

W. A. ZEIDLER.
TURN DOWN COLLAR EDGE IRONING OR FINISHING MACHINE.
APPLICATION FILED APR. 7, 1911.

1,022,169.

Patented Apr. 2, 1912.

3 SHEETS-SHEET 1.

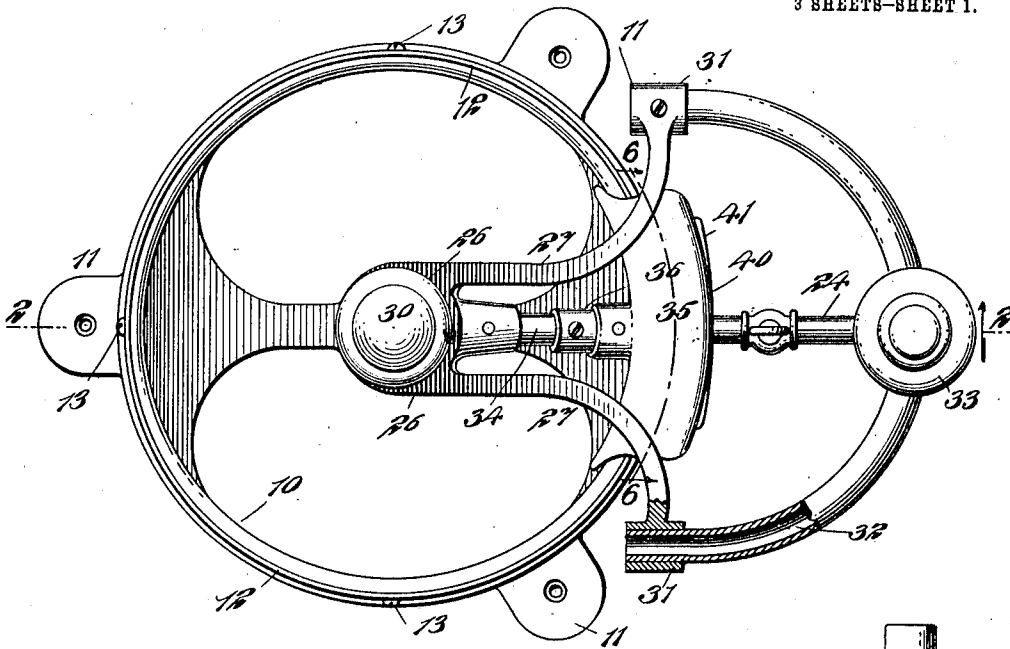


Fig. 1.

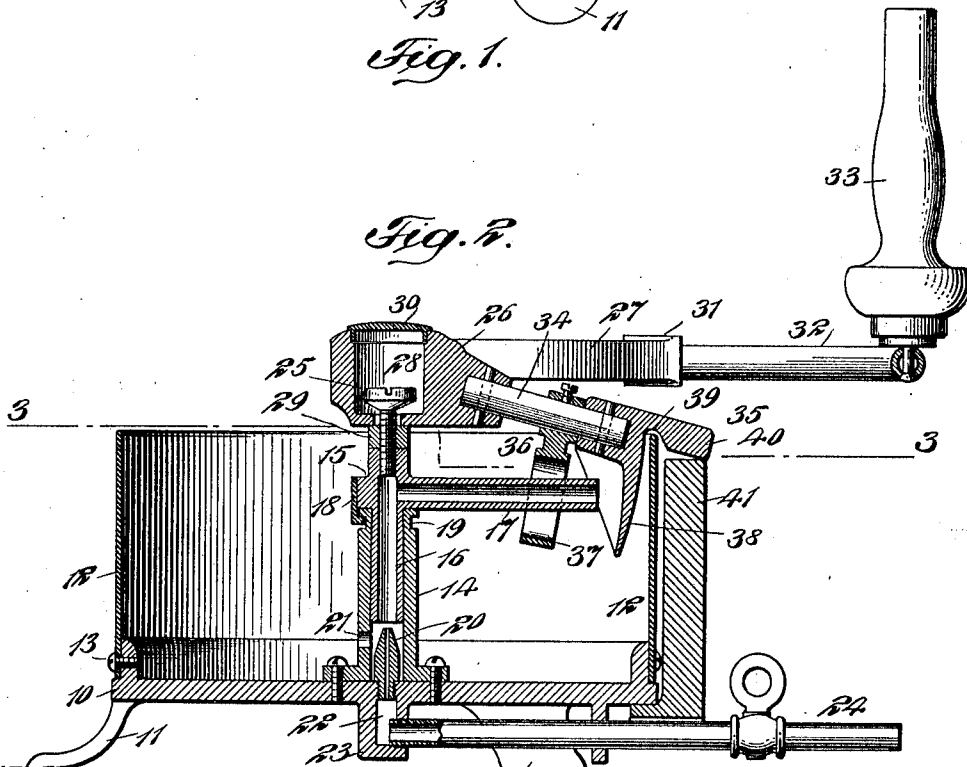


Fig. 2.

