

J. Moulton,

Covering Elastic Rollers

No. 97,428.

Patented Nov. 30. 1869.

Fig. 1.

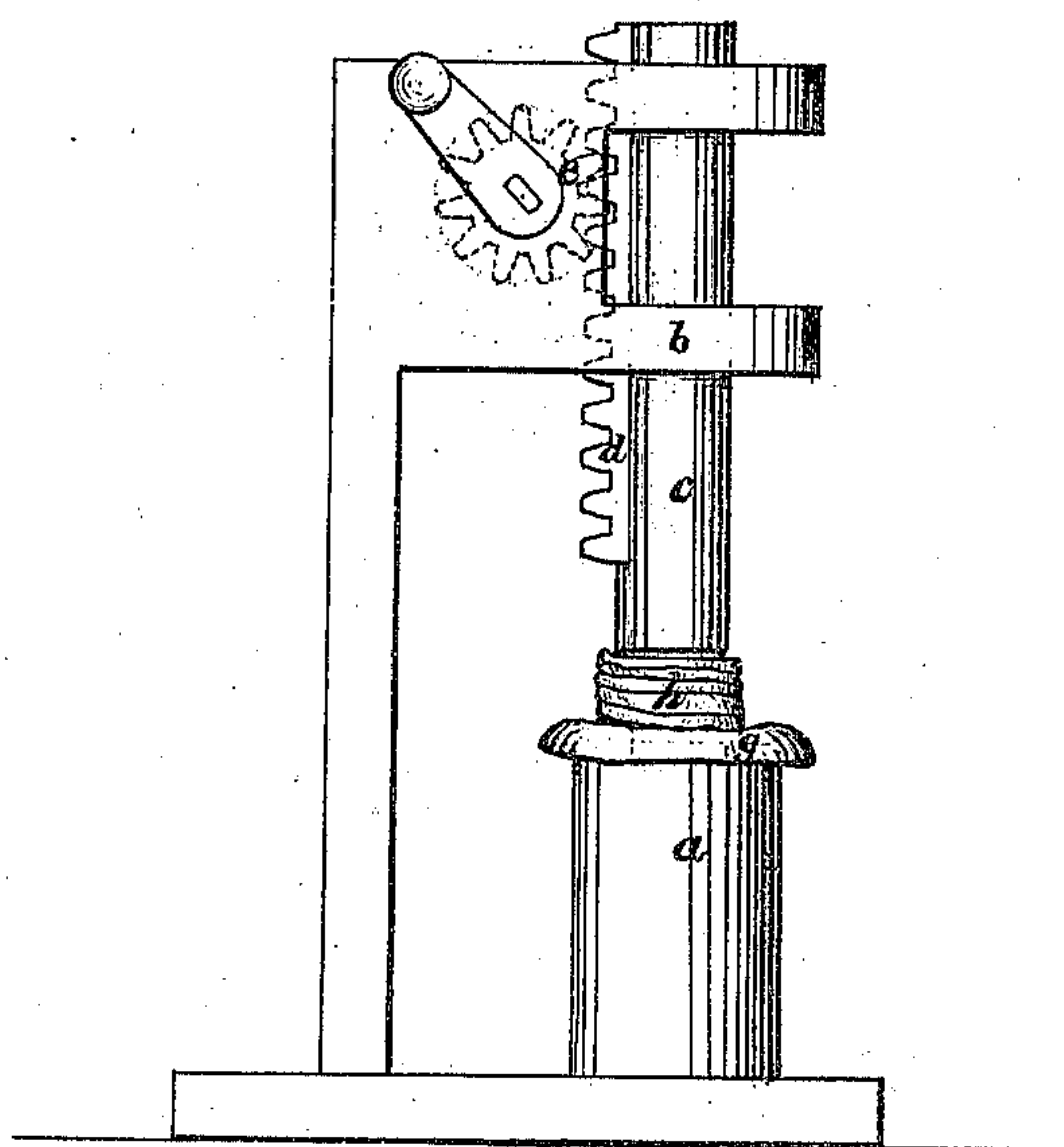
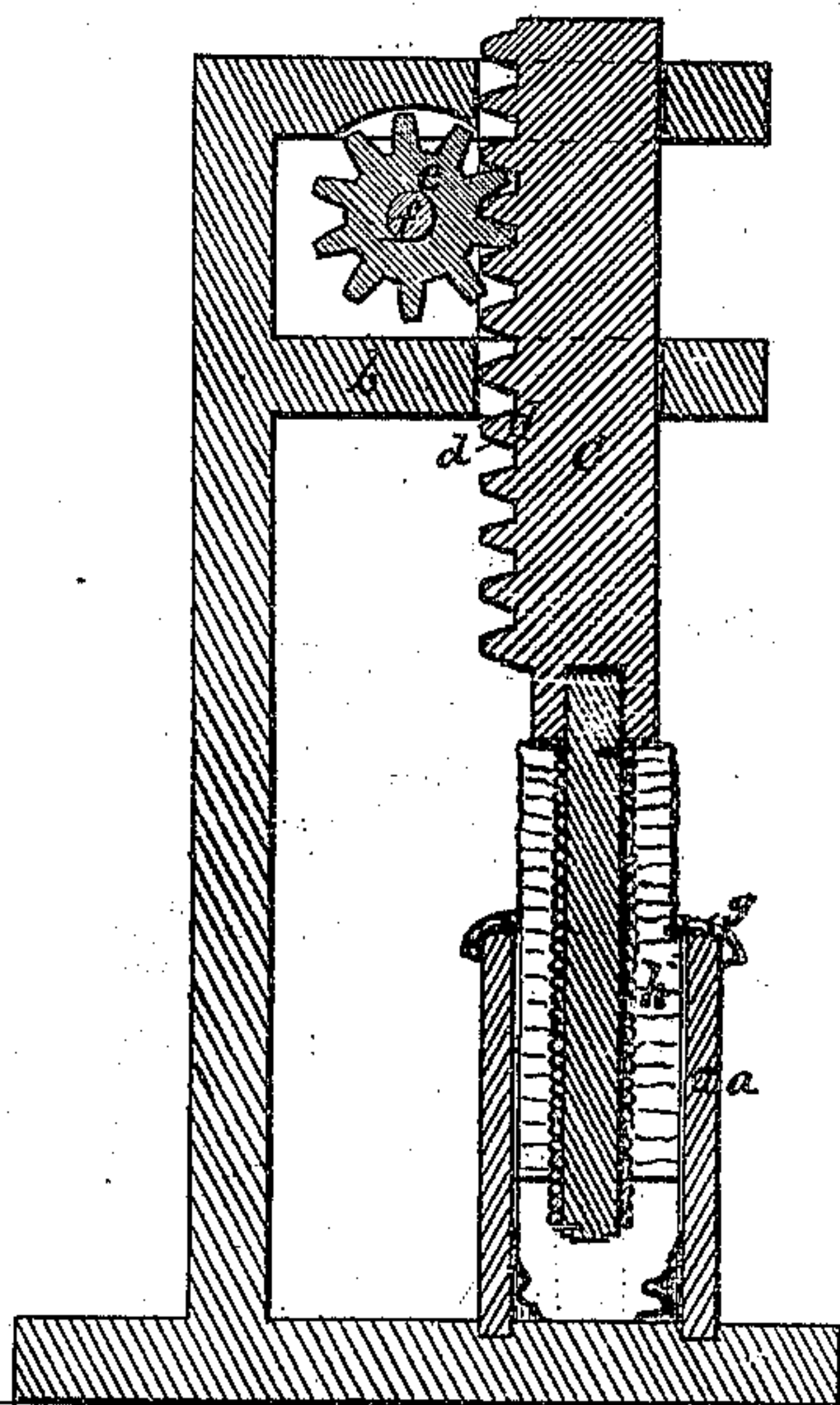


Fig. 2.



