

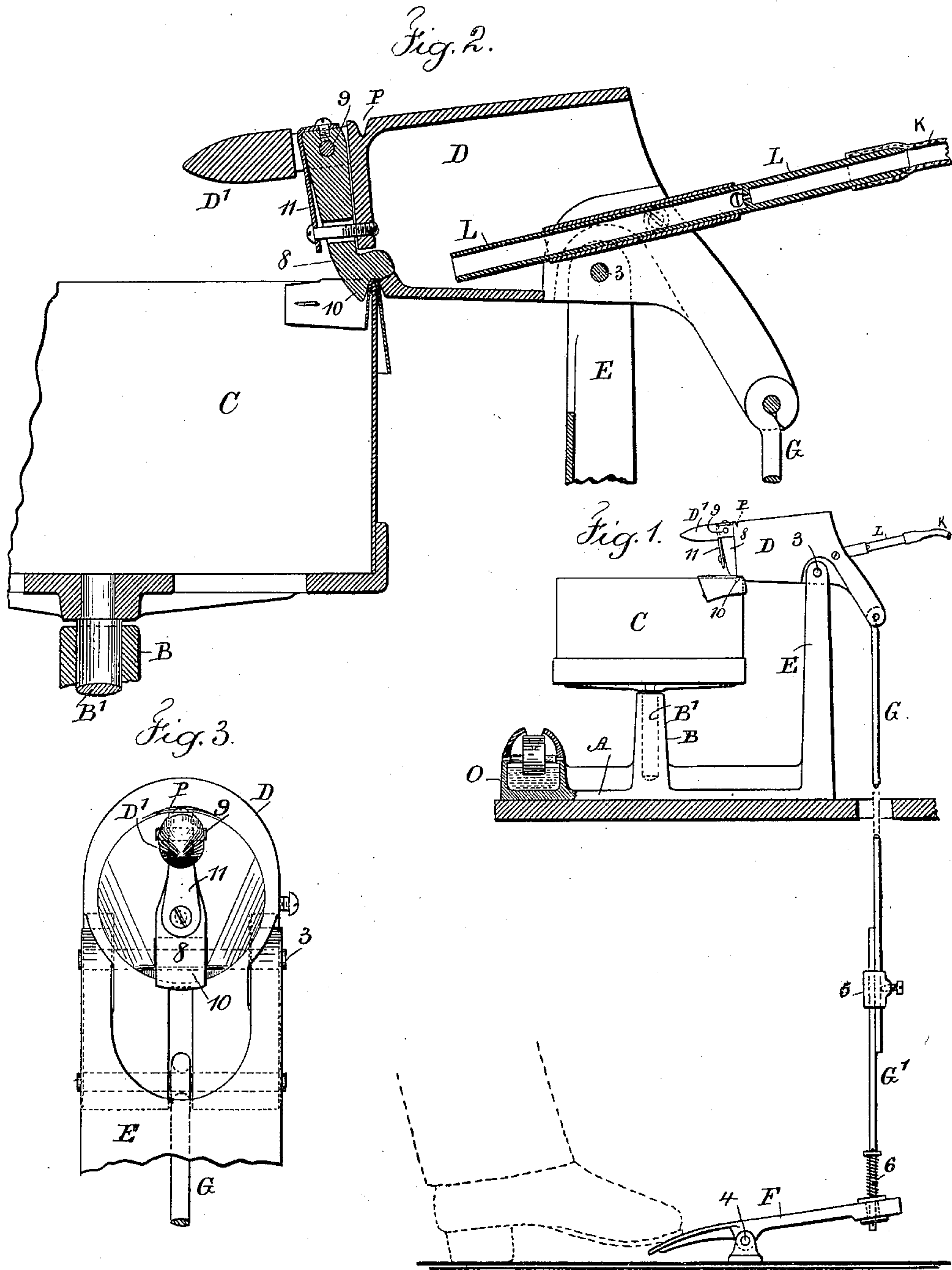
No. 627,889.

Patented June 27, 1899.

W. J. ASHER.
COLLAR SHAPING MACHINE.

(Application filed Nov. 19, 1897.)

(No Model.)



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UNITED STATES PATENT OFFICE.

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COLLAR-SHAPING MACHINE.

SPECIFICATION forming part of Letters Patent No. 627,889, dated June 27, 1899.

Application filed November 19, 1897. Serial No. 659,119. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM JAMES ASHER, a citizen of the United States, residing at Willimantic, in the county of Windham and State of Connecticut, have invented an Improvement in Collar-Shaping Machines, of which the following is a specification.

Machines have heretofore been made in which the collar is laid upon a stationary curved form and a grooved iron has been brought down upon the collar and swung around, so as to press upon the fold of the collar and smooth such collar. In this instance the iron has required to be moved by hand and the attendant could not use both hands in properly placing and holding the collar. Heated rollers have also been made use of for ironing collars, cuffs, and other articles, and in some instances the heated rollers have been hollow at the end, and these rollers have been moved by power.

