

(No Model.)

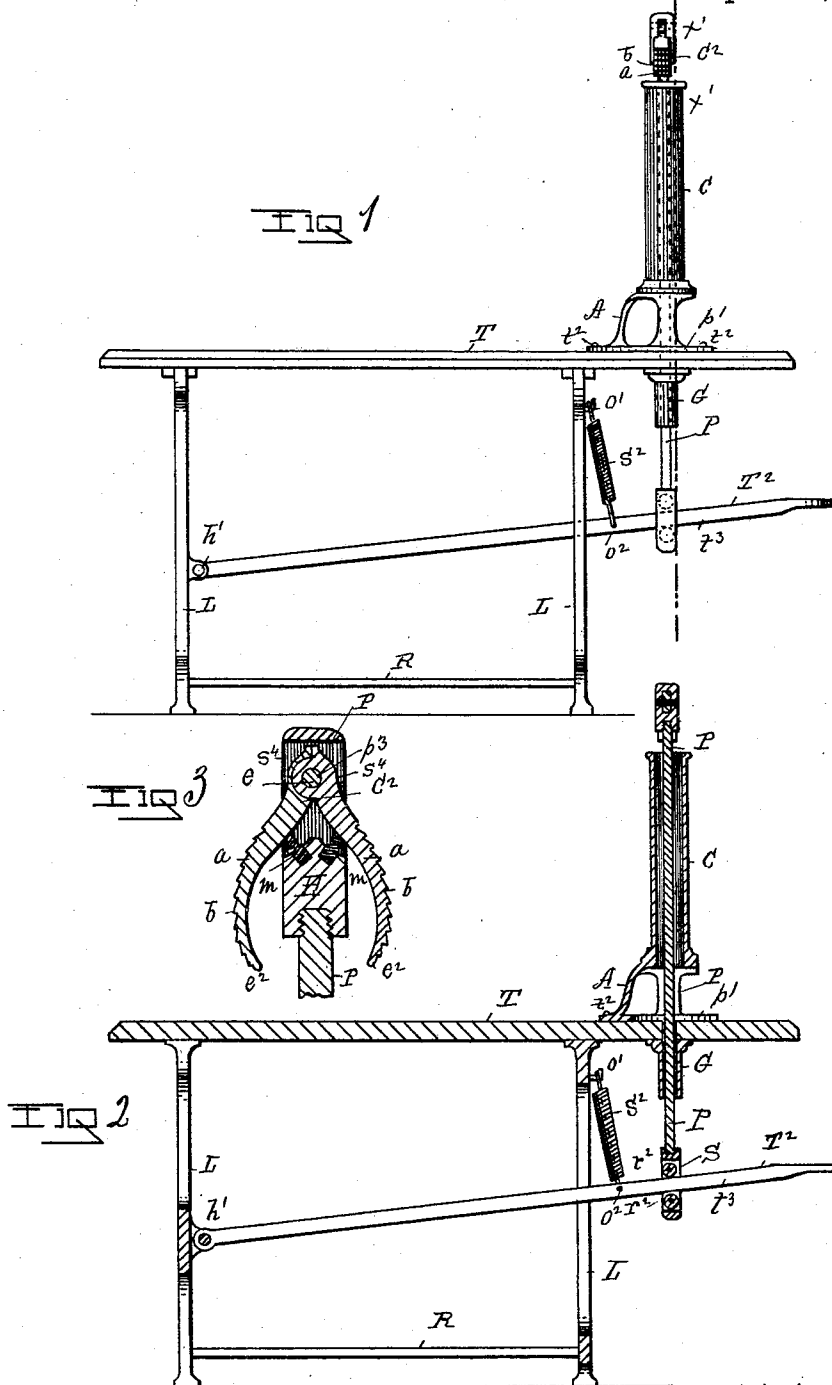
2 Sheets—Sheet 1.

J. H. YOUNG.

MACHINE FOR TURNING COLLARS AND CUFFS.

No. 482,859.

Patented Sept. 20, 1892.



WITNESSES

William A. Sweet
Charles E. Brintwell

INVENTOR
James H. Young
By W. E. Hagan

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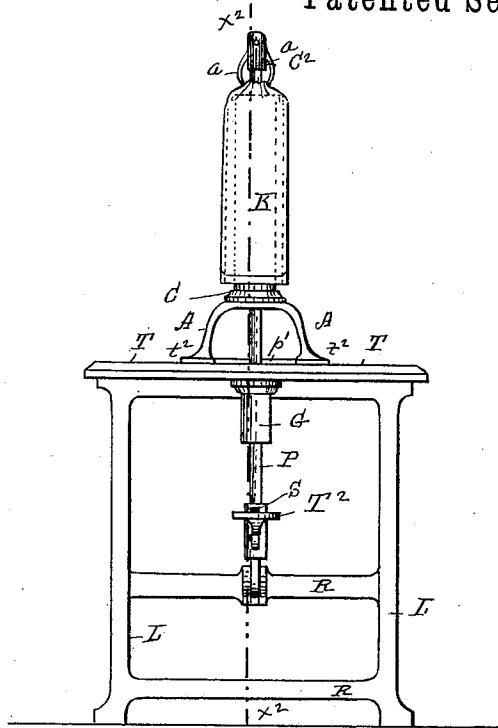


FIG 4

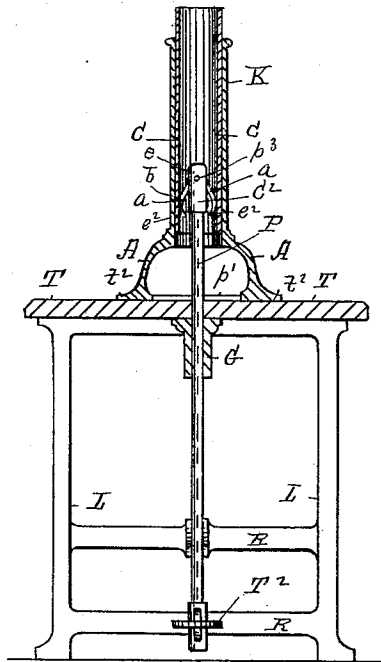


FIG 5

WITNESSES

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UNITED STATES PATENT OFFICE.

