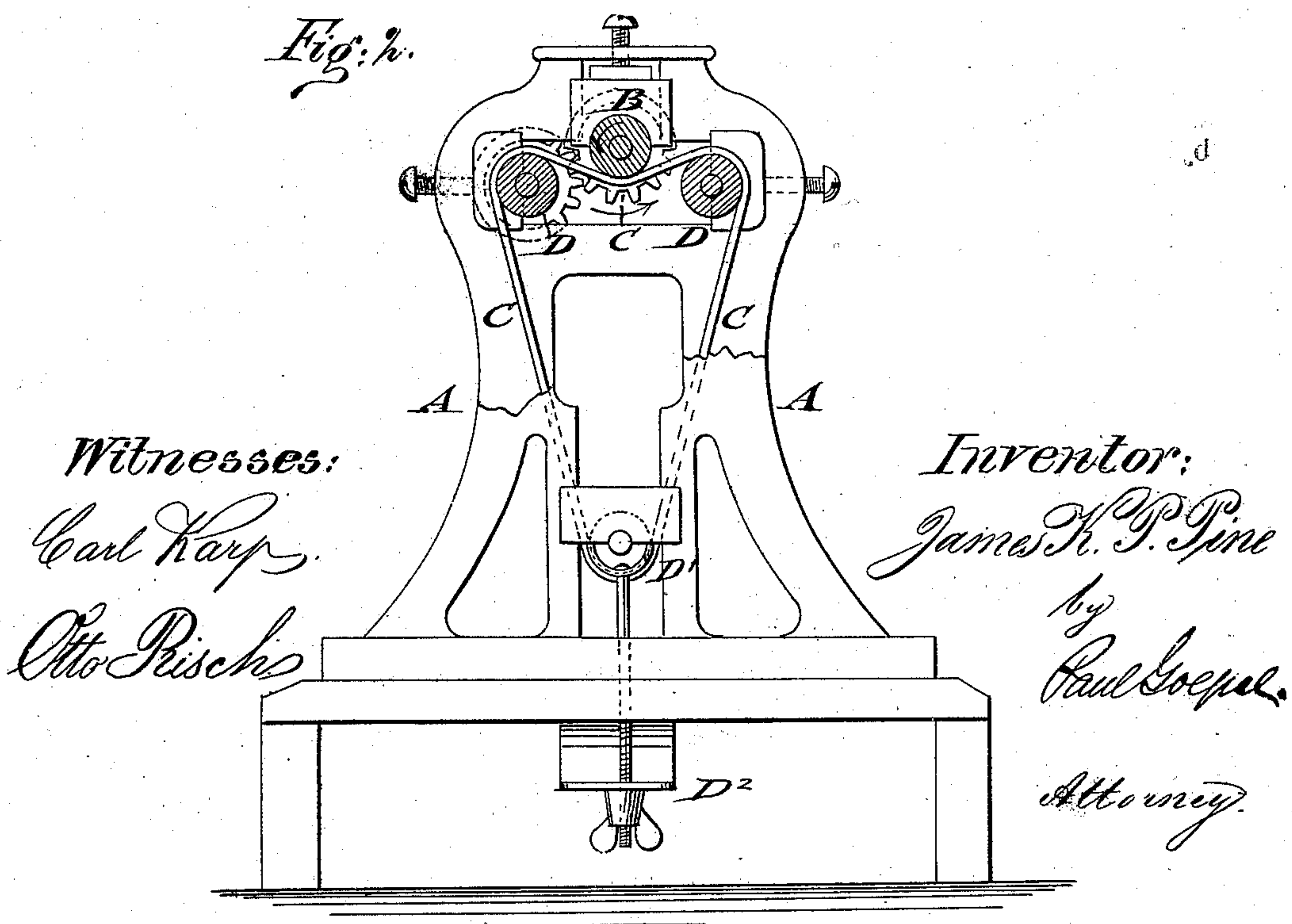