Witnesses:
Julius G. [Signature]
Arthur Marion

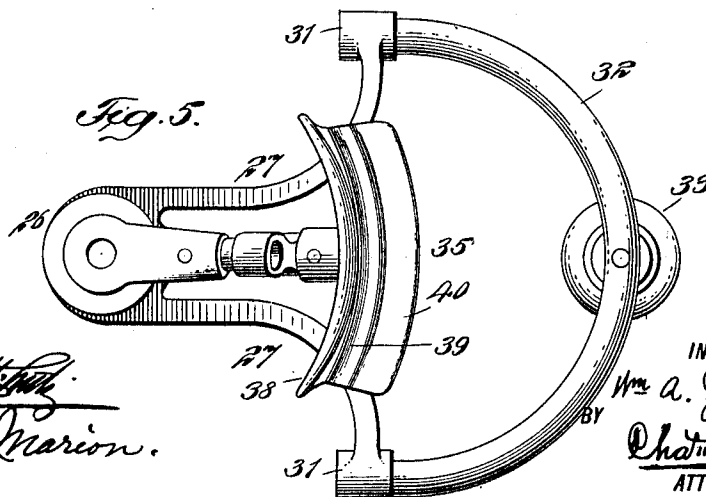
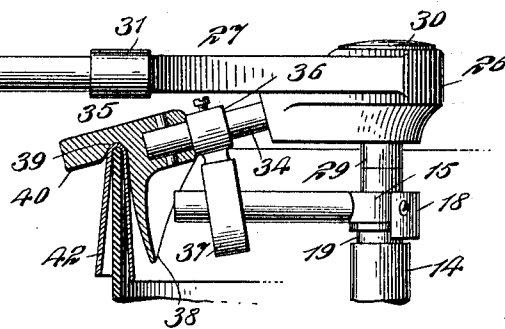
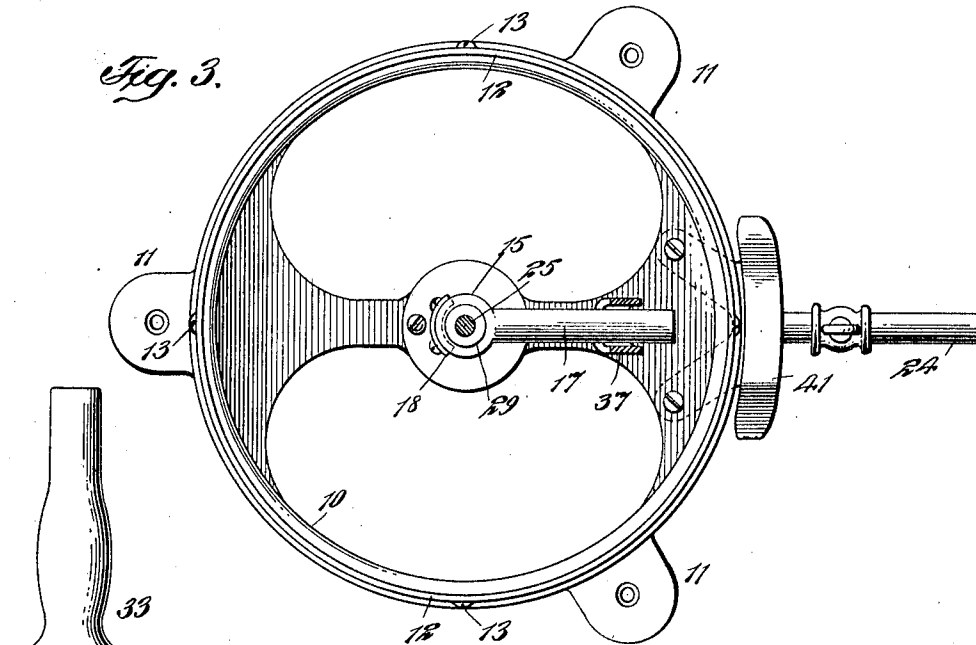
Inventor
William A. Zeidler
By his Attorney *Chas. C. Gill*

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WITNESSES
Arthur Marion.

