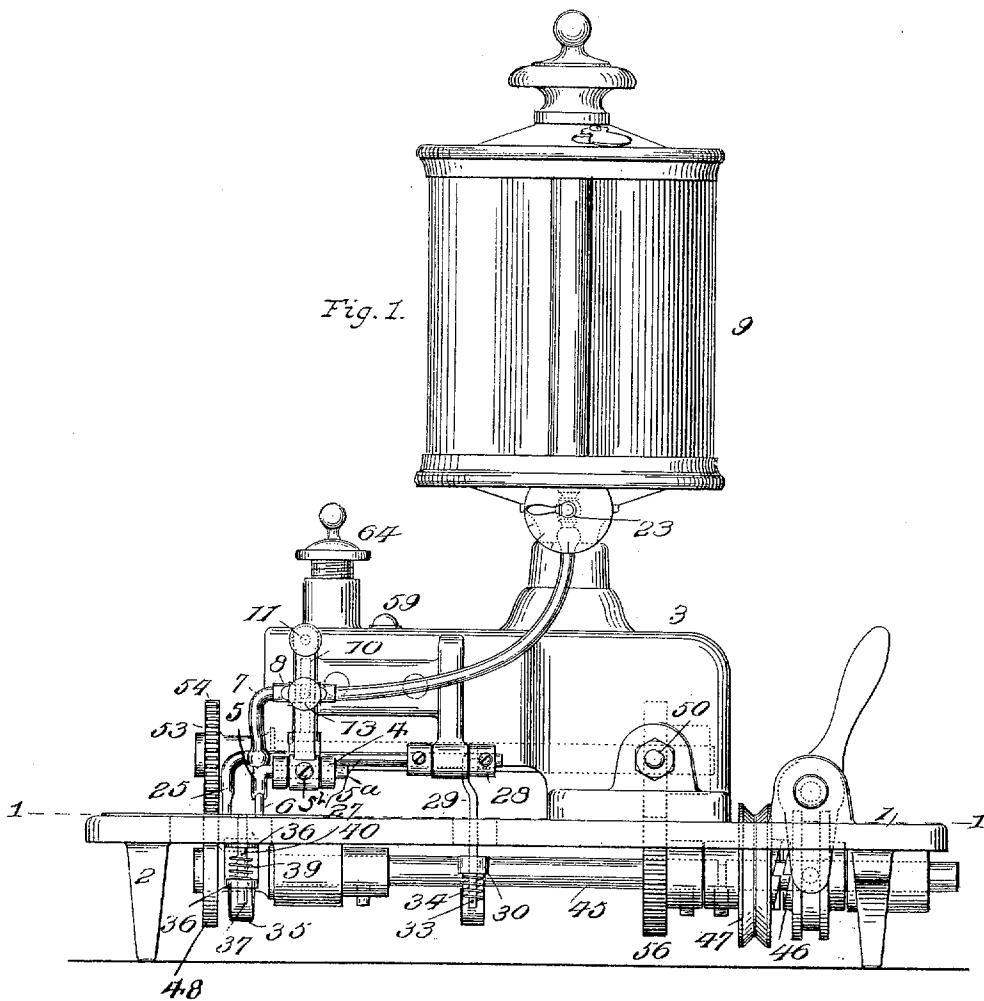


H. C. MILLER.
DAMPENING MACHINE.
APPLICATION FILED AUG. 12, 1904.

972,125.

Patented Oct. 4, 1910.

6 SHEETS—SHEET 1.



Witnesses
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5 SHEETS—SHEET 2.

