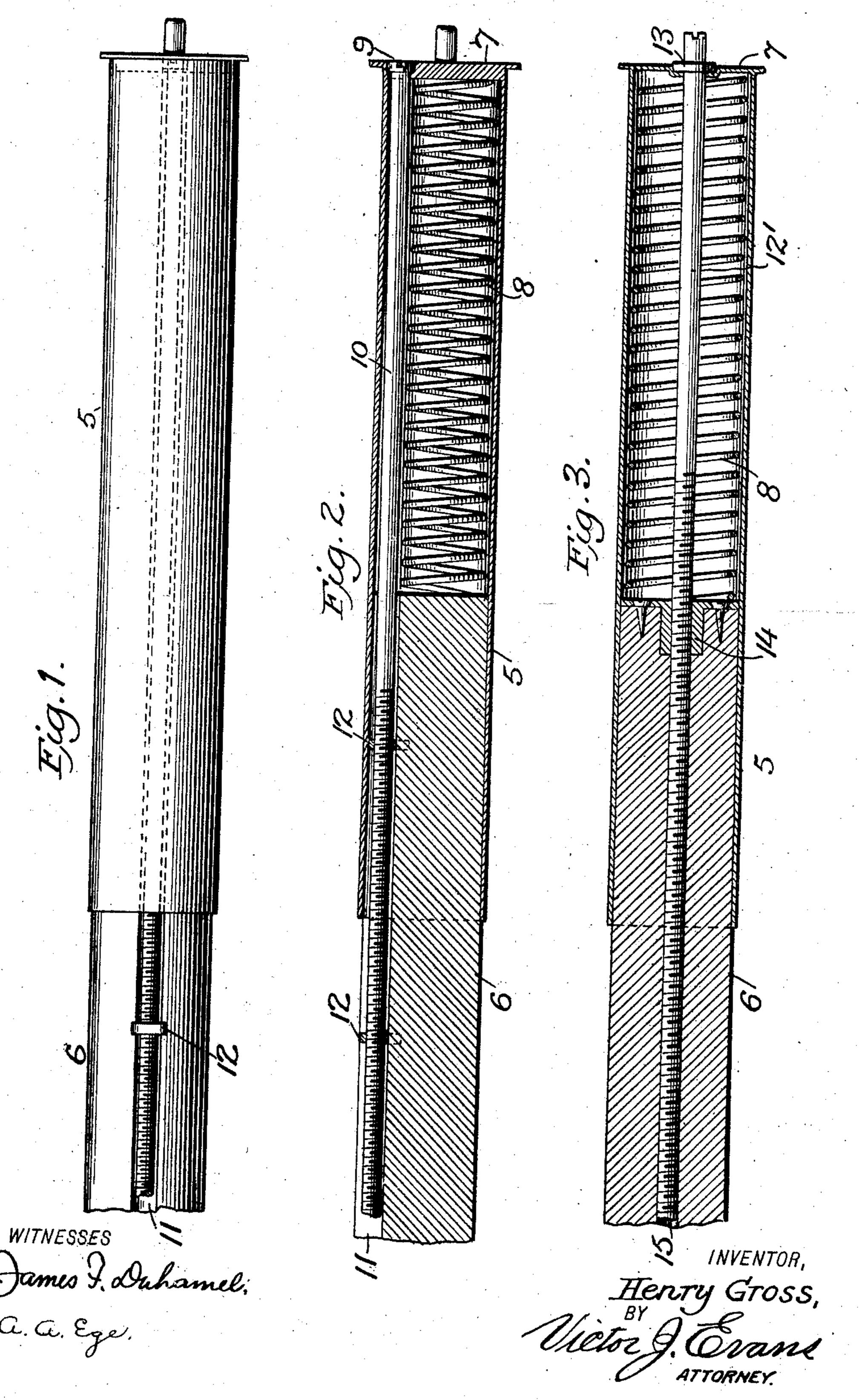
H. GROSS.

CURTAIN ROLLER,

APPLICATION FILED JUNE 28, 1906.



## UNITED STATES PATENT OFFICE.

HENRY GROSS, OF NEW YORK, N. Y.

## CURTAIN-ROLLER.

No. 850,153.

Specification of Letters Patent.

Patented April 16, 1907.

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To all whom it may concern:

Be it known that I, Henry Gross, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Curtain-Rollers, of which

the following is a specification.

My invention relates to curtain-rollers, and more particularly to that class which is adapted to be adjusted so as to fit window-frames of different widths or to provide for any warping of said frame or disarrangement of the brackets which would otherwise unfit the roller for service. These and other objects of my invention are more fully described in the following specification, illustrated in the drawings, and set forth in the appended claims.

In the drawings accompanying this application and forming a part thereon like reference characters are used to designate the

same parts in the several figures.

Figure 1 represents one end of the curtainroller with my invention applied thereto.
Fig. 2 is a longitudinal sectional view of the
seam. Fig. 3 is a longitudinal sectional view
of the roller, showing a modified form of my
invention.

The present invention may be readily ap-30 plied to the ordinary curtain-roller at the end opposite to the automatic spring-operating means and consists of a tube 5, whose interior is about equal in diameter to that of the roller 6 and is adapted to slide thereon. 35 Interposed between the head 7 of the tube and the end of the roller 6 is a coiled spring 8, which is under pressure and tends to force the tube outward; but this outward movement of the tube is limited by the head 9 of 40 the screw 10, which after passing through the empty end of the tube is fitted within a groove 11, cut on the outer surface of the roller 6, and engages the nuts 12, which are carried by the roller 6 and fit across the slot 45 11. In the drawings I have shown two of these nuts 12; but the number may be varied at pleasure, and it will be seen that as screw 10 is turned it works its way in and out the nuts, according to the direction that 50 it is rotated, so as to reduce the distances between the end of the roller and the tube 5, thereby altering the length of the roller, so

that it may be readily fitted within its

brackets.

The pressure of the spring 8 may always 55 be depended upon to hold the head of the tube 7 against the head of the screw 10, so that the regulation of length is positive and there is no danger of the tube and roller having their relations altered except by means 60 of the screw 10.

In the modification shown in Fig. 3 the rotating pin or stud which is provided for the roller is utilized as the adjusting device, and the said pin 12' is slotted at its outer end and 65 has a collar 13, which fits against the head 7 of the tube 5, while the inner end of the pin is threaded and passes through a thimble 14, secured to the outer end of the roller, while the inner end of the pin or screw passes into a 7° socket 15 in the roller. The usual tensionspring 8 is also provided in this instance and forces the tube outward against the collar on the pin, so that the length of the roller is varied when the pin or screw is rotated and 75 works through the thimble 14. The outer end of the pin is slotted for the accomodation of the screw-driver; but both this pin and the screw 10 may have square or hexagonal heads to be turned by means of a wrench. 80

It is obvious that various other modifications may be resorted to in the construction of my improved roller without departing from the essential features above described.

Having described my invention, what I 85 claim as new, and desire to secure by Letters Patent, is—

1. In a curtain-roller the combination with a roller, of a tube carried by one end of the said roller, a spring interposed between the 90 roller and the end of the tube, and a screw passing through the head of the extension and into the roller and adapted to move the extension on the end of the roller and against the pressure of the spring.

2. In a curtain-roller, the combination with a roller, of a tube carried by one end of the roller, a spring interposed between the end of the roller and the head of the tube, a threaded member carried by the roller, and a 100 screw passing through the head of the tube and engaging the threaded member.

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

HENRY GROSS.

Witnesses:

JOHN GUSTAFSEN, CARL GUSTAF KÄLTMAN.