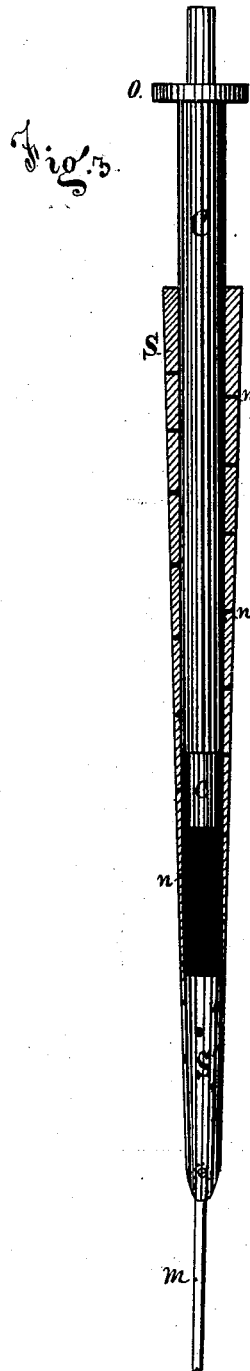
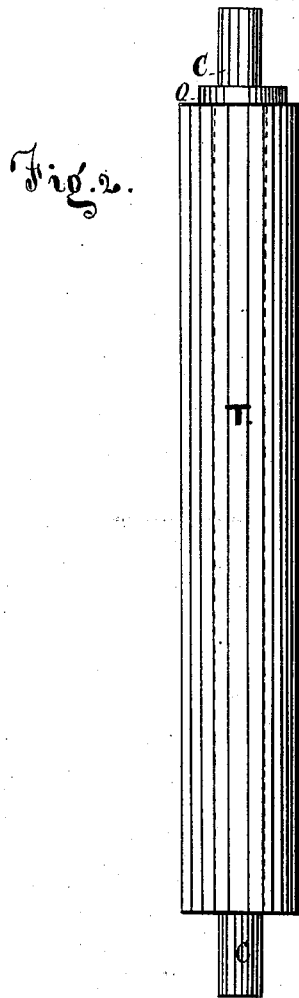
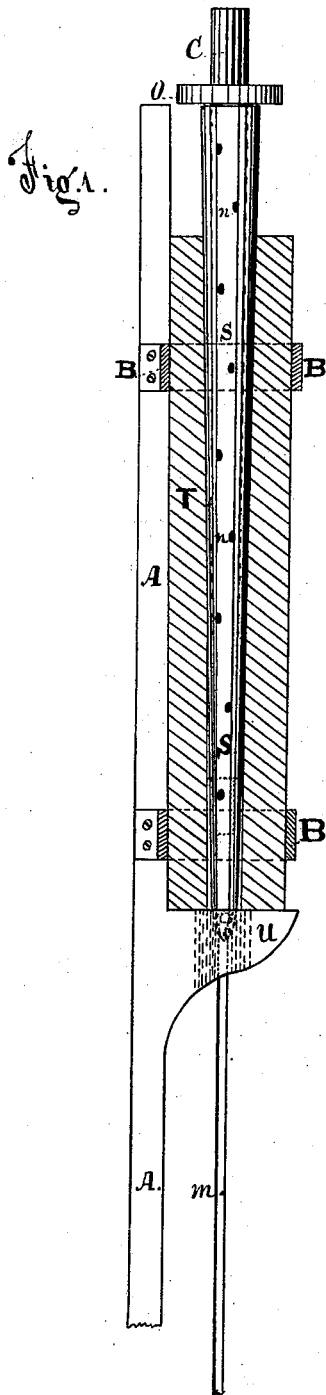


H. N. STRONG.
 Method of Uniting the Rubber-Rolls of Wringers.

No. 209,781.

Patented Nov. 12, 1878.



Witnesses,
 { G. P. Bestman
 John Ritchie, M. L. Bean }

Inventor:
 Henry N. Strong
 By James P. McLean
 Atty.

UNITED STATES PATENT OFFICE.

HENRY N. STRONG, OF CORNWALL, NEW YORK.

IMPROVEMENT IN METHODS OF UNITING THE RUBBER ROLLS OF WRINGERS.

Specification forming part of Letters Patent No. **209,781**, dated November 12, 1878; application filed March 6, 1878.

To all whom it may concern:

Be it known that I, HENRY N. STRONG, of Cornwall, in the county of Orange and State of New York, have invented a certain novel and useful Improvement in the Method of Covering Spindles or Shafting for Clothes-Wringers, &c., with India-Rubber Tubing; and I hereby declare that I have herein set forth the manner in which the same is to be accomplished.

Referring to the drawings, Figure 1 is a vertical sectional view of a rubber tube or roll, T, in the state of being forced upon the conical perforated sheath S, which is filled with cement, in a liquid state, preparatory to receiving the metallic shaft or spindle C, which is forced down into the sheath S in such a manner that a portion of the cement will escape out through the holes *n n*, so as to lubricate the outer surface of the conical tube or sheath, so that the same may be drawn with greater ease through the tubing T, thus leaving the spindle or shaft C, with its cemented coating, in position in the flexible tubing ready for use. A is the supporting-bracket, with a projection, *u*, to support the india-rubber tube or roll T. Said projection is perforated through the center thereof, so as to leave an opening large enough to allow the sheath S to pass through the said hole or opening when drawn out by means of the rod *m*, operated by any suitable power, or otherwise. B B are metallic bands, employed to firmly hold the tube T in a suitable position against the face of the bracket or frame A, to which the said bands B are firmly secured, and they are of sufficient capacity to allow the tubing T to be inserted into and removed from the same after receiving the shafting C, as above set forth.

Fig. 2 is a representation of a flexible roller, T, mounted upon the metallic bearing or shafting C, ready for use.

Fig. 3 is a vertical sectional drawing of the perforated conical sheath or tube S, to be made of any suitable material to receive the shaft C into its cement-chamber, so that the said shaft becomes perfectly coated with the adhesive gum while the sheath is being drawn through the rubber tube until the upper end of the said tube or jacket T, Fig. 1, strikes against the projecting flange or rim O on the shaft, when the sheath T is drawn out, ready for another tube, leaving the rubber roll on the metallic shafting C in the position shown at Fig. 2.

I disclaim W. Cowles's Patent No. 201,096, dated March 12, 1878.

The novelty of my invention consists in the method of securing the rubber jacket or flexible roller to the metallic shafting of a clothes-wringer in the manner as above set forth.

What I claim as novel and useful, and wish to protect by Letters Patent of the United States, is—

The method, as described, of uniting the rubber rolls of the wringers to their metallic shafts by forcing the said rolls upon a conical hollow perforated sheath, filling said sheath with liquid cement, driving the metal shaft into the open end of the sheath, thereby causing the cement to exude from the perforations or openings upon the rubber, and finally withdrawing the sheath, thus allowing the rubber to contract upon the shaft, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

HENRY N. STRONG.

Witnesses:

JOHN RITCHIE McLEAN,
ROBERT A. MORRISON.