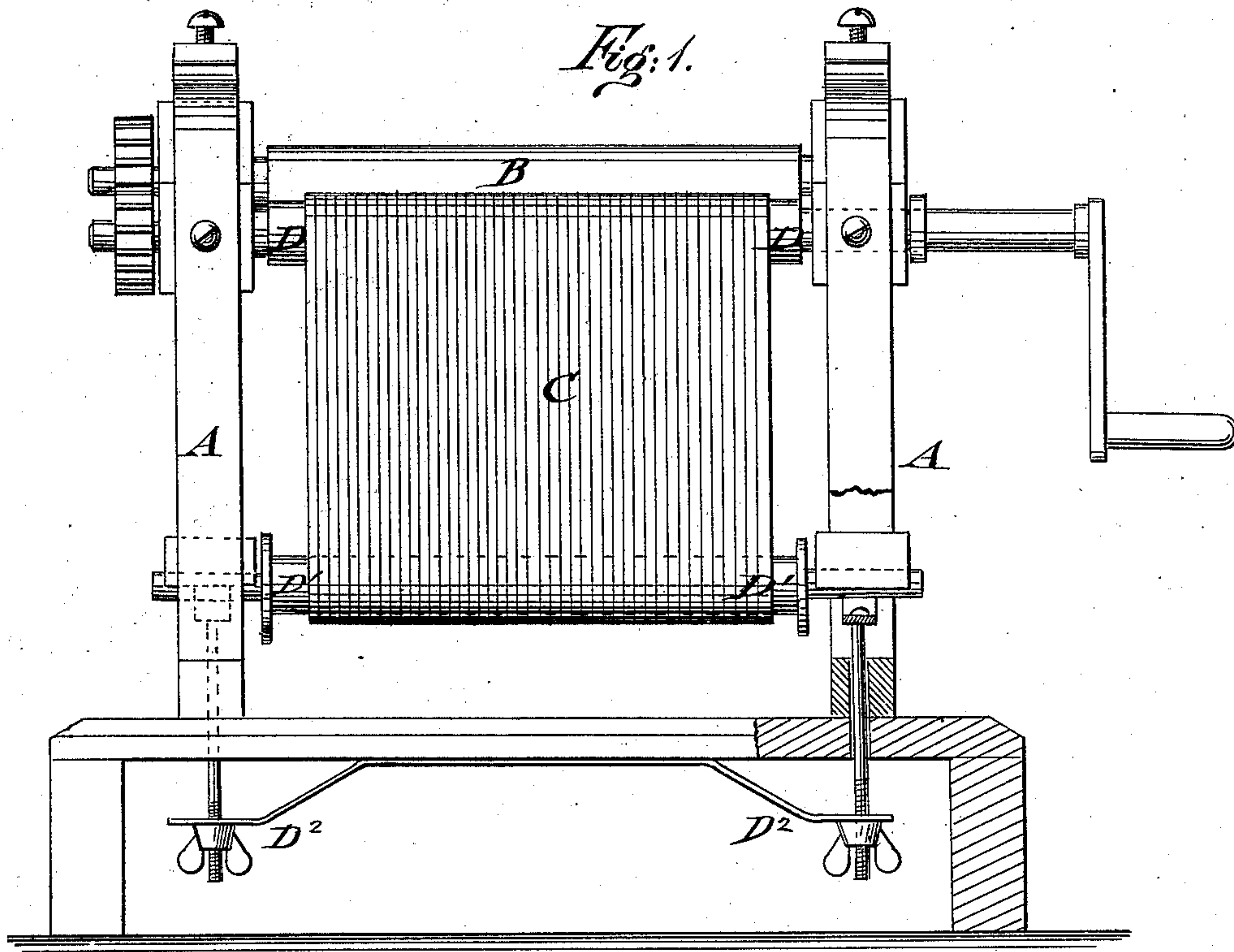