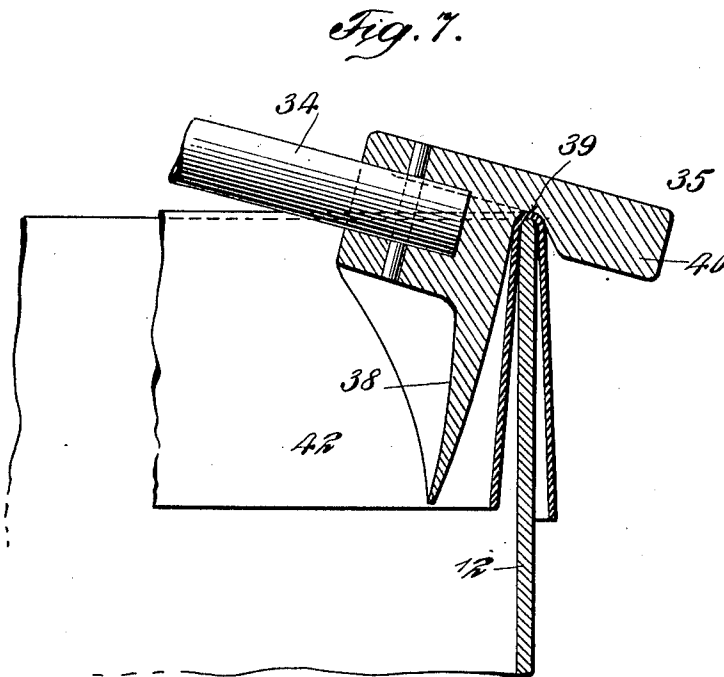
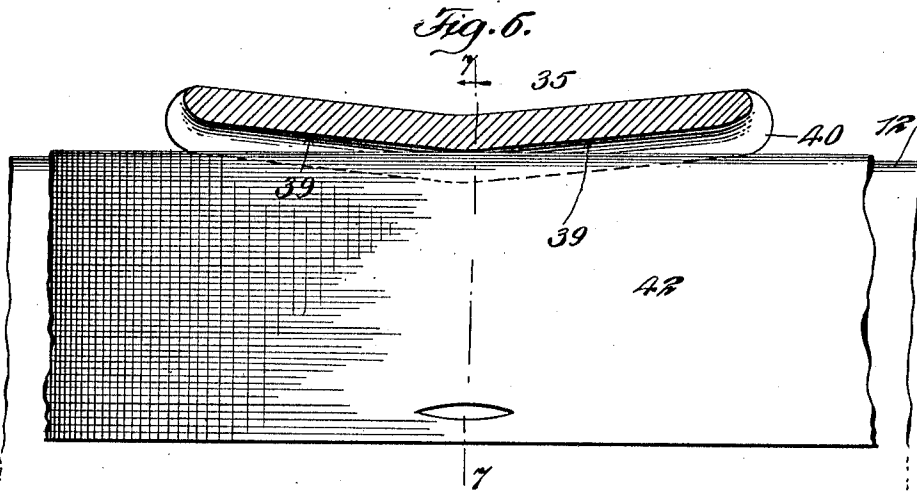
INVENTOR
Wm. A. Zeidler
BY *Chas. C. Hill*
ATTORNEY

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Witnesses:
Julius H. H. H.
Arthur Marion.

Inventor
William A. Zeidler
By his Attorney *Chas. C. Gill*

UNITED STATES PATENT OFFICE.

WILLIAM A. ZEIDLER, OF NEW YORK, N. Y.

TURN-DOWN-COLLAR EDGE IRONING OR FINISHING MACHINE.

1,022,169.

Specification of Letters Patent.

Patented Apr. 2, 1912.

Application filed April 7, 1911. Serial No. 619,474.

To all whom it may concern:

Be it known that I, WILLIAM A. ZEIDLER, a citizen of the United States, and a resident of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Turn-Down-Collar Edge Ironing or Finishing Machines, of which the following is a specification.

The invention relates to improvements in collar edge-ironing machines, and it consists in the novel features and structure hereinafter described, and particularly pointed out in the claims.

The invention made the subject hereof has for its object to provide a comparatively inexpensive machine intended for completing the edge ironing of turn-down collars, these collars being ironed flat and then folded on the proper line, after which the collars are submitted to the present machine for the purpose of finishing the fold-edges thereof.

One of the chief purposes of the present invention is to provide a machine for finishing the fold-edge of collars without material wear thereon or danger of breaking the linen covering of the collars.