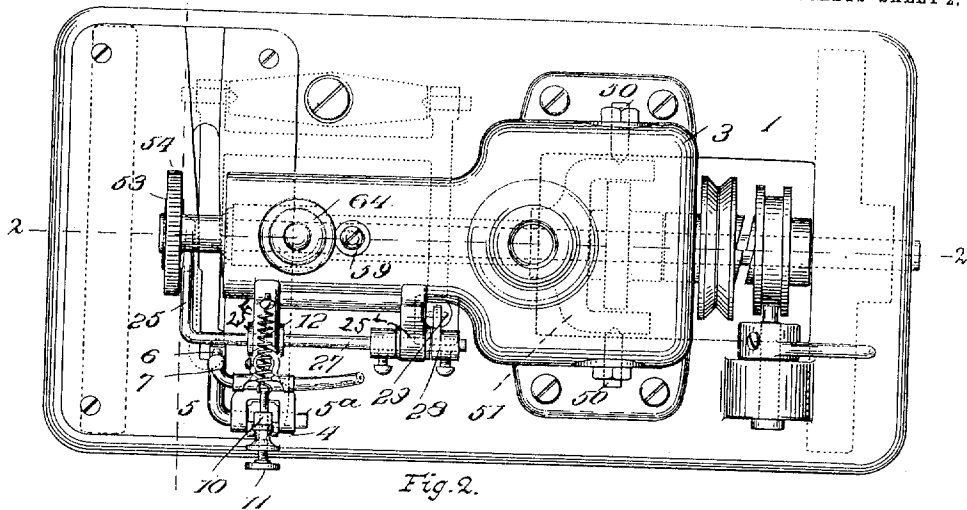


Fig. 2.

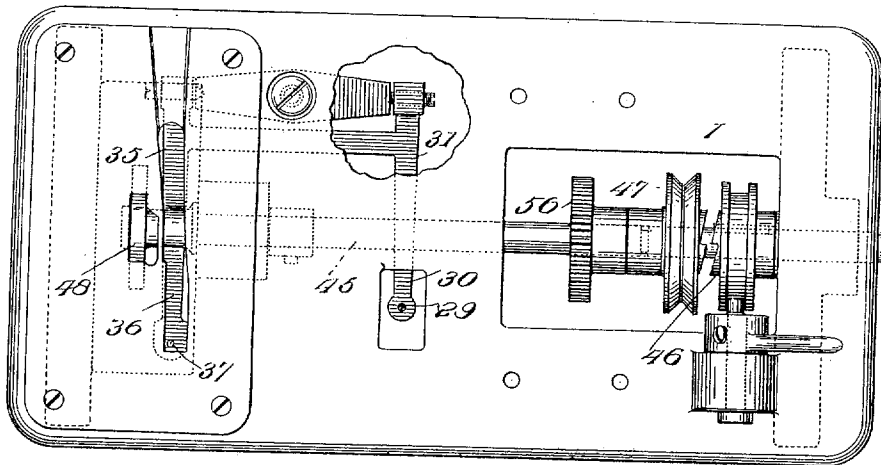


Fig. 3.

