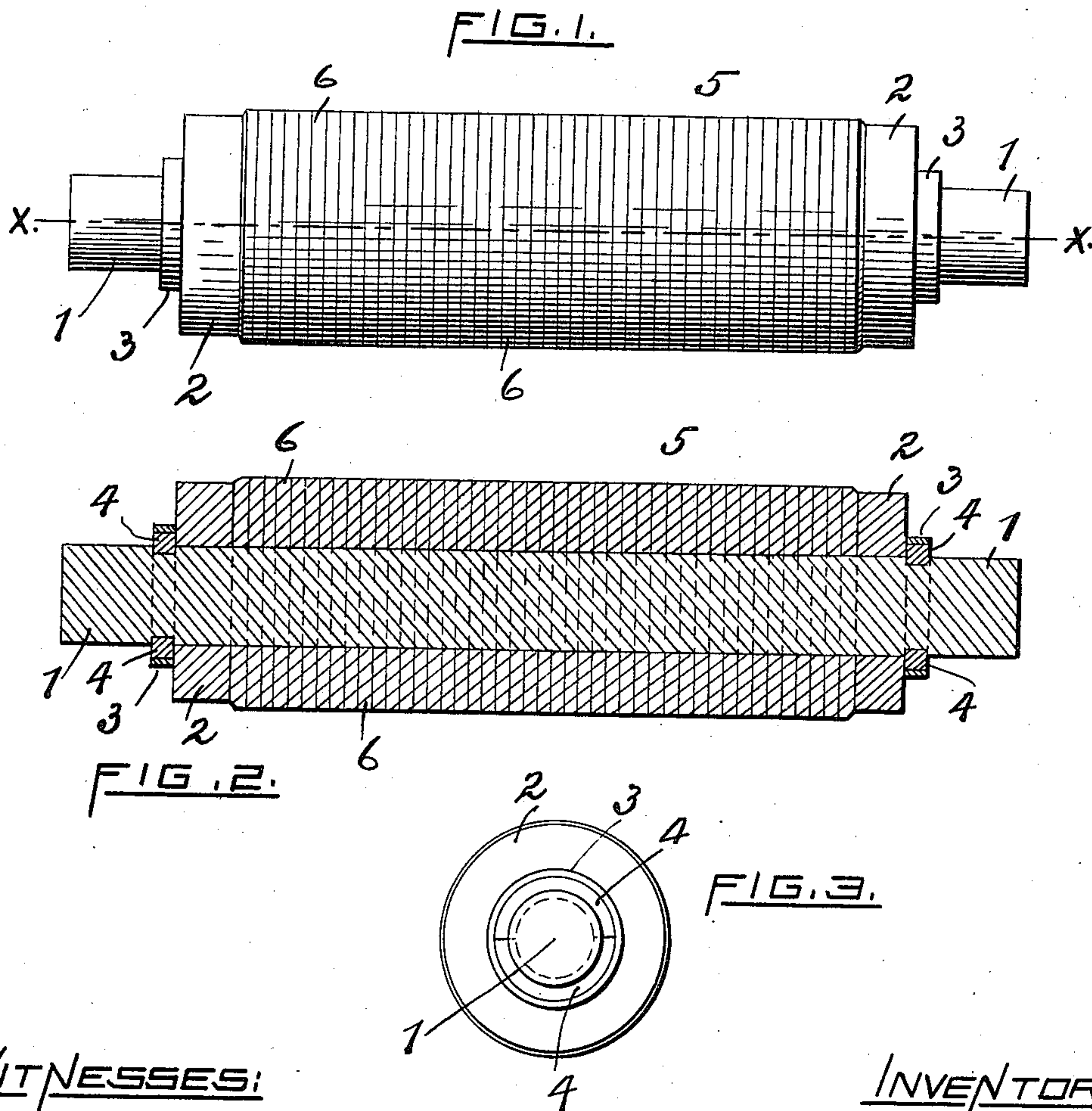


W. S. GRANGER.
CALENDER ROLL.
APPLICATION FILED NOV. 22, 1909.

975,686.

Patented Nov. 15, 1910.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM S. GRANGER, OF PROVIDENCE, RHODE ISLAND.

CALENDER-ROLL.

975,686.

Specification of Letters Patent.

Patented Nov. 15, 1910.

Application filed November 22, 1909. Serial No. 529,184.

To all whom it may concern:

Be it known that I, WILLIAM S. GRANGER, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Calender-Rolls, of which the following is a specification.

My invention relates to calender-rolls and has for its objects the ends commonly sought in structures of this kind, but more particularly to impart to the body thereof a capacity for finishing silks, papers, and the finer grades of textiles more perfectly and successfully than has heretofore been possible.

To these ends my invention consists in the novel composition of the body of the roll as hereinafter set forth, and made the subject matter of the appended claim.

In the accompanying drawings which form a part of this specification Figure 1 is a side elevation of a complete calender-roll embodying my invention, Fig. 2, a central longitudinal section of the same on line *x x* of Fig. 1, and Fig. 3, an end elevation of the roll.

Like characters of reference indicate like parts throughout the views.

In the drawings 1 is the mandrel, 2 the end plates, 3 the collars, and 4 the split

clamping rings, of the usual or any preferred construction.

The body or operating portion 5 of the roll is composed of a series of annuli, rings, or disks 6 contiguously arranged upon the mandrel in the usual well known manner. The disks, however, are formed of compressed noils of silk, by virtue of which the desired improved results are attained.

By the employment of silk noils I obtain a roll that maintains a splendid surface, does not dent easily and should it receive small indentations from any cause, they readily disappear when the roll is moistened and run for a short time. A roll thus constructed embodies the requisite amount of elasticity and compressibility to produce the most satisfactory results.

What I claim is,—

In a calender-roll, the combination with the mandrel, of disks upon the mandrel, each disk comprising compressed silk noils, and means for retaining the disks in contact with each other.

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

WILLIAM S. GRANGER.

Witnesses:

HORATIO E. BELLows,
WILLIAM E. SEFFT.