

No. 868,111.

PATENTED OCT. 15, 1907.

F. A. NEIDER.  
CARRIAGE CURTAIN KNOB.  
APPLICATION FILED AUG. 30, 1905.

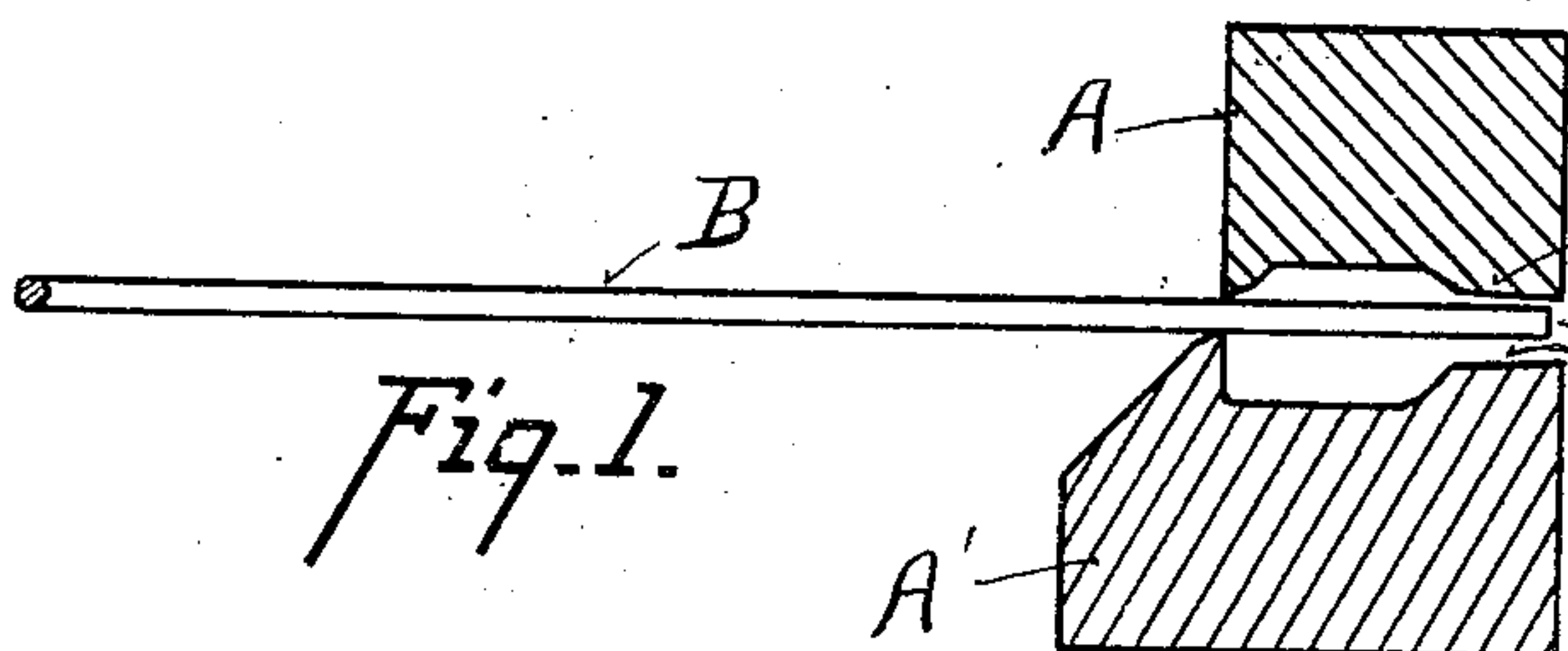


Fig. 1.

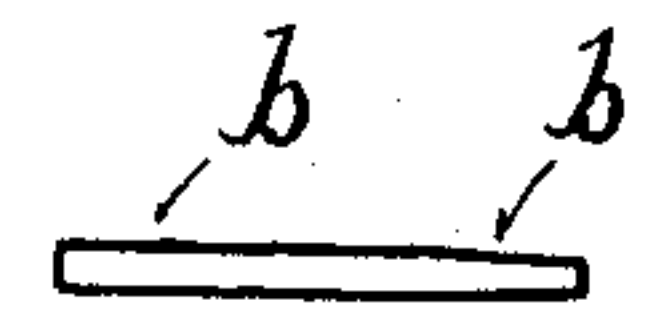


Fig. 2.

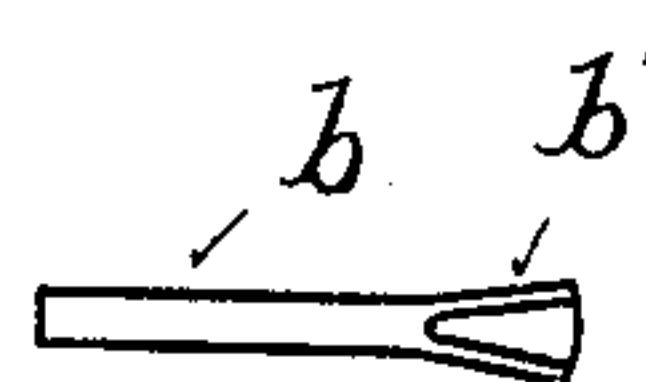


Fig. 3.

