

UNITED STATES PATENT OFFICE.

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MACHINE FOR FORMING TURNDOWN OR ROLLED COLLARS.

SPECIFICATION forming part of Letters Patent No. 526,246, dated September 18, 1894.

Application filed July 9, 1894. Serial No. 516,973. (No model.)

To all whom it may concern:

Be it known that I, RANDOLPH N. MARTZ, a citizen of the United States, residing at Frederick, in the county of Frederick, State of Maryland, have invented certain new and useful Improvements in Machines for Forming Turndown or Rolled Collars, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to machines for giving proper form to turned down and also rolled collars to cause them after having been laundered and passed through an ironing machine, to fit nicely around the neck of a person; and the objects of my improvement are to provide a simple, strong and inexpensive machine in which the heated iron or former is movable and under the immediate control of the operator to force it toward the padded collar supporter, and the latter is retained adjustably at any desired angle to the heated iron, and thus adapted to transfer the pressure of the heated iron to the collar either at the bend close to the band as in ordinary turn down collars, or away from said bend as in rolled collars wherein the bend at the top has a wide roll away from the band or the collars of negligee shirts. I attain these objects by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the machine constructed in accordance with my invention. Fig. 2 is a vertical central section of the iron former and supporting pad mounted upon an arm adjustably clamped to the frame. Fig. 3 is a perspective view of the pad and its sheet metal support.

In said drawings A represents a table or bench upon which the machine is placed and secured by bolts *b* passing through the bottom flange of the two side frames B. Said frames are united together at a short distance above their base by bolts *b*² passing through washers *b*³ that keep them separated. The frames B are also connected together at their upper ends by a bolt *c* upon which is pivoted a lever C located between said frames. To the front face of said lever is attached the stem or handle *d* of the iron or collar former D, by means of bolts or screws *d*² passing through said handle and entering said front face of the lever. The iron former D is sub-

stantially cylindrical, its curvature corresponding substantially to the curvature to be formed on the collars. Said former D is hollow and has a bottom upon which charcoal may be ignited to heat it, although it is preferable to heat it by the flame of gas jets issuing from a pipe *e* having its lower end within the former D, said pipe being retained in proper position by a clamping sleeve *e*² secured to the handle *d* by one of the screws *d*².

To the rear end of the lever C is pivoted at *c*² one end of a rod *f*, that is adjustably connected with the rear end of a treadle G, by means of a tubular rod F. The lower end of the rod *f*, is received within the upper end of the rod F, said upper end being slitted longitudinally for a short distance and screw threaded, has placed thereon a nut *f*² to compress the slitted portions against the rod *f* and retain the parts adjustably united. The treadle is pivoted at *g* on a suitable stand *g*². To support the collar intended to be given a proper form by the iron D, a pad *h* of textile material is firmly supported in the rear of said iron D. The top and bottom edges of the pad *h* are sewed to the top and bottom edges of a sheet metal plate *i* that has small perforations near said edges for the passage of the threads used in the sewing. The pad *h* backed by its plate *i* is placed within a semi-circular cavity formed in the front end of an arm K, and the ends of the plate *i* are outwardly bent over the edges of said cavity and secured to said arm by screws *i*². The rear portion of the arm K is flat, and is received between the two side frames B to which it is pivoted at *k*. In the rear of said pivot *k* the arm K is adjustably clamped to the frames B by means of a bolt *m* passing through said lever and through curved slots *b*⁴ formed in the frames B, a washer being preferably placed between the head of said bolt and the face of the frame.

By having the iron D adapted to be moved and forced within the concavity of the supporting pad, a proper form is given to the collar, and by having the angle or inclination of the pad adjustable relatively to the inclination given to the iron D, the operator is enabled to subject the collar to the greatest amount of pressure on any desired line thereof. For example for turned down collars

the pressure can be substantially uniform on its whole surface by clamping the pad carrying arm K to the frame in the position shown in Fig. 1; but if it is desired to have the greatest pressure at the bend so that there will be some divergence between the collar band and the collar, to facilitate the admission of a neck-tie between them, the pad carrying arm K can be clamped to the frame as shown in Fig. 2; but if the machine is to be used upon rolled collars requiring space between the collar and its band on the line of their junction, the rear end of the arm K is to be tilted down even more than as shown in Fig. 1.

Having now fully described my invention, I claim—

1. In a collar forming machine the combination of a frame, a lever C pivoted to said frame, an iron collar former secured to said pivoted lever, a treadle, and a connecting rod

uniting said treadle with the lever C, with a pad, a pad carrying arm pivoted to the frame, and means to clamp said arm adjustably to the frame substantially as described. 25

2. In a collar forming machine the combination of a frame a lever C pivoted to said frame, and an iron collar former secured to said pivoted lever, with an arm K pivoted to and adjustably secured to the frame, a sheet metal pad-backing *i* secured to the arm K and provided with perforations along its edges and a pad *h* sewed to the pad backing *i* substantially as described. 30

In testimony whereof I affix my signature in presence of witnesses. 35

RANDOLPH N. MARTZ.

Witnesses:

MARSHALL FOUT,
A. E. HEIDLER,
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