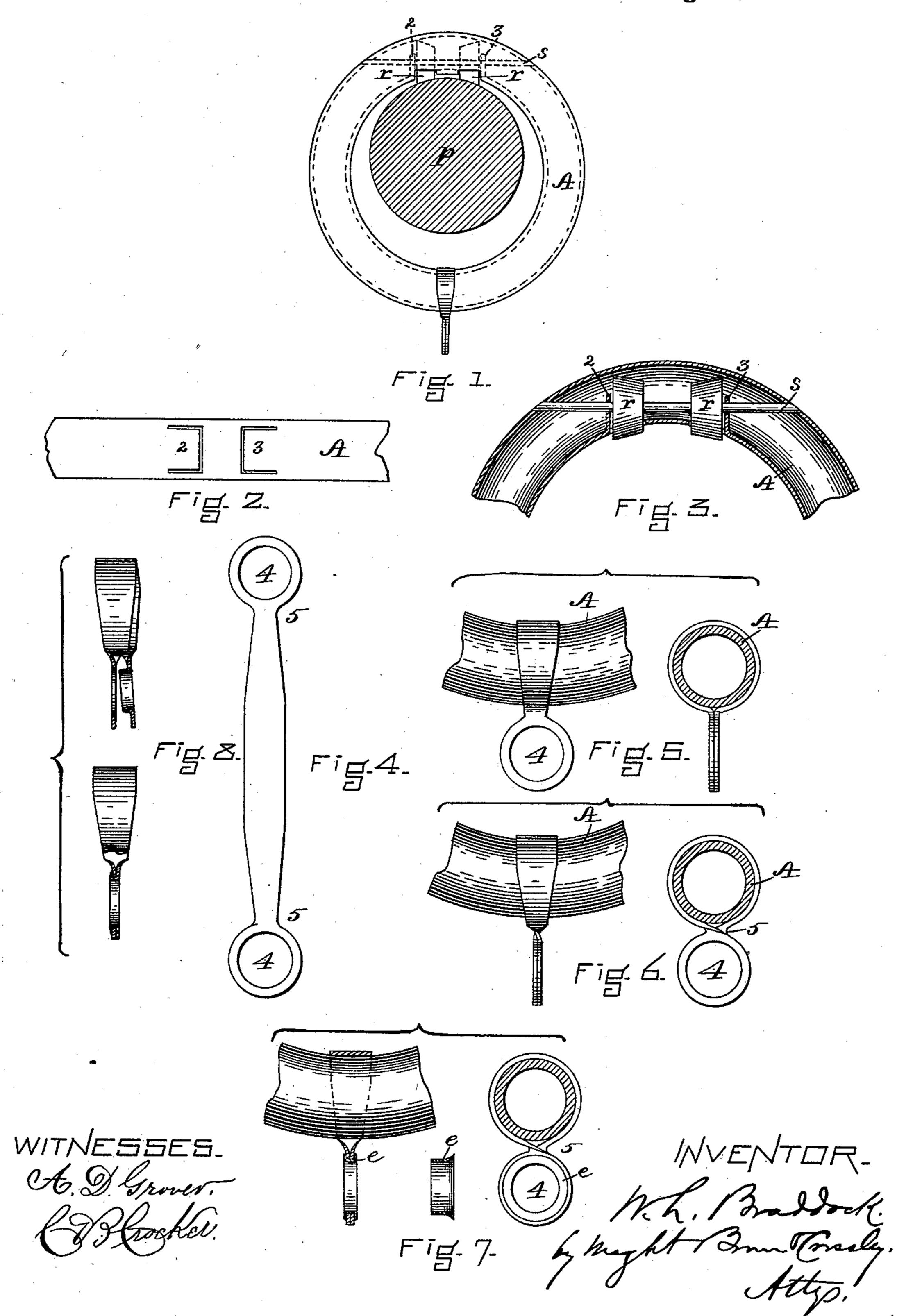
## W. L. BRADDOCK.

CURTAIN RING.

No. 387,392.

Patented Aug. 7, 1888.



## United States Patent Office.

WARREN L. BRADDOCK, OF BOSTON, MASSACHUSETTS.

## CURTAIN-RING.

SPECIFICATION forming part of Letters Patent No. 387,392, dated August 7, 1888.

Application filed August 20, 1887. Serial No. 247,425. (No model.)

To all whom it may concern:

Be it known that I, WARREN L. BRADDOCK, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Curtain-Rings, of which the following is a specification.

