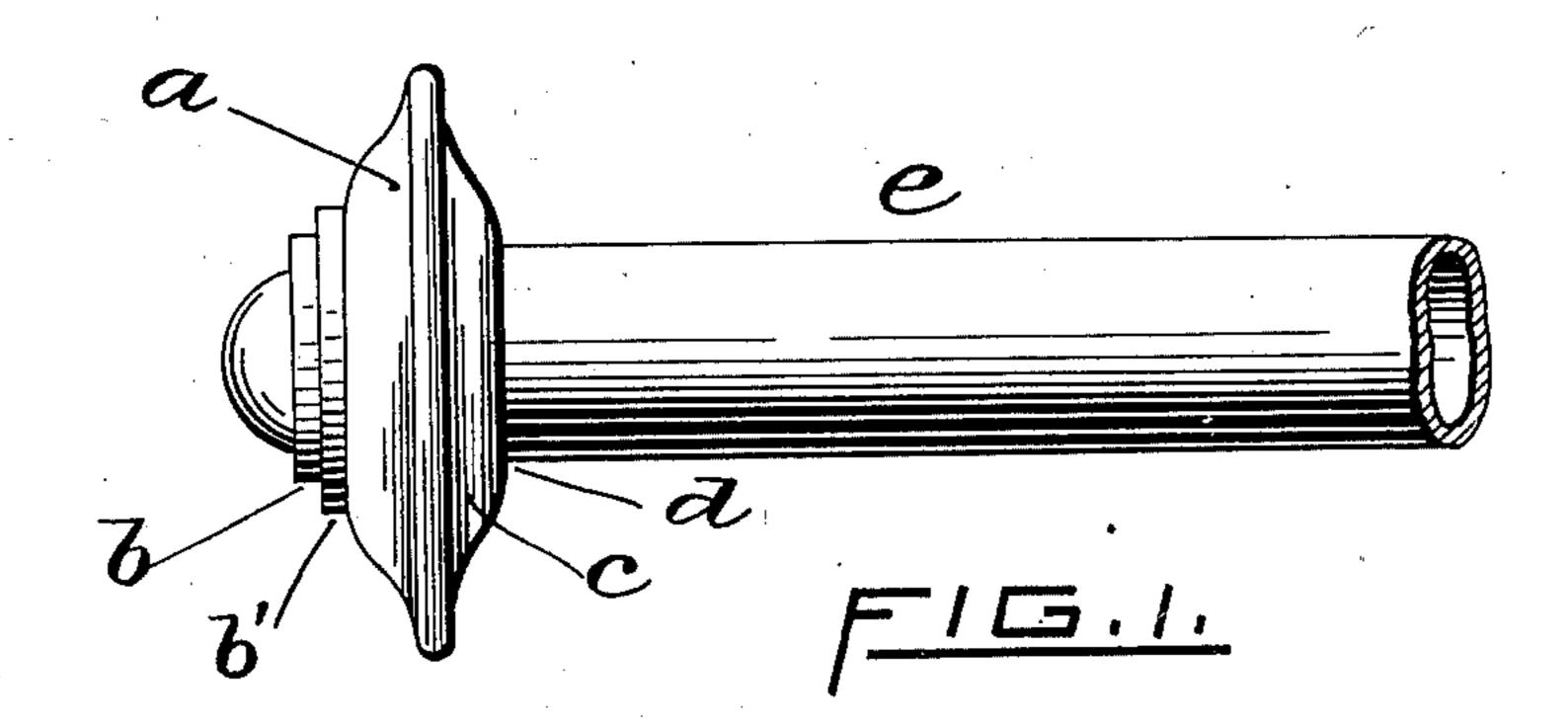
H. T. BARNWELL.