Witnesses

Geo. A. Loring
Edmund Griffith

Inventor.
Joel Moulton

by his Attorney.
Frederick Curtis.

United States Patent Office.

JOEL MOULTON, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 97,428, dated November 30, 1869.

IMPROVED MODE OF COVERING ELASTIC ROLLS.

The Schedule referred to in these Letters Patent and making part of the same.

To all to whom these presents shall come:

Be it known that I, JOEL MOULTON, of Boston, in the county of Suffolk, and Commonwealth of Massachusetts, have made an invention of a new and useful Process or Mode of Covering Elastic Rolls; and do hereby declare the following to be a full, clear, and exact description thereof, due reference being had to the accompanying drawings, making part of this specification, and in which—

Figure 1 is an elevation, and

Figure 2, a vertical section of a machine in which the process is effected.

The invention herein described relates to means for enveloping an elastic roll in its outer case or jacket, which is applied to it for the purpose of imparting to it a finished appearance, and a smooth and perfect surface, a particular form of elastic roll to which my invention has special and local pertinency being those intended for clothes-wringers, and which have heretofore been covered by hand, at considerable expenditure of time and labor.

In carrying out the ideas of my invention, I employ first an upright hollow cylinder or receiver, shown at *a* in the drawings, for reception of the roll and its covering, and over this cylinder I dispose, within a suitable frame, *b*, a reciprocating perpendicular plunger, *c*, actuated by a rack, *d*, and pinion *e*, the former being affixed to the inner side of the plunger, and the latter mounted upon a shaft, *f*, suitably supported in boxes or bearings provided for it at the upper part of the frame *b*.

Rotation of the pinion *e* in either direction will of course produce corresponding vertical movements of the plunger *c* toward or away from the cylinder *a*.

In pursuance of my mode of covering the roll, I insert within the cylinder *a* the thin elastic jacket or tube *g*, destined to give the finished surface to the roll, a small portion of such tube being left protruding from the top of the cylinder, by laying hold of which the bulk of the tube is prevented from becoming doubled or wrinkled within said cylinder, and the act of inserting the lower end of the roll therein rendered more certain and expeditious.

The tube having been inserted within the receiver

as explained, the roll shown at *h* in the drawings is to be placed perpendicularly over the mouth of the cylinder, and its lower end inserted within the latter.

The outer circumference or surface of the roll, as well as the inside of the jacket, is at this time, if not previously done, to be smeared with a suitable cement, and the pinion-shaft rotated in the right direction, which effects a descent of the plunger, its lower end being preferably recessed to receive the upper end of the roll-shaft, in order to insure a perpendicular position of the latter.

The descent of the plunger effects a corresponding descent of the roll within the tube *g*, the cement acting as a lubricator, to facilitate the entrance of the roll.

The plunger having been lowered to such an extent as to drive the roll into its tube to the distance required, the pinion-shaft is rotated in a reverse direction, and the plunger removed from contact with the roll-shaft, and elevated to its starting-point, the roll enveloped in its thin tube or dress, which clings tightly to it, being next removed with the receiver *a*, and properly vulcanized.

By the mode above described, I am enabled to accomplish the covering of an elastic roll in much less time, and with much less labor, than the same object can be effected by means now generally adopted, the saving in a large establishment being a matter of no small importance.

Claim.

I claim as my invention, and desire to secure by Letters Patent of the United States—

The mode of covering elastic rolls hereinbefore explained, that is to say, in first depositing the thin tubular covering or casing within the receiver *a*, next placing over it the roll, and smearing one or both with cement, and then depressing the roll within the casing by means of the plunger *c*, the whole being arranged and operating in manner as hereinbefore explained.

JOEL MOULTON.

Witnesses:

FRED. CURTIS,
E. GRIFFITH.