I will first proceed to describe my improvements, having reference to the accompanying drawings, forming a part of this specification, and subsequently point out the invention in

the claims.

Of the drawings, Figure 1 represents a side view of my invention in position on a curtainpole, the latter being shown in section. Fig. 15 2 is a view of a fragment of the ring developed, showing the manner of cutting into the ring for the purpose of making place for the anti-friction rollers. Fig. 3 is a vertical sectional view of the upper portion of the ring, 20 showing the construction of the anti-friction rollers and the manner of supporting them in position in the ring. Fig. 4 is a representation of the material from which the curtain-attaching eye is formed after the said material has 25 been struck up from a sheet of metal or otherwise formed. Figs. 5, 6, and 7 are detail views showing the successive steps pursued in securing the curtain attaching eye to the ring. Fig. 8 is a modified view of means for forming the 30 eyeleted eye.

Similar letters of reference indicate similar

parts in all of the views.

In the drawings, A represents a curtain-ring, which may be made hollow and formed of sheet metal, as is common in articles of this kind, or be constructed in any other suitable manner. In the upper part of the ring I make place in any desired way for two anti-friction rollers, r, which are mounted so as to turn on a shaft, s, extending through the ring, as most clearly shown in Fig. 3. These rollers are preferably (though not necessarily) slightly beveled, so as to constitute a frustum of a cone, and fit them to rest with their faces fairly on the pole p, as shown in Fig. 1.

When the ring is constructed of sheet metal or made hollow, I make place for the rollers r by cutting into the ring, so as to form two tongue-pieces, 23, which tongue-pieces are left attached at some point to the body of the ring, as clearly represented in Fig. 2. These tongue-

pieces are bent inward to a point where the shaft swill pass therethrough, so as to form an additional stay or support for said shaft. (See Fig. 3.) This construction is exceedingly simple, easy, and economic of manufacture, and very durable. Besides this, by providing each ring with a plurality of anti-friction rollers said rings can be moved with greater ease, and the rollers are less liable to bind on the pole 60 than though each ring were provided with a single roller.

single roller.

The curtain attaching eye e, I construct by first forming a blank, as shown in Fig. 4, consisting of a strip of metal having an eye, 4, 65 formed in each end and a comparatively narrow neck, 5, in the body adjacent to such eyes. This blank may be bent to conform to the ring. so that the eyes 4 4 will "register," as shown in Fig. 5, in which position said eyes are held 70 by inserting an eyelet and riveting or swaging it down therein, as represented in Fig. 7; or an eyelet may be drawn up in one end of the blank, as represented at f in Fig. 8, and the smaller end of the eyelet so formed on one end 75 of the blank passed through the eye 4 of the other end and swaged or riveted down, so as to form a smooth round hole that will not be liable to cut or wear the threads or material passed therethrough.

In case it is desired to have the curtain-attaching eye take position at right angles to the ring proper, the eyes 4 4 are given a quarterturn, putting a quarter-twist in the necks 5 5 of the blank, as shown in Fig. 6, in which position the eye may be fixed and supported in place by an eyelet passed into and riveted in the eyes 4 4, as shown in Fig. 7; or the eyes 4 4 may be eyeleted together, as represented in Fig. 8. By this mode a curtain-attaching 90 eye can be easily and quickly formed, and a secure and entirely efficient device for the pur-

pose is provided.

In Figs. 5, 6, and 7 both side and sectional views of the curtain attaching eye, together 95 with a portion of the ring, are shown, and in the last mentioned figure a representation is given of an eyelet attached.

Though I have been particular to describe the exact form and arrangement of the parts as 100 shown and as I prefer to construct them, it is obvious that these may be varied within the limits of mechanical skill without departing from the nature or spirit of the invention.

Having thus described my improvements,

what I claim is—

5 1. The hollow ring A, having the tongue-pieces 2 3 integrally connected with the ring, combined with a single roller-shaft, s, supported in the ring and passing through said tongue-pieces, and two anti-friction rollers set into the ring and journaled on said shaft, as set forth.

2. A curtain-ring provided with a curtain-attaching device consisting of a strip of metal

bent around the ring and having its ends provided with eyes twisted to the extent of a quarter-turn and riveted together with an eyelet, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 15th day of August, 20 A. D. 1887.

## WARREN L. BRADDOCK.

Witnesses:

ARTHUR W. CROSSLEY, C. F. BROWN.