

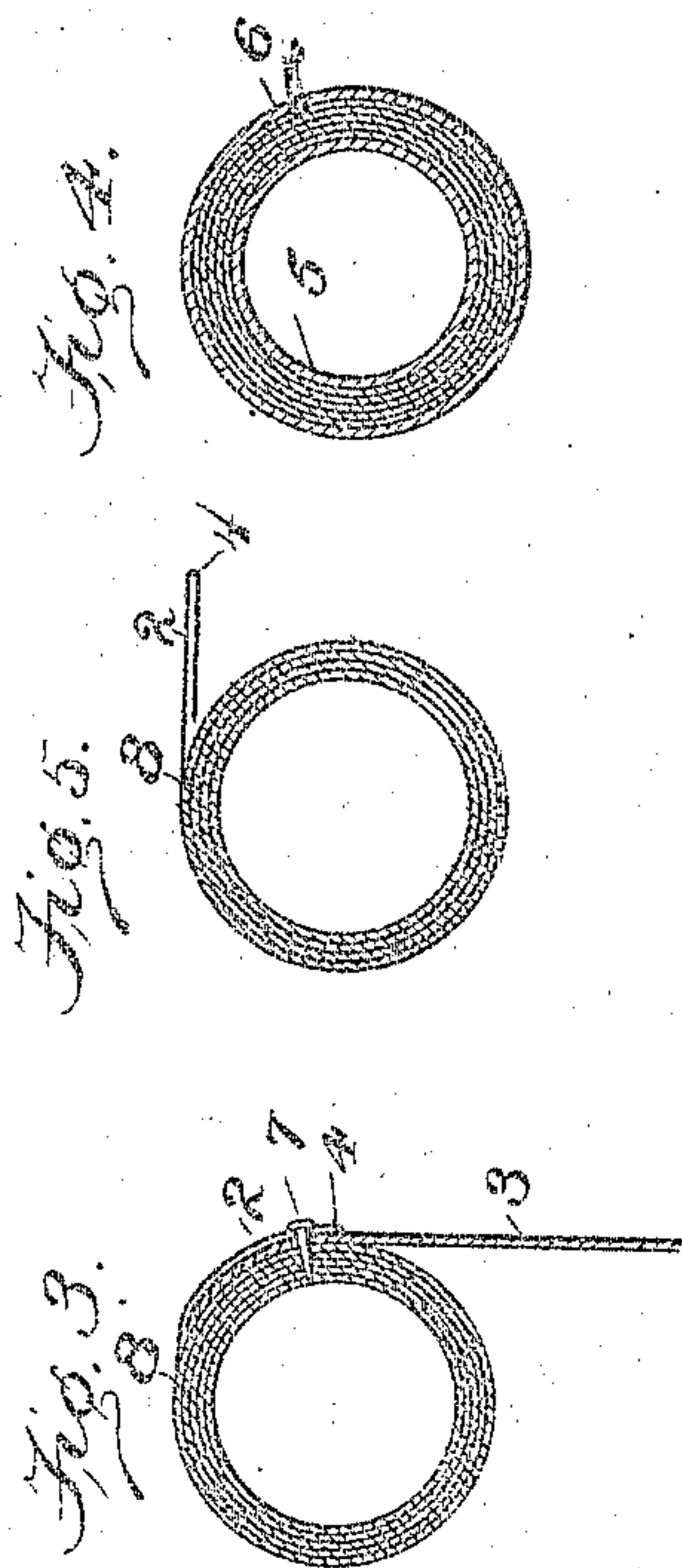
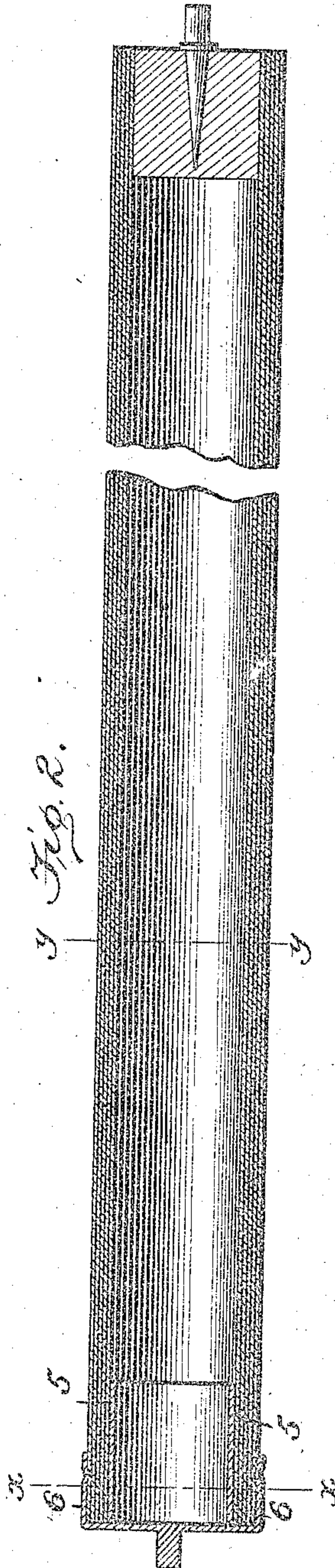
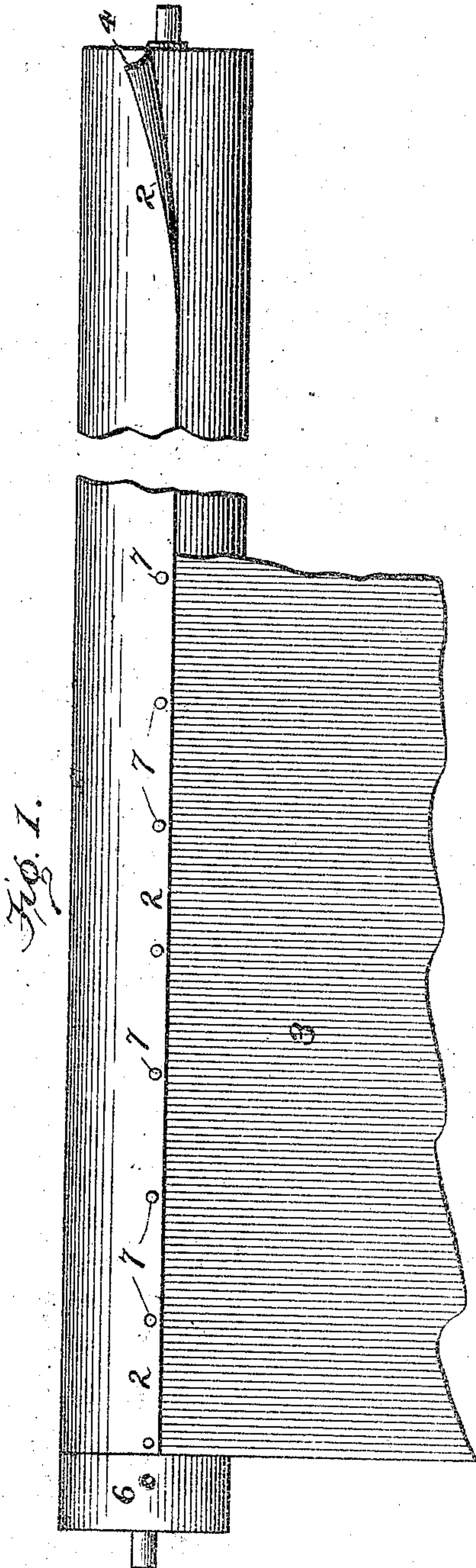
No. 635,070.