The invention will be fully understood from the detailed description hereinafter presented, reference being had to the accompanying drawings, in which:

Figure 1 is a top view, partly broken away, of a collar ironing machine constructed in accordance with and embodying my invention; Fig. 2 is a vertical section of the same on the dotted line 2—2 of Fig. 1; Fig. 3 is a horizontal section of the same on the dotted line 3—3 of Fig. 2; Fig. 4 is a detached side elevation, partly in section, of a portion of the machine showing the application of the iron to the fold edge of a collar placed on the upper edge of the cylinder; Fig. 5 is a bottom view of the iron and the handle to which it is connected; Fig. 6 is an enlarged vertical section through a portion of the machine on the curved dotted line 6—6 of Fig. 1, the cylinder and collar located thereon below the iron being partly broken away, and Fig. 7 is an enlarged vertical section through the same on the dotted line 7—7 of Fig. 6.

In the drawings, 10 designates a suitable ring-like cast iron base for the operative parts of the machine, said base being preferably equipped with feet 11 by means of

which and suitable screws or nails the machine may be readily fastened upon a bench or table. A cylinder 12 is secured at its lower edges by means of screws 13 to the ring base 10, said cylinder being vertical and having rounded upper edges and preferably being of nickel-plated or highly polished metal. Centrally within the cylinder 12 a hollow post 14 is secured to a cross-bar of the base 10, and upon the upper end of this post is pivotally secured a hub 15 having a hollow stem 16 extending downwardly into said post and the horizontal pipe 17 which constitutes a gas burner for heating the iron. The hub 15 has secured at one edge a plate 18 whose lower edge is bent into an annular groove 19 formed in the upper end of the post 14, and the engagement of the plate 18 with the groove 19 serves to bind the hub 15 in position on the post and permit said hub to turn thereon and thereby follow the movement or position of the iron during the placing of the latter from point to point along the upper edge of the cylinder 12. A jet nozzle 20 is secured in the lower end of the post 14 and adjacent to the same the said post is provided with an air inlet 21, as shown in Fig. 2. The lower end of the nozzle 20 communicates with a passage 22 in a hub 23 cast on the base 10 and is fed with gas from a pipe 24 which enters said hub 23. The nozzle 20 is directly below the vertical tube 16 and the air inlet 21 is adjacent to the upper portion of said nozzle, which has a tapered upper end portion extending upwardly slightly above the opening 21.

Upon the upper end of the hub 15 is secured by means of a screw 25, the hub 26 of the handle frame 27, the hub 26 being formed with a chamber 28 receiving the head of said screw 25 while the stem of the screw passes downwardly through a collar 29 and into the upper end of the hub 15, which being swiveled on the post 14 allows the handle frame and its connected parts to have a like swiveling movement. The chamber 28 is preferably closed at its upper end by a cap 30, and said chamber is of greater width than the head of the screw 25. The sides of the head of the screw 25 are, in their lower portions, of inverted cone-shape and free within the opening through the hub 26 at the base of the chamber 28, and the purpose of this construction is to allow the hub 26, handle frame 27 and parts connected

therewith, to have an angular or rocking movement on the screw 25 as well as a swiveling movement adapting the iron to be carried along the upper edge of the cylinder 12. The hub 26 will, therefore, be freely mounted so as to be capable of rocking upon its support without becoming detached therefrom. The handle frame 27 is, in the present instance, integral with the hub 26 and in the form of two oppositely curved arms upon whose outer ends are sleeves 31, which receive the ends of a bent or semi-circular tube 32 to which a wooden handle 33 is pivotally secured. The tube 32 is open at both ends and being hollow an air chamber is formed therein which materially aids in preventing the heat of the iron from affecting the handle 33.

The hub 26 has connected with it by means of a rod 34 the iron 35, said rod 34 being socketed at its ends in said hub 26 and iron 35, as shown in Fig. 2. Upon the rod 34 is mounted a hanger 36 affording a vertically elongated loop member 37 which encompasses the gas pipe 17 and preserves the due relation of said pipe to the iron 35 without interfering with the handle and iron being rocked angularly on the upper edge of the cylinder 12. The iron 35 has an inner downwardly extending arc-shaped body portion 38 which extends downwardly into the cylinder 12, as shown in Figs. 2 and 4, and at the upper edge of said body portion 38 the iron is formed with a groove 39 adapted to the curvature of the walls of the cylinder 12 and to receive the upper edge of said cylinder together with the fold edge of a collar that may be placed thereon in the manner illustrated in Fig. 4. The rod 34 and iron 35 extend downwardly and outwardly at an angle to the horizontal plane of the handle frame 27 and also at an angle to the upper edge of the cylinder 12, and at its outer edge said iron is formed with a projecting portion 40 which, when the iron is in use on the collar, extends outwardly beyond the cylinder 12 without performing any function, as shown in Fig. 4, but which when the iron is in its initial position rests upon a vertical support 41, as shown in Fig. 1, holding the iron clear of the upper edge of the cylinder 12 so that it may not bruise or wear on said edge.

