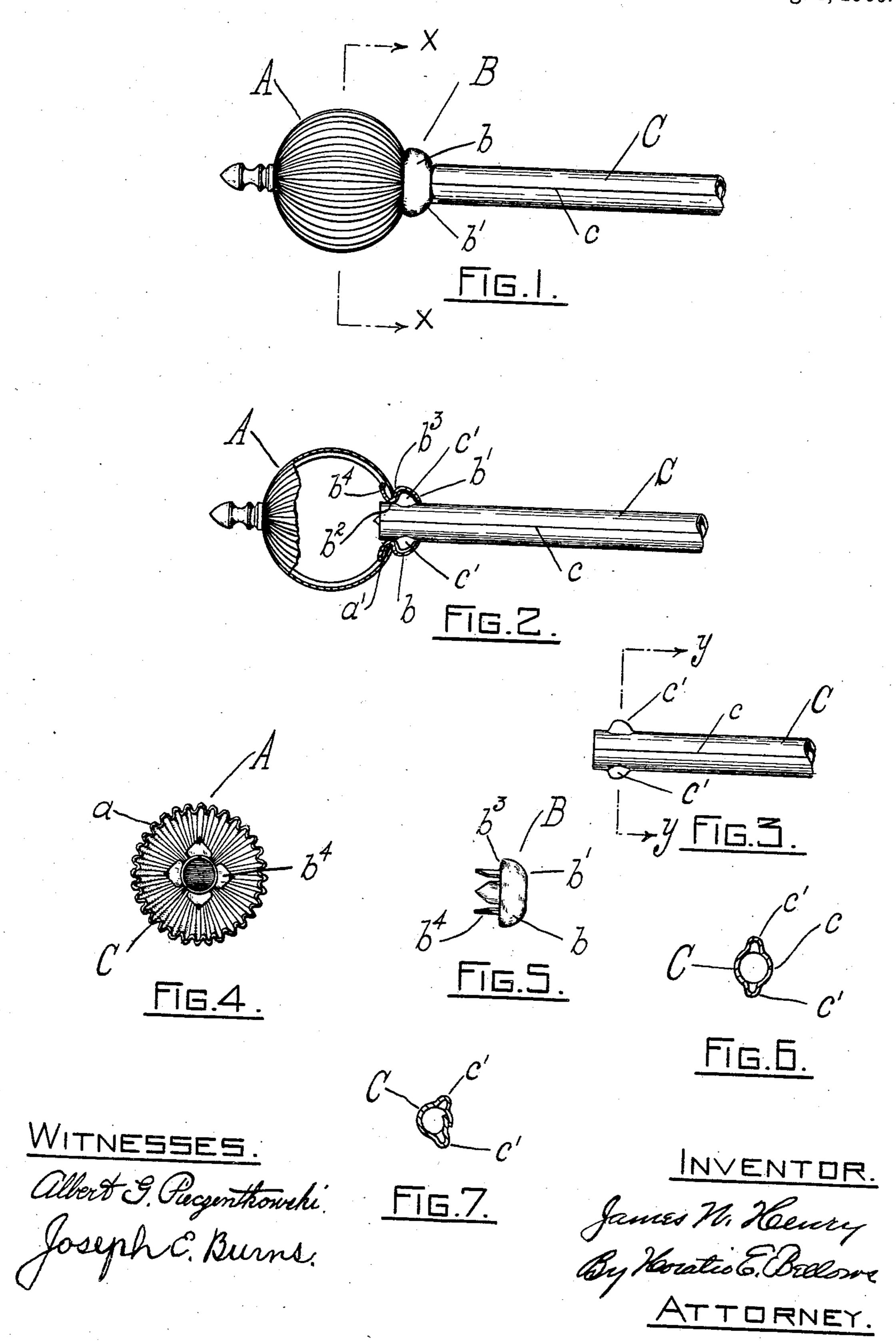
## J. N. HENRY. CURTAIN ROD. APPLICATION FILED 00T. 3, 1908.

930,288.

Patented Aug. 3, 1909.



## UNITED STATES PATENT OFFICE.

JAMES N. HENRY, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO C. P. HENRY NOVELTY COMPANY, A CORPORATION OF RHODE ISLAND.

## CURTAIN-ROD.

No. 930,288.

Specification of Letters Patent.

Patented Aug. 3, 1909.

Application filed October 3, 1908. Serial No. 455,983.

To all whom it may concern:

Be it known that I, James N. Henry, a Providence, in the county of Providence and 5 State of Rhode Island, have invented certain new and useful Improvements in Curtain-Rods, of which the following is a specification.