Patented Oct. 17, 1899.

S. J. EDMISTON.  
SHADE ROLLER.

(Application filed Dec. 22, 1898.)

(No Model.)



WITNESSES:

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# UNITED STATES PATENT OFFICE.

SAMUEL J. EDMISTON, OF GREENWICH, NEW YORK.

## SHADE-ROLLER.

SPECIFICATION forming part of Letters Patent No. 635,070, dated October 17, 1899.

Application filed December 22, 1898. Serial No. 700,037. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL J. EDMISTON, a citizen of the United States, residing at Greenwich, in the county of Washington and State of New York, have invented certain new and useful Improvements in Shade-Rollers, of which the following is a specification.

My improvement is directed to the production of a shade-roller for windows in which the convenient and cheap way of tacking the shade to the roller is made better and durable and the tacked edge of the shade protected from wear and tear and kept smooth. In the present way the tacked edge of the shade breaks and tears out at the tacks and becomes turned up at the corners and causes the shade to roll out of true set and to be creased and bad to handle. The roller which I have provided is constructed of paper in layers one upon the other, making a strong and rigid roller, in which the outer layer terminates at the circumference in a free or loose flange or lip the full length of the roller as the means of fastening or attaching the shade to the body of the roller and at the same time forming a cover for the tacked edge of the shade and making a very secure and smooth binding for it.