In the initial condition of the machine the iron will, as hereinbefore explained, rest on the support 41, and the collar to be treated will be folded along its proper fold line and placed upon the upper edge of the cylinder 12 at a point removed from the support or rest 41. The iron will thereupon, when properly heated, be lifted, by means of the handle 33, from the rest 41 and placed upon the fold-edge of the collar, which I number 42, and having been placed upon said edge of the collar the iron will by manual power

exerted through the handle 33, be rocked back and forth angularly to smooth and finish so much of the fold-edge of the collar as the length of the iron may reach, and thereupon the iron will be lifted and moved to an adjacent position along the fold-edge of the collar and again rocked or turned angularly for ironing that portion of the edge of the collar, after which the iron will be moved to successive points along the fold-edge of the collar and rocked until the entire collar has had its entire fold-edge ironed or finished. After a collar has had its fold-edge completed, the iron 35 will, by means of the handle 33, be returned to the rest 41 preparatory to another collar being placed on the cylinder 12 for treatment. During the movement of the iron 35 from place to place over the upper edge of the cylinder 12, the hanger 36 by freely engaging the gas pipe 17 compels the latter to follow the iron, and at the same time the loop member 37 of said hanger being vertically elongated, does not interfere with the rocking movement of the iron, but serves to limit the extent of such movement, the lower end of said loop member at the end of each proper throw of the iron coming up against the pipe 17 the latter serving as a stop.

It is obvious from what has already been stated that my invention provides means for ironing, or finishing the fold-edge of turn-down collars without the necessity of dragging an iron along such edge, my purpose being to finish the edge of the collar by rocking the iron thereon as distinguished from dragging it back and forth over such edge. The handle carrying the iron is swiveled so that the iron may be moved from point to point over the upper edge of the cylinder 12 and collar thereon and the head of the screw 25 is cut away on its under surface to permit a rocking movement of the iron supporting frame. Since the burner-pipe 17 constantly follows the iron or shoe 35 the latter will be kept uniformly heated. The burner as a whole may be varied, of course, to suit the special gas employed for heating the iron. The ironing-shoe 35 is of segmental outline and preferably from four to five inches in length, and I have found it to be very advantageous to incline this ironing-shoe downwardly and outwardly at an angle to the horizontal plane of the cylinder 12, as shown, with the groove 39 so disposed that less than one-half inch thereof will at any one time press on the fold-edge of the collar during the rocking of the iron. I preferably make the groove 39 of substantially uniform depth and concentric with the upper edge of the cylinder and then secure the ironing-shoe in inclined position, whereby said groove becomes tilted with relation to the edge of the cylinder and may be rocked thereon with

good effect, and I regard this coöperation of the cylinder and angularly disposed groove as important in securing the best results.

What I claim as my invention and desire to secure by Letters-Patent, is:

1. A collar edge-finishing machine comprising a vertical cylindrical member upon whose upper edge the fold of the collar is placed, a grooved ironing-shoe to engage the fold-edge of the collar, a handle frame and handle connected with said ironing-shoe, and means pivotally mounting said handle-frame concentrically with said cylindrical member and permitting it to be manually rocked angularly for rocking said shoe on the fold-edge of the collar.

2. A collar edge-finishing machine comprising a vertical cylindrical member upon whose upper edge the fold of the collar is placed, a grooved ironing-shoe to engage the fold-edge of the collar, a handle frame and handle connected with said ironing-shoe, and means pivotally mounting said handle-frame concentrically with said cylindrical member and permitting it to be manually rocked angularly for rocking said shoe on the fold-edge of the collar, said shoe at its

groove being inclined downwardly and outwardly at an angle to the horizontal plane of said cylinder.

3. A collar edge-finishing machine comprising a vertical cylindrical member upon whose upper edge the fold of the collar is placed, a grooved ironing-shoe to engage the fold-edge of the collar, a handle frame and handle connected with said ironing-shoe, a vertical tubular post secured centrally within said cylinder, a hub swiveled on the upper end of said post and having a tubular stem extending into the same and a laterally projected burner-pipe for heating said shoe, means mounting said handle frame on said hub, means for leading gas to the interior of said post, and means for compelling said burner-pipe to maintain its relation to said shoe during the movement of the latter along its circular path.

Signed at New York city, in the county of New York and State of New York, this 5th day of April A. D. 1911.

WILLIAM A. ZEIDLER.

Witnesses:

CHAS. C. GILL,
ARTHUR MARION.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."