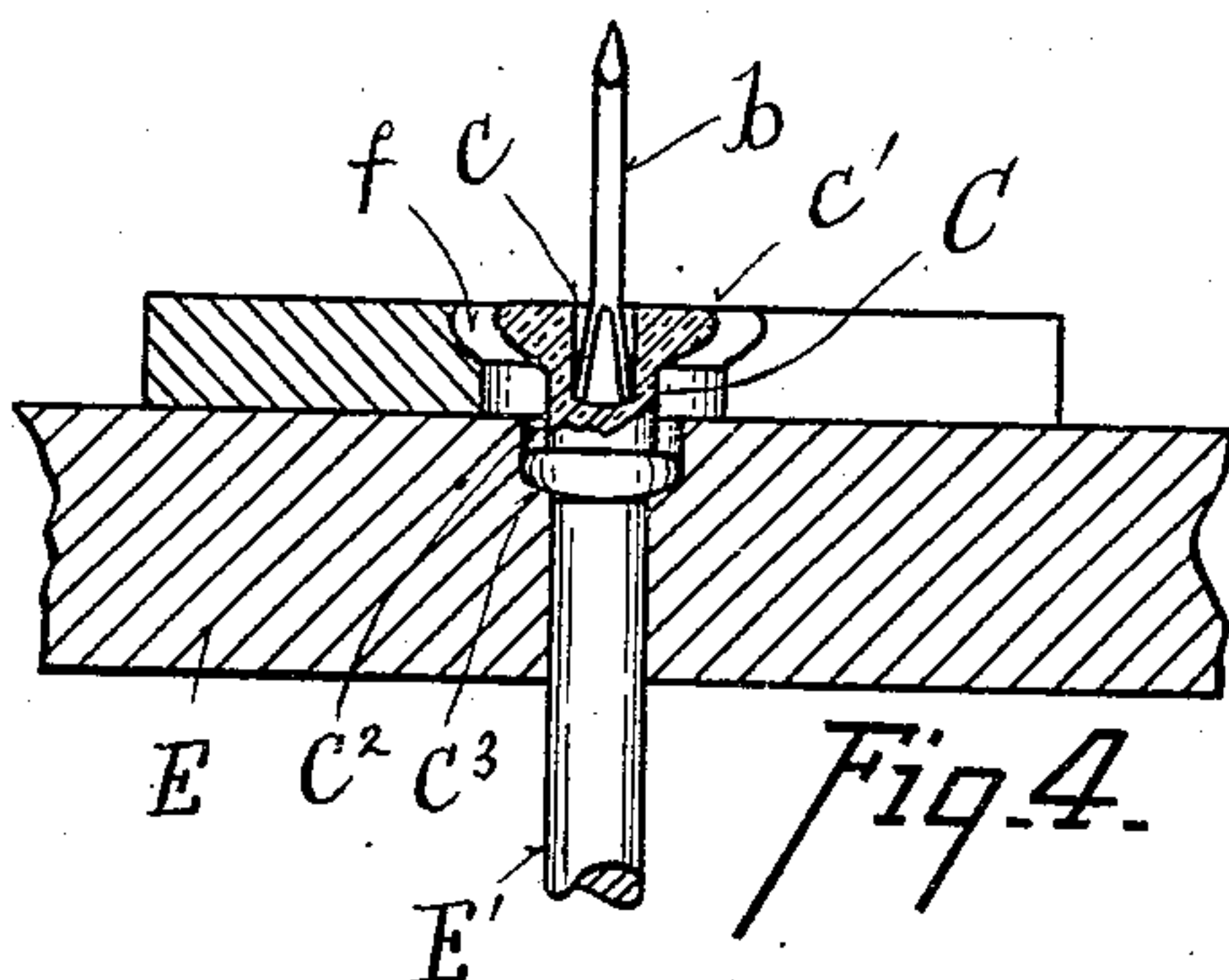


Fig. 4.