Witnesses.
Walter D. Collier,
Dwight Matthews,

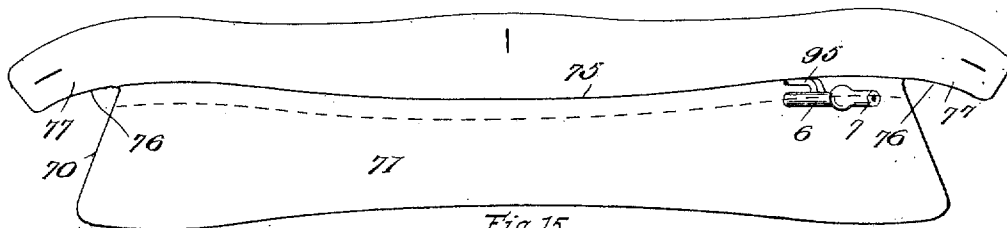
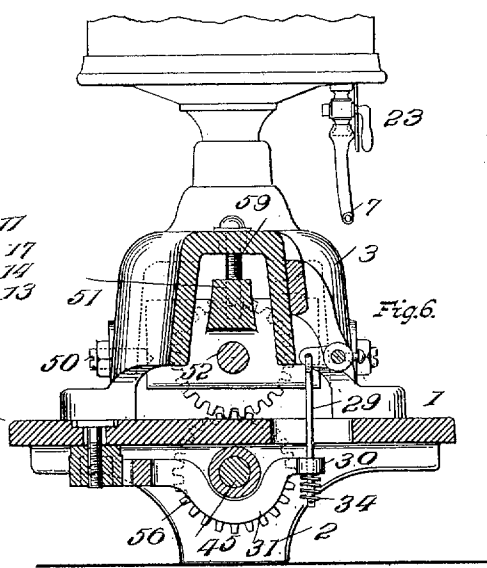
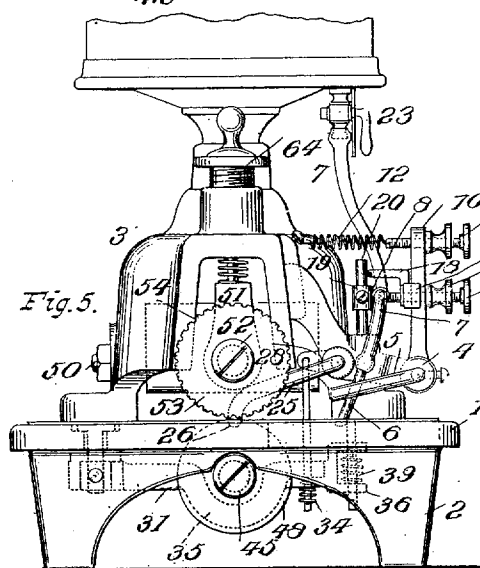
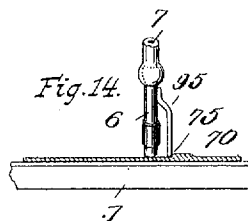
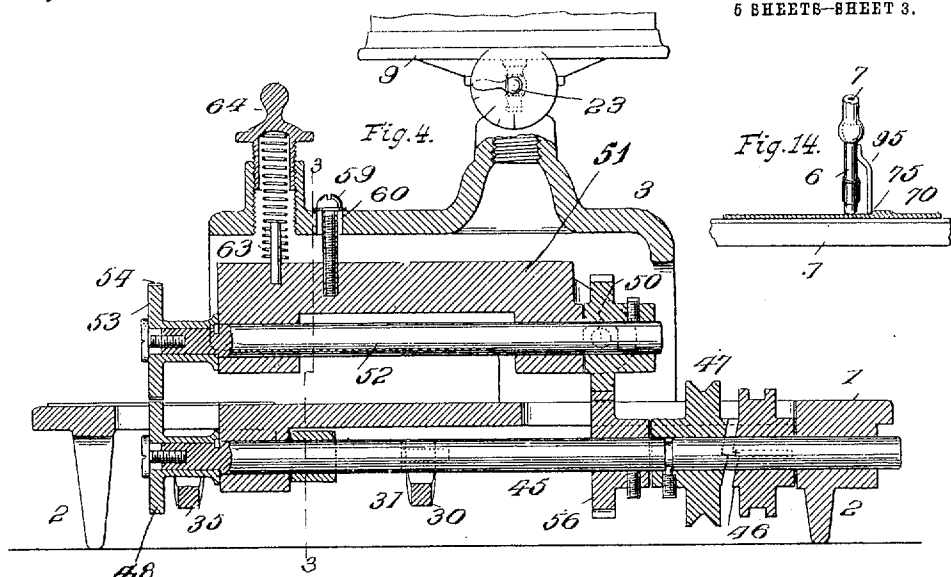
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5 SHEETS—SHEET 3.



Witnesses.
Walter A. Collier.
Quiza Matthews.

Fig. 15.

