the tip. Fig. 2 is a section similar to Fig. 1, and differing therefrom only in the shape of the metal portion of the tip and the form of the screw-head or terminal; and Fig. 3 is a section similar to Fig. 1, and in which the screw or screw-threaded rod has no head, but is screwed at one end into one of the wooden pieces of the 35 tip.

Similar letters of reference designate corre-

sponding parts in all the figures.

In all the figures, A designates the end portion of a curtain-pole, usually made of wood, and BB'C designate the several separable parts which compose the pole-tip, and which are secured together in close juxtaposition and to the pole by means of a screw-threaded rod, D.

Referring now particularly to Fig. 1, it will be observed that the portion or part C consists of an approximately-cylindric shell of metal, which is formed with circumferential beads a, and the edges of which are turned in to form flanges or shoulder-like portions b b'.

The parts B B are made of wood, and are

or may be highly finished in any suitable manner. They have at their adjacent ends circular projections c c', or bosses forming shoulders at the bases of said projections. The bosses or projections c c', respectively, enter 55 the metal band or shell C, and are properly centered by the flanges or shoulder-like portions b b' thereof. These flanges b b' have a bearing on the shoulders formed by the projections c c'.

In this example of our invention we have shown a socket or socket-piece, E, as interposed between the tip and the end of the pole A. It is made of metal, and its edges are turned in to form flanges or shoulder-like portions 65 d d, which receive hubs or projections e e on the pole A and part B', and thus properly center the tip relatively to the pole.

The screw-rod D (shown in Fig. 1) passes entirely through the tip, and has at the outer 70 end a head, f, (here shown as of spherical form,) and at the inner end it is screwed into the end of the pole. By screwing up the rod all parts of the tip and the socket-piece E are held in close juxtaposition and to the pole. 75

In the example of our invention shown in Fig. 2 the construction is the same as in Fig. 1, save that the head f of the screw-rod D is of different form, and the form of the metallic part C of the tip is different. The part C has shoulder-80 like portions or flanges bb', which receive the circular projections cc' on the parts BB', and the socket-piece E has flanges or shoulder-like portions dc', which receive the circular projections dc' on the pole A and tip portion B'. 85

In the example of our invention shown in Fig. 3 the construction is like that shown in Fig. 1, save that the part B of the tip is provided with a terminal, g, and the rod D is furnished at its outer end with a screw-thread 90 which screws into the part B of the tip.

In the examples of our invention shown in Figs. 1 and 2 the parts are tightly clamped by taking hold of the screw-thread f and turning the screw.

In the example of our invention shown in Fig. 3 the parts are clamped together by taking hold of the tip portion B and turning it relatively to the other parts.

In all the examples of our invention the 100

shell or metallic portions C E may be produced by spinning, drawing, or any other of the cheap processes by which thin sheet metal is worked.

In all the examples of our invention the pieces of wood B B' are bored to receive through them the rod D. They have a long bearing on the rod, and are properly and directly centered by it relatively to the pole.

No portion of the shell C fits the rod, but the shell is wholly supported and centered by the portions B B' of wood on opposite sides thereof.

What we claim as our invention, and desire

to secure by Letters Patent, is—

15 1. The combination, with a curtain-pole, of a tip composed of two portions of wood, B B', a screw-rod, D, passing through said portions and into the pole, and serving to directly center said portions relatively to the pole, and a metallic shell or portion, C, interposed between the portions B B', and centered on said portions, substantially as herein described.

2. The combination, with a curtain-pole, of a tip composed of the parts B B', formed with circular bosses or projections c c', and an interposed metallic shell or part, C, larger in diameter than said bosses or projections, and formed with inwardly-projecting flanges b b', which receive the said bosses or projections within them, and have a bearing on the shoulders formed by said bosses or projections, and a screw-rod whereby the several parts of the tip are secured together and to the pole, substantially as herein described.

3. The combination, with a curtain-pole, of 35 a tip secured thereto by a screw-rod, and a metallic socket or socket-piece interposed between the pole and tip, substantially as herein described.

4. The combination, with a curtain-pole and 40 pole-tip, each provided with a circular boss or projection, of a metallic socket or socket-piece interposed between the pole and pole-tip, and having inwardly-projecting flanges which receive the bosses or projections of the pole 45 and pole-tip, and a screw-rod whereby the several parts are secured together, substan-

tially as herein described.

5. The combination of the pole A, having the boss or projection e, the tip composed of 50 the parts B B', having the circular bosses or projections e' e' e', and the metal shell or portion C, having the flanges bb', the socket-piece E, having flanges dd', and the screw-rod D, all substantially as herein described.

## JOSEPH MUNGER. ARTHUR A. BUTLER.

Witnesses to the signature of Joseph Munger:

T. R. HYDE, Jr.,

F. J. KINGSBURY, Jr.

Witnesses to the signature of Arthur A. Butler:

FREDK. HAYNES, C. E. LUNDGREN.