J. K. P. PINE.
Machine for Shaping Cuffs.

No. 224,794.

Patented Feb. 24, 1880.



UNITED STATES PATENT OFFICE.

JAMES K. P. PINE, OF TROY, NEW YORK.

MACHINE FOR SHAPING CUFFS.

SPECIFICATION forming part of Letters Patent No. 224,794, dated February 24, 1880.

Application filed August 2, 1879.

To all whom it may concern:

Be it known that I, JAMES K. P. PINE, of Troy, county of Rensselaer and State of New York, have invented certain new and useful
5 Improvements in Machines for Shaping Cuffs, of which the following is a specification.

In the accompanying drawings, Figure 1 represents an end elevation, partly in section, of my improved machine for shaping cuffs;
10 and Fig. 2 is a sectional side elevation of the same.

Similar letters of reference indicate corresponding parts.

The object of my invention is to furnish a
15 machine for shaping linen cuffs in a dry state after they have been ironed, so as to dispense with the rolling and banding of the cuffs by hand; and the invention consists of a revolving shaping-roll, in combination with an end-
20 less apron or belt that is stretched over guide-rollers, one at each side of the shaping-roll, and kept taut by a third weighted or spring-acted lower roller. The cuff is tightly pressed
25 shaped by the pressure exerted thereon by the roll and apron.

The journals of both guide-rollers D D are laterally adjustable for the purpose of inter-
30 meshing with the pinion of the shaping-roll, to whatever position the latter may be adjusted, whether higher or lower, relatively to the siderollers. This adjustability of the rolls, to which the apron adapts itself automatically, admits that any degree of curl or curve may
35 be given to the rolls by simply changing the relative position of the upper rolls and imparting then the required tension to the apron by the lower stretching-rolls.

Referring to the drawings, A A represent
40 the supporting-standards of my improved machine for shaping cuffs. A central shaping-roll, B, turns in adjustable journal-bearings of the standards, while an endless leather apron or belt, C, is pressed against the lower
45 part of the roll B by means of guide-rollers D D, which are placed symmetrically to the shaping-roll B, one at each side thereof. The guide-rollers D D turn in side journal-boxes of the standards, and are both geared with a
50 pinion on the end of the shaft of the shaping-

roll, so that by revolving either one of the guide-rollers by a hand-crank or power-belt the shaping and guide rollers are simultane-
ously revolved, and thereby the shaping-roll and the endless apron moved at the same
55 speed and in the same direction. The apron is stretched taut over the upper guide-rollers by a third roller, D', which turns in bearings vertically below the shaping-roll, the lower
60 roller being acted upon by tightening springs or weights D², so as to impart the proper tension to the apron.

When a cuff is fed to the shaping-roll and apron it is carried forward between the same
65 and rolled up or shaped by the joint action of the shaping-roll and the bite formed in the apron by the guide-rollers and shaping-roll. The cuff is thereby curled up, one cuff
70 being shaped like the other, so that the cuffs can be packed without being rolled up and banded by hand, and thereby a considerable
75 saving of labor and material is obtained.

I am aware that an apron or conveyer stretched over four rollers, one of which is a
80 shaping or molding roller, such as that claimed in the patent of Wm. H. Hart, Jr., dated May 23, 1876, and numbered 177,831, has been used
85 heretofore; but in this case only the side guide-rollers are adjustable, while the remaining rollers are stationary. This prevents the
90 exact adjustment of the rollers and the convenience of adjustment which is the case in my machine.

Having thus described my invention, I claim as new and desire to secure by Letters
95 Patent—

In a cuff-shaping machine, the combination of an endless apron, C, with an adjustable
90 shaping-roll, B, laterally adjustable side guide-rollers, D D, and a lower guided and spring-actuated stretching-roll, all substantially as
95 and for the purpose set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 28th day July, 1879.

JAMES K. P. PINE.

Witnesses:

W. W. KNICKERBOCKER,
WILLARD W. SEARLE.