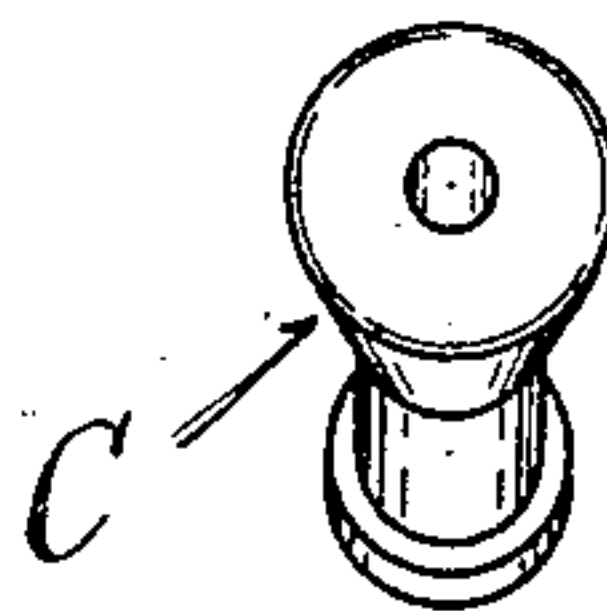


Fig. 6.

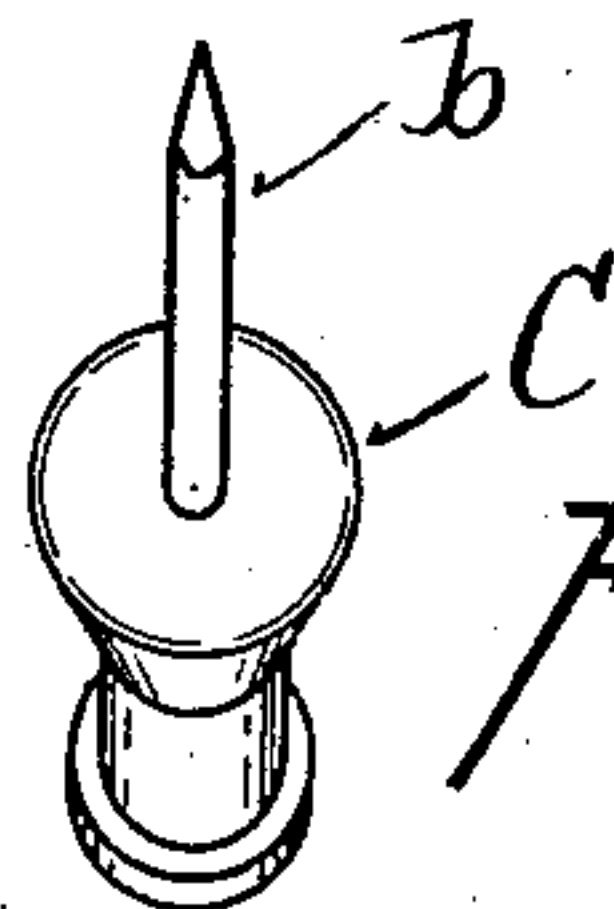


Fig. 7.

