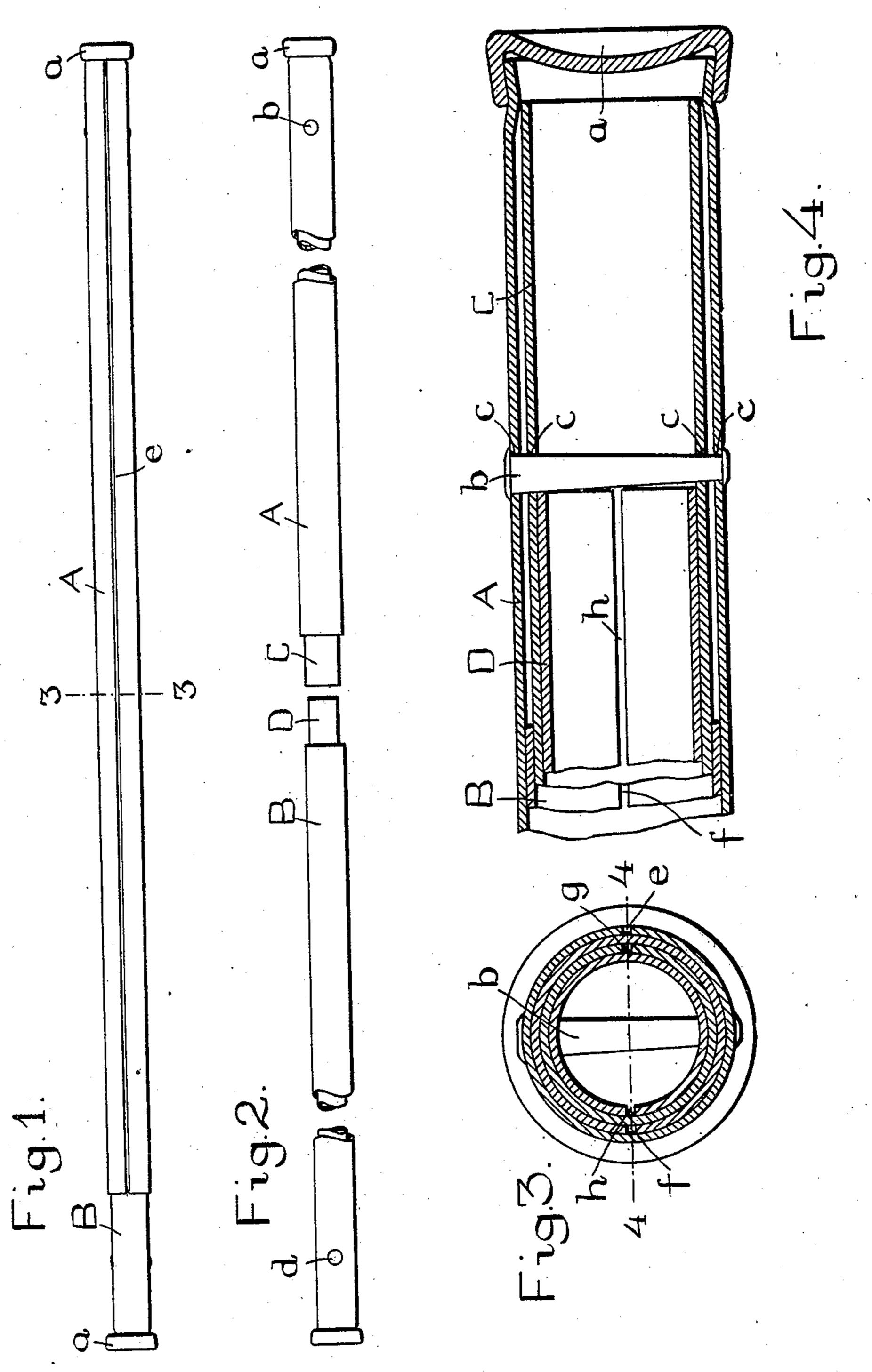
## E. W. VAUGHAN. CURTAIN ROD. APPLICATION FILED DEC. 15, 1905.



Witnesses

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## UNITED STATES PATENT OFFICE.

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## CURTAIN-ROD.

No. 828,586.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Edwin W. Vaughan, a citizen of the United States, residing at Worcester, in the county of Worcester and Commonwealth of Massachusetts, have invented a new and useful Improvement in Curtain-Rods, of which the following is a specification, accompanied by drawings, forming a part of the same, in which—

Figure 1 is a side view of my improved curtain-rod. Fig. 2 is a plan view of the same with the two telescopic members separated. Fig. 3 is a cross-section on an enlarged scale; and Fig. 4 is a longitudinal section of one end of my improved rod on line 4 4, Fig. 3, on the

same scale.