JAMES H. YOUNG, OF TROY, NEW YORK.

MACHINE FOR TURNING COLLARS AND CUFFS.

SPECIFICATION forming part of Letters Patent No. 482,859, dated September 20, 1892.

Application filed January 4, 1892. Serial No. 416,930. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. YOUNG, of the city of Troy, county of Rensselaer, and State of New York, have invented a new and useful
5 Improvement in Machines for Turning Cuffs and Collars, of which the following is a specification.

My invention relates to improvements upon that class of machines which are used for turning
10 collars, cuffs, and such other like apparel—articles in which the fabric blanks are laid with the facings interiorly placed and sewed at the side edges with the parts wrong side out and are then turned through the open
15 and unsewed ends, so as to bring the exterior faces of the cuff or collar to the outside; and the object and purpose of my invention is to better adapt this class of devices to the uses for which they are designed.

20 Accompanying this specification to form a part of it there are two sheets of drawings, containing five figures, illustrating my invention, with the same designation of parts by letter reference used in all of them.

25 Of the illustrations, Figure 1 is a side elevation of the machine containing my invention. Fig. 2 is a central vertical section taken from front to rear on the line $x^2 x^2$ of Fig. 4; Fig. 3, a section of part of the clutch and
30 piston, taken on the line $x' x'$ of Fig. 1. Fig. 4 is an end elevation of the machine, with a cuff shown as slipped on over the cylinder and with the upper end of the cuff shown as gathered in to be grasped by the clutch. Fig.
35 5 is a cross-section taken through the cylinder and the cuff after having been drawn down into the cylinder, turned, and in a position to be thrown out of the latter by the piston-rod and clutch.

40 The several parts of the machine thus illustrated are designated by letter reference, and the function of the parts is described as follows:

The letter T designates the table-support,
45 on which the machine rests and with which it is connected to be operated. This table is constructed with legs L and rails R, connecting the legs.

50 The letter C designates a cylinder or tube, which is secured to the top of the table at t^2 by means of arms A, rising from a bottom plate p' .

The letter P designates a rod that is arranged within the cylinder C, the lower end of this rod being shown as connected with a
55 treadle T^3 , which at its rear end is hinged at h' to one of the rails R.

The letter G designates a guide arranged on the underside of the table, through which the rod P moves. 60

The letter S designates a slot made in the lower end of the rod for the passage of the treadle-arm t^3 , and the letter r^2 designates
65 antifriction-rollers arranged in the slot S to facilitate the movement of the rod over the treadle-arm when the latter is being operated to draw down the rod P.

The letter S^2 designates a spring, one end of which connects with one of the table-legs at o' and with the other end of said spring connecting with the treadle at o^2 , and the function of this spring is to raise up the treadle
70 and rod P after having been depressed and the force which causes the latter ceases.

The letter C^2 designates a clutch on the
75 upper end of the rod P, the inner ends e of said clutch being pivoted at p^3 to the rod within a slot s^4 , made therein, with the outer ends of said clutch-arms a each having a serrated outer face b , where said clutch parts
80 are made to curve downwardly, outwardly, and then inwardly toward each other at their lower ends e^2 .

The letters $m m$ designate spiral springs, of which there is one for each of the clutch-
85 arms, arranged between the inner face of each of the latter and the rod-head H, so that said clutch-arms a are forced inwardly and toward each other against the force of said springs m .

The operation of the mechanism thus described is as follows: A cuff K, which has had
90 its sides sewed, with the ends left open, is placed on over the cylinder C, with its end edges projecting above the cylinder and gathered in to be engaged by the clutch
95 C^2 , as shown at Fig. 4. When this has been done, the rod P is drawn down within the cylinder C, by means of which the cuff is also drawn down within the latter, is turned, and when the rod P is allowed to rise the turned
100 cuff is by the clutch forced out of the cylinder. As the cylinder thus constructed and arranged when combined with the rod P, made with the clutch C^2 , would operate just the same whether

the rod was actuated by the treadle or some other means that would reciprocatingly move the rod vertically within the cylinder in the same manner, I do not limit my invention
5 to the use of a treadle to operate the rod or plunger.

Thus made and arranged cuffs and collars sewed together with their exterior facings laid interiorly and then sewed at the sides,
10 with the ends left free, can be turned very rapidly.

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

15 In a machine for turning cuffs and collars,

the combination of a cylinder C, a reciprocative rod P, arranged within the cylinder and carrying a head H, the clutch-arms hinged to the head and formed with serrations on their outer edges, and a treadle connected to the
20 lower end of the reciprocative rod to operate the rod and clutch, substantially as described.

Signed at Troy, New York, this 17th day of September, 1891, and in the presence of the two witnesses whose names are hereto written. 25

JAMES H. YOUNG.

Witnesses:

CHARLES S. BRINTNALL,
W. E. HAGAN.