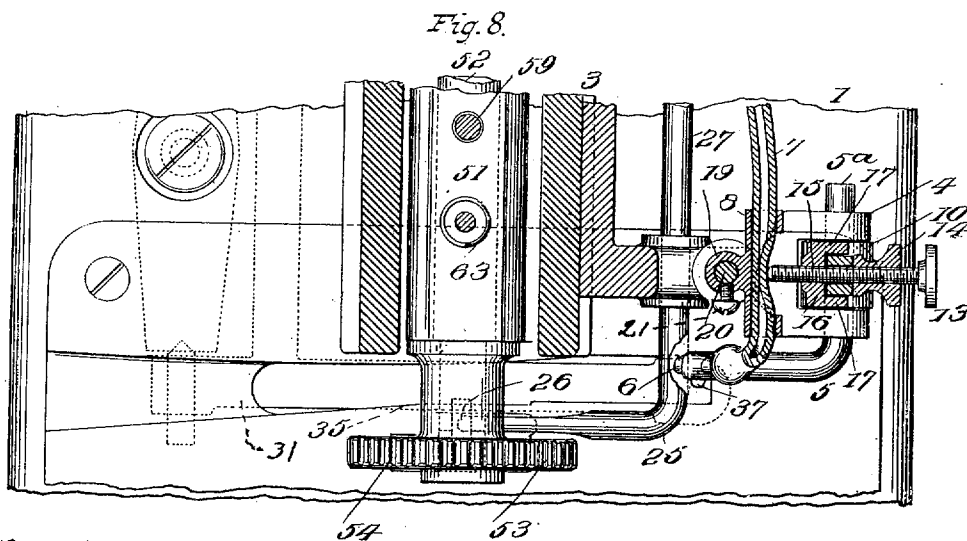
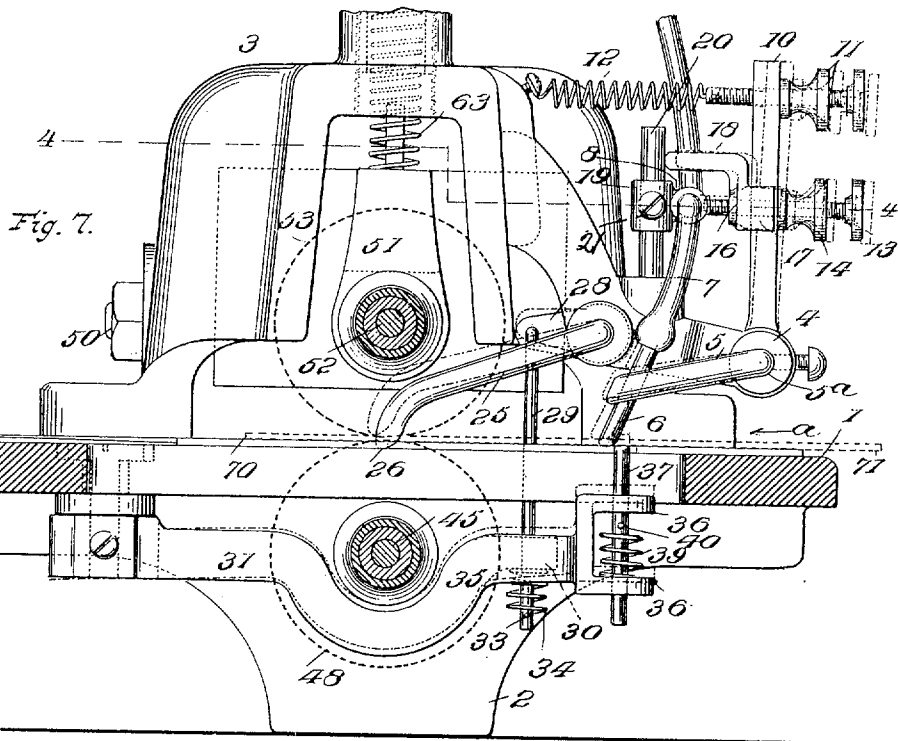
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972,125.

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5 SHEETS—SHEET 4.