Similar reference-letters refer to similar

parts in the different views.

My invention relates to an improvement in curtain-rods by means of which I obtain an extensible curtain-rod which will fit any desired opening, having a maximum of strength with a minimum of weight and with a greatly-increased ease and reduced cost of manufacture; and it consists in the construction and arrangement of parts hereinafter described, and pointed out in the annexed claims.

My improved curtain-rod may be made of very thin sheet metal rolled into tubes of the proper sizes, and by my improvements I obviate the necessity of soldering or otherwise fastening the opposing edges of the rolled

sheet metal.

Referring to the accompanying drawings, my improved curtain-rod is constructed of a number of telescopic tubes constructed of thin sheet-brass or other suitable metal, and A denotes the outer or largest tube. I pro-40 vide a tube B, fitted to telescope within the tube A. The outer ends of the tubes A and B are fitted with caps a. Inside the hollow tube A is a smaller tube C, slightly longer than the tube A, which is attached to the 45 tube A in the present instance by means of a tapering pin b, passing through holes c in the tubes A and C. The tube C is fitted to telescope within the tube B when the curtainrod is assembled. Attached in a similar way 5° to the tube B by a tapering pin d is a hollow tube D, slightly longer than the tube B, which is fitted to telescope within the tube C when the curtain-rod is assembled.

By making the inner tubes slightly longer than the outer tubes of each pair I facilitate the telescoping of the two pairs together, as

the inner tubes can be entered one within the other in advance of the outer tubes. The tubes A and C are so arranged that the joints formed by their opposing edges are approxi-60 mately opposite to each other, as shown at e and f, Fig. 2, and the tubes B and D are so arranged that the longitudinal openings in those rods are also opposite, as shown at g and h, Fig. 2. When the rod is assembled, care is 65 taken also to arrange the telescoping of the two pairs of rods, so that in no case shall one of these joints correspond to that of the tube next to it, thereby increasing the strength of the curtain-rod.

In assembling the curtain-rod the pair of tubes A and C and the pair of tubes B and D are fitted together with the tube B inside the tube A, the tube C inside the tube B, and the tube D inside the tube C. When the tubes 75 are pushed together, giving the shortest length of curtain-rod, the tube B abuts against the pin b, as shown in Fig. 4, and the tube A against the pin d. By withdrawing the telescoping tubes the curtain-rod may be 80 extended as desired. I therefore provide practically an entire curtain-rod composed of four telescopic tubes, thereby combining extreme lightness with extreme rigidity, and by the arrangement of offsetting the joints of 85 the several tubes, as above described, I am enabled to construct the tubes in the most convenient and cheapest manner—that is, rolling them from sheet metal without fastening the joints and without weakening the 90 curtain-rod in any appreciable degree.

I am aware that curtain-rods with two telescoping members have been constructed before, and I do not claim, broadly, curtain-rods formed with telescoping members.

What I claim as my invention, and desire

to secure by Letters Patent, is—

1. A curtain-rod composed of two telescoping members, with each of said members formed of two tubes, and with said tubes so graded in diameter that the outer tube of one member is fitted to telescope between the two tubes of the other member.

2. A curtain-rod composed of two telescopic members, each of said members comprising 105 an outer and an inner tube graded in diameter to telescope one within the other, and having the inner tubes of each member longer than the outer tube.

3. A curtain-rod composed of two tubular 110 telescoping members, each of said members comprising two tubes formed of sheet metal

and rolled into tubular shape, so graded in diameter that the outer tube of one member is fitted to telescope between the two tubes of the other member.

5 4. A curtain-rod composed of telescoping members formed of sheet metal rolled into tubular shape having longitudinal seams or joints, each of said members formed of two tubes so graded in diameter that the outer tube of one member is fitted to telescope between the two tubes of the other member, said tubes in each member being fastened together at their outer ends with their joints offset.

5. A curtain-rod composed of two telescopic members, each of said members comprising two tubes attached at their outer ends and having offset longitudinal seams or joints, said tubes being so graded in diameter that the outer tube of one member is fitted to telescope between the outer and inner tube of the other member, the inner tubes of each of said members being longer than the outer tubes.

EDWIN W. VAUGHAN.

Witnesses:

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