My improved paper shade-roller is illustrated in the accompanying drawings, in which—

Figure 1 shows the roller and a piece of the shade as it is applied and fastened to the circumferential paper lip or flange. Fig. 2 is a longitudinal section of the tubular paper roller, showing the reinforcing for its ferruled bearing end. Fig. 3 is a cross-section of the same, showing the shade as it is secured to the roller by the circumferential free paper lip. Fig. 4 is a cross-section of the reinforced bearing end, and Fig. 5 shows a cross-section of the roller and its reinforced paper lip integral with the circumference of the roller.

The roller is made of layers of strong tough paper solidly united, so that the outer layer terminates at the circumference in an uncemented or free lip, flap, or flange 2 of about an inch wide and extending the full length of the roller. This lip or flange as a part of the outer paper layer stands freely from the part which is cemented to the body of the roller at 8, and it has all the strength of the

paper, and this may be increased or reinforced by folding or doubling the lip or flange upon itself, as at 4, and cementing the lap to give it double thickness and make it a strong binder for receiving the tacks 7, which fasten the binder to the end of the shade 3 and both to the body of the roller, as shown by the lip part in Figs. 3 and 5.

The roller may be constructed of a number of separate paper tubes solidly compacted or of a continuous layer of paper; but, however made, the outer layer must terminate in the free binding lip or flange 2 at the circumference of the roller. As the free binding lip or flange lies when fastened concentric with the roller the rolling and unrolling of the shade is upon the smooth surface, and the fastening-lip is not subjected to any creasing wear or any strain tending to split or to break the lip or flange at its cemented connection 8 with the body of the roller. I prefer to fasten the edge of the shade to the under side of the binding-lip because the lip is thereby made to form a cover for the fastened edge of the shade and prevents it from curling up or tearing out. This cover protection is the important feature of my improvement, and the covering-lip being integral with the material of the roller is thereby conveniently and cheaply formed in making the roller.

As an integral part of the circumference of the roller the lip is both a shield and a fastening for the end of the shade, and it may be secured to the roller and to the shade by any suitable means.

The roller may be fitted with end pivot-bearings in any suitable manner and provided with the usual interior spring for rolling the shade. As shown, one end of the roller is closed by a plug which has the bearing-pin, while the other end of the roller has the bearing-pin on a ferrule-cap 6, which is by compression fixed on the outer surface of the roller.

A reinforcing-tube 5 is driven into the end of the roller to give it firmness as a rigid seat for and to resist the compression in applying the ferrule-cap, and this reinforcing-tube may be made of metal or of paper.

I claim as my improvement—

1. A paper roller for window-shades made of a series of layers cemented together, its



outer layer terminating on the surface in a free circumferential longitudinal lip, flange, or flap as a means for mounting the shade.

2. A paper roller for window-shades having a cemented layer terminating in a free longitudinal lip or flange on the surface, combined with the shade fastened to said lip or flange.

3. A laminated paper roller for window-shades constructed of cemented layers the outer layer terminating on the surface in a longitudinal lip or flange circumferential with the roller and lying concentric therewith.

4. A tubular paper roller for window-shades made of a series of layers cemented together the outer paper layer terminating in a longitudinal lip or flange, and having its end reinforced for the purposes stated.

5. A tubular paper roller for window-shades having means for fastening the shade in combination with a reinforcing-tube secured within the end of the roller and a pivot-mount-

ing band secured on the end of the roller outside of the reinforcing-tube for the purpose stated.

6. A laminated paper roller for window-shades having its outer layer terminating in a free longitudinal lip or flap folded double and cemented at the fold as a means for mounting the shade.

7. A laminated paper roller for window-shades, having its outer layer terminating in a free longitudinal tangential lip or flange fixed at the surface, in combination with the shade fastened to the body of the roller by means of said tangential lip or flange.

In testimony whereof I have hereunto signed this specification, this 20th day of December, 1898, at Washington, District of Columbia.

SAMUEL J. EDMISTON.

Witnesses:

GUY H. JOHNSON,

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