The present invention as distinguished from the devices that have preceded it consists in a cylindrical former, over the edge of which the collar is applied and held by hand, and the cylinder is mounted upon a shaft or axis, so as to be turned around to move the collar while in contact with an iron that is pressed upon the fold thereof, and the pressure of the iron is applied by the foot, so that the hands are entirely at liberty to manipulate the collar, and the iron is expansible, so as to accommodate different thicknesses of collars or to pass over seams without undue pressure.

In the drawings, Figure 1 is an elevation, partly in section, illustrating the present improvement. Fig. 2 is a section in larger size of the iron and a portion of the cylindrical former, and Fig. 3 is a front view of the iron.

A suitable bed A is provided, which may be supported upon a table, bench, or other convenient device, and upon this bed is a socket B, which is advantageously vertical and supports the shaft B' of the cylindrical former C, the surfaces and upper edge of which are smooth and adapted to receive upon them the fold of the collar, so as to support such fold while being ironed, and this cylinder turning freely upon its axis can be moved with the collar while presenting the same to the action of the iron D. This iron D is upon

a pivot 3 at the upper end of the standard E, and there is a treadle F, pivoted at 4 upon bearings supported by the floor, and the back end of the treadle is provided with a two-part rod G G', provided with a clip or clips 5 to secure the two parts together and allow for their extension, so as to suit the height at which the iron is supported from the floor, and there is a spring 6 resting at its lower end upon the treadle and acting at its upper end against a collar, so that when the foot is placed upon the treadle and pressed down to the floor the iron will be swung into contact with the collar and press the same with the desired force, which will be regulated according to the compression of the spring. Hence there is no fear of too much pressure after the parts have been adjusted, even by a careless operator. This iron D is adapted to press upon the fold or edge of the collar as such collar is presented upon the cylindrical former, and I prefer to make the iron expansible by using a hinged finger 8. This finger 8 is in the form of a comparatively narrow bar (see Fig. 3) which is passed up through a mortise in the iron, and it is hinged or pivoted at the upper end 9, and the lower end is beveled in both directions, as seen in Fig. 2, and there is a lateral projection passing into a mortise in the iron, so that this lower end 10 and the adjacent lower edge of the iron are adapted to act upon the collar at the upper or folded edge, and the spring 11 tends to press the lower end 10 of the finger toward the iron as it acts upon the collar; but this spring allows for different thicknesses of collar being ironed within the groove between the finger and the iron. The heated point D' upon the iron is of ordinary character, and a pipe K conveys gas or other heating fluid into the perforated pipe L within the iron, the flame burning within such iron and heating the same to the desired temperature. Any suitable means may be employed for heating the iron.

It will be apparent that the former C need not be a complete cylinder, Fig. 2 showing only a portion of the cylinder; but it is preferable to make it cylindrical in order that the collar may be placed upon any portion of it; but under any circumstances the former, being pivoted, can be turned around, carrying with it the collar to be shaped or ironed, and

the attendant is enabled to place the collar upon the former and to manipulate the same with both hands, as the pressure upon the iron is controlled by the foot.

5 I have shown a box at O, that may contain water and a roll of felt or similar material by which moisture can be applied to the edge or fold of the collar, as the same may be introduced through the slotted cover to the
10 water vessel.

At the top of the iron I provide a groove at P, through which the edge or fold of the collar can be drawn to remove any roughness, especially after the edge has been dampened.

15 I claim as my invention—

1. The combination with an iron adapted to be heated, of a pivoted former having a segmental edge upon which the collar or other article to be ironed or smoothed is placed, the
20 former being turned upon its pivot during the ironing operation, substantially as set forth.

2. The iron and means for heating the same and a pivotal support for the iron, in combination with a treadle for giving motion to the
25 iron, a pivoted former having a curved edge adapted to receive the article to be ironed or shaped, such former being turned upon its pivot during the ironing operation, substantially as set forth.

30 3. The former having a curved edge for receiving the article to be shaped or ironed, and an axis or shaft by which it is supported and

upon which it can be turned, in combination with an iron, a pivot for supporting the iron and a treadle and connection for swinging the
35 iron and applying pressure to the collar or other article upon the former, substantially as set forth.

4. A bed having a vertical socket, a cylindrical former, having a central shaft received
40 into the socket and upon which the former can be turned, in combination with an iron and means for applying pressure to cause the iron to smooth or shape the collar or other article upon the former, substantially as set forth. 45

5. The combination with a former for supporting the article to be ironed or shaped, of a two-part iron adapted to yieldingly press upon the article being ironed, and means for heating the iron, substantially as set forth. 50

6. The two-part iron, one portion of which is hollow and receives within it the heating device, such as a pipe for supplying gas, the other portion of the iron being a pivoted finger and having a lower end adapted to act
55 upon the fold of a collar or other article, and a spring to press the finger toward the body of the iron, substantially as set forth.

Signed by me this 4th day of November, 1897.

WILLIAM JAMES ASHER.

Witnesses:

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