No. 670,789. Patented Mar. 26, 1901.

J. KRODER.

FASTENING FOR FIXTURES.

(Application filed Mar. 24, 1900.)

(No Model.)

Fig. 1.

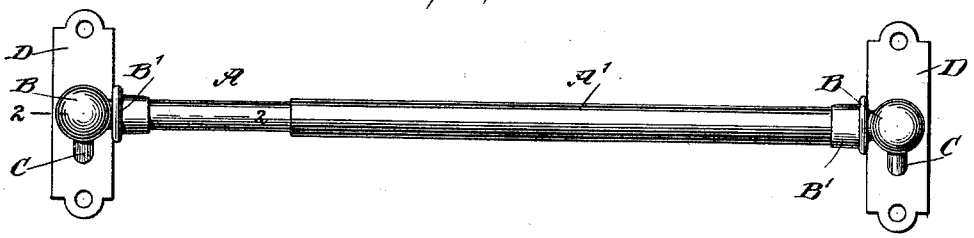


Fig. 2.

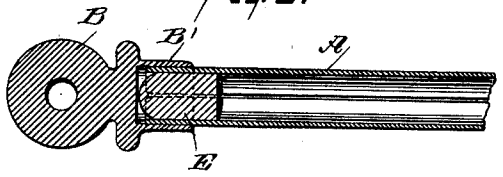


Fig. 3.

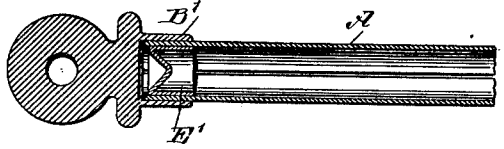


Fig. 4.

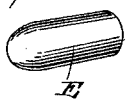


Fig. 5.



Fig. 6.

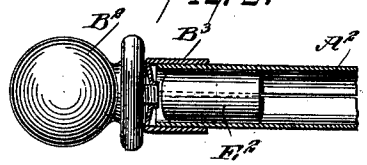
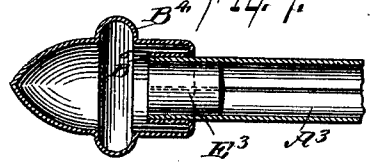


Fig. 7.



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FASTENING FOR FIXTURES.

SPECIFICATION forming part of Letters Patent No. 670,789, dated March 26, 1901.

Application filed March 24, 1900. Serial No. 10,030. (No model.)

To all whom it may concern:

Be it known that I, JOHN KRODER, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Fastening for Fixtures, of which the following is a full, clear, and exact description.

The invention relates to sash-curtain rods, curtain-poles, and similar fixtures; and its object is to provide a new and improved fastening for such fixtures whereby the head or tip is securely fastened in position on the rod in a very simple and inexpensive manner and without the use of solder, rivets, or similar devices.

The invention consists of novel features and parts and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a front elevation of the improvement as applied to an extension sash-curtain rod. Fig. 2 is an enlarged sectional plan view of the same on the line 2 2 in Fig. 1. Fig. 3 is a like view of a modified form of the improvement. Figs. 4 and 5 are perspective views of different kinds of expanding-plugs. Fig. 6 is a sectional side elevation of a modified form of the improvement, and Fig. 7 is a similar view of another modified form of the improvement.

As shown in Fig. 1, the improvement is applied to an extension-rod for sash-curtains, consisting of telescoping tubular split rods A A′, the heads or tips B removably engaging the arms C of attaching-brackets D. Each of the heads or tips B is formed with a socket or annular flange B′, fitting exteriorly upon the outer end of the corresponding tubular split rod A or A′, and in order to securely hold the flange or socket in position on the rod an expanding-plug E is driven through the rod from the other end until it is in the end engaging the flange or socket. As this expanding-plug E is of a diameter somewhat in excess of the internal diameter of the tube A or A′, it is evident that when the said plug is driven through the tube into a final position then the tube is expanded or opened up in the immediate neighborhood of the plug, and the opened-up end of the tube is thus moved in very firm engagement with the inner surface of the socket or flange B′ to securely hold the latter against removal from the end of the tube. (See Figs. 2 and 3.) The plug may be of wood, as shown in Figs. 2 and 4, or it may be in the form of a hollow metal plug E′, as indicated in Figs. 3 and 5.

It is expressly understood that the split tubular rod readily opens when the plug is driven through it to the end of the tube, as described, so that the head or tip is securely locked in place on the end of the tube by the expanding metal at the end of the tubular rod.

As illustrated in Fig. 6, the tip is made in two parts $B^2 B^3$, fastened together by a screw, the part B^3 being in the shape of a socket for receiving the end of a tube A^2, opened up at its end by a plug E^2.

In the arrangement shown in Fig. 7 the head B^4 is formed with an inwardly-extending flange B^5, adapted to be engaged by the corresponding end of the tubular split rod A^3, opened up at the end by the plug E^3.

For extension sash-curtain rods, as described, it is only necessary to have a head or tip on one outer end of an extension-tube; but in case the improvement is applied to a single rod having heads at both ends I proceed as follows: The first head is placed on one end of the rod, and then the first plug for this head is driven from the other open end by a suitable tool in position to secure the first head in place in the manner described, and then the second plug is inserted in the open end of the rod and pushed by a suitable tool, say, to the middle of the rod, and then the second head is placed in position on the end of the rod. The plug is now pushed back to the end of the rod carrying the second head by the use of a suitable tool passed sidewise into the tubular rod through the longitudinal slot or split thereof. Thus the two heads are securely held in position on the single rod by the use of two expanding-plugs. The arrangement described makes it possible to produce a very simple and effective fas-

tening for holding the heads or tips in place on split tubular rods without the use of solder, rivets, or similar devices.

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

1. As a new article of manufacture, a curtain-rod, comprising a tubular rod split longitudinally from end to end, heads or tips for the rod, said heads or tips being each constructed for engaging a bracket and provided with an annular flange projecting therefrom and forming a socket, the sockets each having a uniform internal diameter to snugly receive the ends of the rods, and plugs of greater diameter than the internal diameter of the rod and arranged in the ends of the rods within the sockets of the tips or heads, as set forth.

2. As a new article of manufacture, a curtain-rod, consisting of a tubular rod, split longitudinally from end to end, heads or tips for the rod, said heads or tips being each provided with an annular flange projecting from its inner end forming a socket external of the body of the head or tip, said sockets fitting snugly on the ends of the rod, and plugs of greater diameter than the internal diameter of the rod and in the ends of the rods within the socket, as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN KRODER.

Witnesses:

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