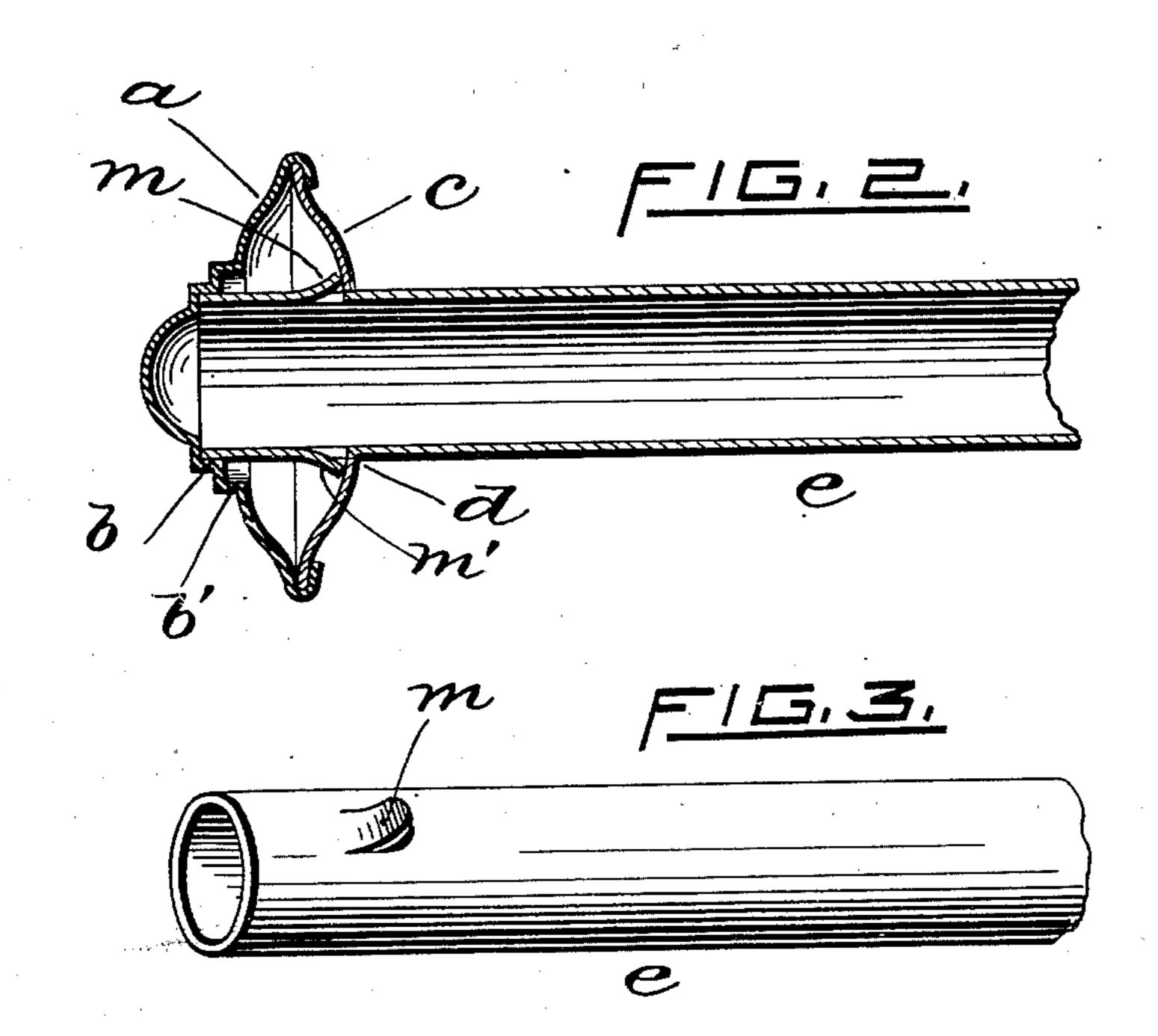
CURTAIN ROD.

(Application filed Oct. 12, 1900.)

. (No Model.)







WITNESSES.

Charles I Hannigan: Harry I Barrensell
Isaac St. Lincoln: 7 Horstio & Bellows
Offfy.

UNITED STATES PATENT OFFICE.

HARRY T. BARNWELL, OF PROVIDENCE, RHODE ISLAND.

CURTAIN-ROD.

SPECIFICATION forming part of Letters Patent No. 663,848, dated December 18, 1900.

Application filed October 12, 1900. Serial No. 32,819. (No model.)

To all whom it may concern:

Be it known that I, HARRY T. BARNWELL, a citizen of the United States, residing at Providence, in the county of Providence and State 5 of Rhode Island, have invented a certain new and useful Improvement in Curtain-Rods, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to metallic curtainrods which have tubular bodies and whose heads are affixed to the rod member.

The object of my invention is to construct a curtain-rod of minimum weight at small 15 cost having great durability. Heretofore attempts have been made to secure these ends by joining the parts with solder or inserting wood into a hollow metallic head, but in practical use these expedients have been ineffect-20 ive. I secure the desired objects by means of the construction hereinafter described, and illustrated in the drawings, wherein—

Figure 1 is a side elevation of a section of my curtain-rod; Fig. 2, a central vertical sec-25 tion of the same, and Fig. 3 a perspective view of a part of the rod member.

Similar letters indicate similar parts

throughout the several views.

I construct my device as follows: A circu-30 lar cap of thin sheet metal a is struck up, having one or more concentric shoulders b b'. These form an exterior ornamentation of the rod-head exterior and afford on the interior of the head a suitable bearing for the rod-35 body. This cap, which forms the front of the head, is spun, swaged, or otherwise joined to the rear member c of the head, which is also struck up from thin metal, having a circular opening d to allow the passage of the rod 40 member e therethrough. The rod member e is tubular, having near its end spring-tongues m m', formed by cutting circular pieces in the

rod member, on opposite sides thereof, whose free extremities normally project above the surface of the rod-member. The head and 45 body members are united by inserting the rod member, with its spring-tongues, through the opening d into the head until its end contacts with the head-cap a and abuts against the inner concentric shoulder b. The mo- 50 ment the rod end contacts as above the spring-tongues m m' immediately expand and engage the rear head-plate c, thus uniting the head to the rod in such a firm manner that the periphery of the head can have no lateral 55 motion.

The outer concentric shoulder b' is provided in order to make the front cap a suitable as a bearing for a rod end of greater diameter than that shown when such size is 60 desired.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A curtain - rod consisting of a tubular 65 rod member, spring-tongues on both sides of the tubular rod member, and a hollow head member whose rear face is provided with a concentric shoulder for engaging the end of the rod member in conjunction with the rear 70 portion of the head.

2. A curtain-rod consisting of a tubular rod member, having spring-tongues cut from both sides of the same, and a hollow head member adapted to be locked thereon by 75 means of said tongues and a concentric shoulder on the inner face of the head.

In testimony whereof I have affixed my signature in presence of two witnesses.

HARRY T. BARNWELL.

Witnesses:

MARY F. CADY, HORATIO E. BELLOWS.