My invention relates to improvements in 10 curtain or sash rods or poles, and like fixtures, and particularly to the means for engaging the heads, balls, or knobs with the ends thereof.

In a general way my invention has for its 15 object an attaching means which shall be cheap and simple to construct, and secure in operation; but more particularly to provide means for preventing the rotation of the head relatively to the joint; to insure 20 against transverse movement of the head relatively to the rod; to insure a minimum of waste stock in forming the head and rod connection; and to provide a perfect and secure locking connection between the rod and 25 joint member.

To the above ends essentially my invention consists in the novel construction and combination of the several parts hereinafter pointed out and claimed, and illustrated in

30 the accompanying drawings, wherein-Figure 1 is a side elevation of one end of my curtain rod and head, Fig. 2, a like elevation of the same showing the joint and a part of the head in longitudinal central sec-35 tion, Fig. 3, a side elevation of an end of the rod, Fig. 4, a section on line x-x of Fig. 1, Fig. 5, a side elevation of the joint member before bending its prongs, and Figs. 6 and 7, sections on line y-y of Fig. 3 showing 40 the rod in normal and lapped positions respectively.

Like reference characters indicate like

parts throughout the views.

In the drawings, A is a hollow knob or 45 head provided with longitudinally disposed parallel corrugations, a, and a circular end opening or orifice, a', at its inner portion.

A socket or joint member, B, is provided comprising in detail an annular transversely 50 curved body portion, b, having one side inwardly inclined as at b', and upon its opposite side a contracted portion,  $b^2$ , forming a vertical wall or shoulder, b3. Projecting from the contracted portion are prongs,  $b^4$ . 55 The socket member, B, is fixed to the head,

A, as follows: The prongs,  $b^4$ , are passed through the orifice, a', of the head,  $\bar{A}$ , and citizen of the United States, residing at | pressed back against the inner surface of the head with the points bent back into the corrugations, a, so strongly that the exterior 60 face of the head is held tight against the vertical surface or shoulder,  $b^3$  of the socket, B. The described connection of the parts, A and B, insures not only a tight union of these parts, but prevents any possible rota- 65 tion of the head, A. The rod, C, is hollow, and longitudinally split as at c. It is constructed of metal, preferably spring steel, so that its split margins may be made by manual pressure to temporarily overlap, as 70 shown in Fig. 7. At diametrically opposite points near its end the stock of the rod, C, is punched outwardly to form projections, e', which fit in the annular recess formed by the transverse curvature of the socket, B. 75 The rod is engaged by compressing temporarily the end of the rod, C, while the projections, c', enter the recess, and then releasing the rod to seat the projections. The marginal side or edge, b', of the socket, B, 80 is sufficiently remote from the contracted portion or bearing,  $b^2$ , as to insure, by these two interspaced bearing points upon the rod, against any transverse movement of the member, B, relatively to the rod. This fact 85 also makes it possible to make the portion of the rod projecting into the head very short, and thus avoid waste of material. A minimum of stock for the head also is insured by the described combination of head 90 and socket member.

The number of projections, c', may be one or more, or the projection, c', may consist of an annular rib without departing from the spirit of my invention.

What I claim is,

1. The combination with a hollow ornamental head provided with an orifice, and with corrugations converging at the orifice, of a socket member against which the head 100 abuts provided with prongs which pass through the orifice and rest against the wall of the head between the corrugations, and a rod mounted in the socket.

2. The combination with a hollow orna- 105 mental head provided with an orifice, of an annular socket member abutting against the onter face of the head provided with interspaced bearings, prongs upon the margin of the socket member passing through the ori- 110

fice and engaging the inner face of the head, and a rod mounted in the bearings of the socket member.

3. The combination with a hollow orna-5 mental head, of an annular transversely curved socket member provided upon one side with a contracted portion to form, in conjunction with its opposite side, bearings for a rod; means upon the contracted por-10 tion of the socket member for engaging the head; and a rod mounted in the bearings.

4. The combination with a hollow ornamental head, of a socket provided with interspaced bearings, prongs upon the socket en-15 gaging the head, a rod mounted in the bear-

ings, and a projection upon the rod registering in the socket intermediate the bearings.

5. The combination with a hollow ornamental head, of a socket provided with interspaced bearings, prongs upon the socket en- 20 gaging the head, a rod provided with a longitudinally split end mounted in the bearings, and a projection upon the rod registering in the socket intermediate the bearings.

In testimony whereof I have affixed my 25 signature in presence of two witnesses.

JAMES N. HENRY.

Witnesses:

HORATIO E. BELLOWS, CHARLES D. KENNEY.