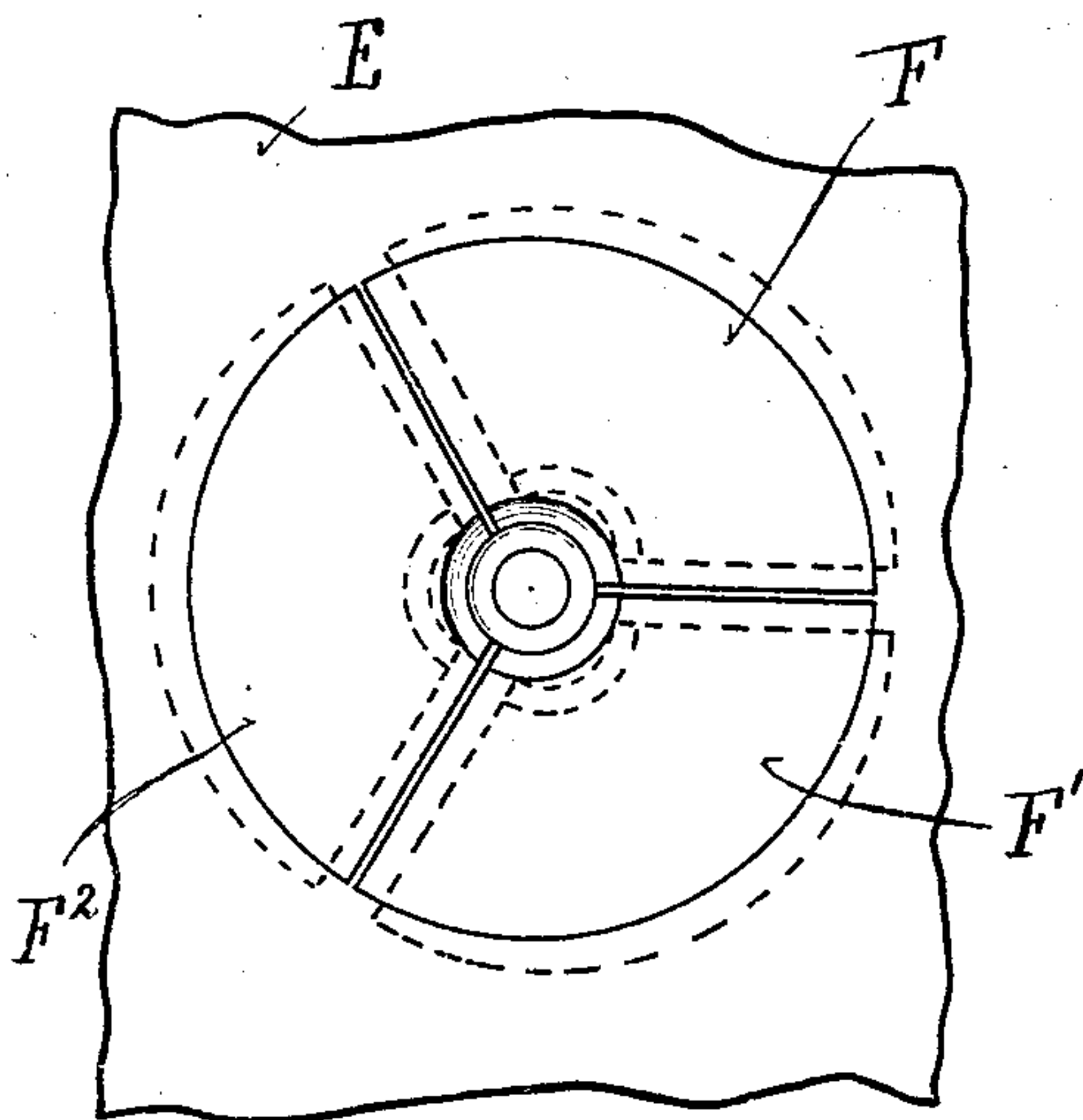


Fig. 5.

Witnesses  
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# UNITED STATES PATENT OFFICE.

FRED A. NEIDER, OF AUGUSTA, KENTUCKY.

## CARRIAGE-CURTAIN KNOB.

No. 868,111.

Specification of Letters Patent.

Patented Oct. 15, 1907.

Application filed August 30, 1905. Serial No. 276,365.

*To all whom it may concern:*

Be it known that I, FRED A. NEIDER, a citizen of the United States of America, and a resident of Augusta, county of Bracken, State of Kentucky, have invented  
5 certain new and useful Improvements in Carriage-Curtain Knobs, of which the following is a specification.

My invention relates to carriage curtain knobs which consist of a blank containing the head, neck and base, and a central bore, and the shank which is held in the  
10 bore.

The object of my invention is a carriage curtain knob in which the shank is held firmly in the head blank against rotation and which may be produced with a least possible waste of metal.

Referring to the drawings, Figure 1 shows the die for cutting the blank to form the shank, and for flattening the end of the same. Fig. 2 is a detail side elevation of a shank. Fig. 3 is a front elevation of the same. Fig. 4 is a sectional view showing the second operation in  
15 my process. Fig. 5 is a plan view showing the third and last step. Fig. 6 is a perspective view of the blank showing the head, neck and base. Fig. 7 is a similar view of the finished knob.

In the first step of the process for forming my curtain knob a blank, *b*, of wire is severed by knives, *A*, *A'*, from a strand of wire, *B*. Knives, *A*, *A'*, have tapered projections, *a*, *a'*, at their ends, which contact the end, *b'*, of the shank, *b*, and spread it out. The enlarged end, *b'*, of the shank, *b*, is then placed in the bore, *c*, of  
25 a blank, *C*, which contains the base, *c'*, neck, *c''*, and head, *c'''*, of the knob. Blank, *C*, is held in a die, *E*,

with its base, *c'*, in the plane of three metal dies, *F*, *F'*, and *F''*, which are adapted to be moved towards each other by radial forces, the direction of whose movement is 120 degrees apart. Dies, *F*, *F'*, and *F''* have their inner contacting surfaces, *f*, in the shape of arcs of a circle equal to the circumference of a base, *c'*. When the dies, *F*, *F'* and *F''*, are brought inward about the base, *c'*, they compress the metal thereof about the shank, *b*, and cause the same to be pressed snugly around the flattened portion, *b'*, of the shank. I have found that by dividing the dies, *F*, *F'*, and *F''*, into three or more parts, the metal of the blank is compressed more uniformly and firmly about the shank than when two parts are used.  
35 40 45

The blank, *b*, with the enlarged and flattened head is held securely in the head blank *C* and has no tendency to turn in the same, since with my form of die the metal is brought snugly around the same, thus preventing any tendency towards pulling out or of rotating in the head blank.  
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What I claim is:

A carriage curtain knob comprising two metal blanks secured together, one blank consisting of a head and neck having a seat or opening and the other blank consisting of a shank having one end flattened and spread, the said end being embedded in the seat and snugly fitting the walls thereof.  
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Witnesses:

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