Witnesses.
Walter A. Collier.
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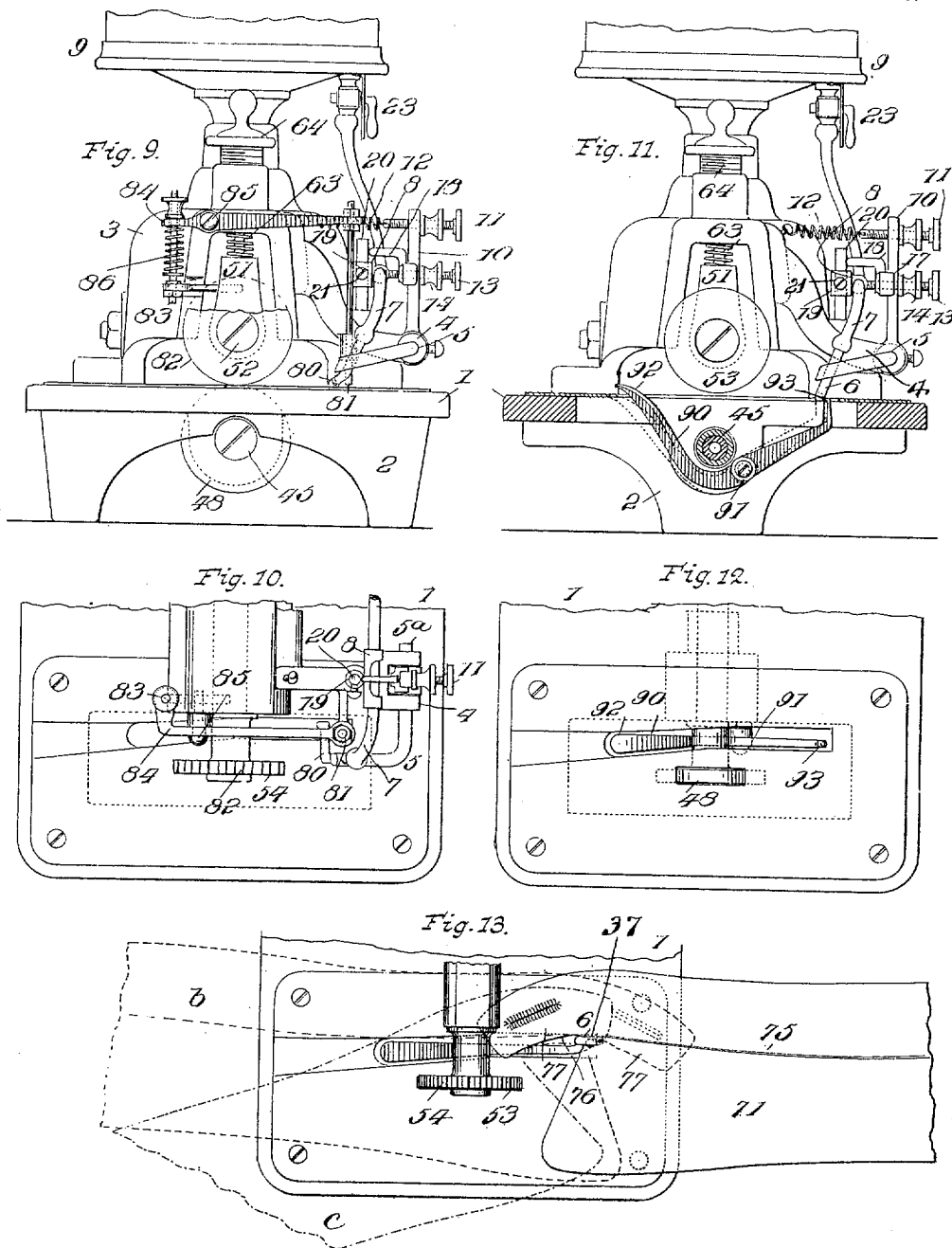
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H. C. MILLER.
DAMPENING MACHINE.
APPLICATION FILED AUG. 12, 1904.

972,125.

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5 SHEETS—SHEET 5.



Witnesses.
Walter D. Giller,
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UNITED STATES PATENT OFFICE.

HENRY C. MILLER, OF WATERFORD, NEW YORK.

DAMPENING-MACHINE.

972,125.

Specification of Letters Patent.

Patented Oct. 4, 1910.

Application filed August 12, 1904. Serial No. 220,570.

To all whom it may concern:

Be it known that I, HENRY C. MILLER, a citizen of the United States, residing at Waterford, in the county of Saratoga and State of New York, have invented certain new and useful Improvements in Dampening-Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to machines for dampening the top of collars along the line they are to be folded on, to avoid disfiguring or cracking the fabric.

It is well known in this art, that it is essential to the rapid manufacture of collars to starch and laundry them flat, and then turn them over along a predetermined line. Heretofore this part of the manufacture of collars has been slow and exceedingly tedious, and to a certain extent expensive. Either too much or too little fluid would be introduced to the collar, with the result that unsatisfactory results followed. If too little fluid is introduced, the collar will invariably crack when folded, if on the other hand the discharge of fluid is too great the laundried effect is destroyed and the collar is therefore disfigured.

It is therefore the purpose and object of this invention to provide a machine for dampening collars along a predetermined line, to render them susceptible to folding to avoid cracking and otherwise disfiguring the fabric. I accomplish this important object by providing a fluid pen adapted to run along the collar seam or adjacent thereto, and connect the pen to a fluid controlling valve, whereby the thickness of the collar in transit will regulate both the starting of, and the discharge of fluid to the collar. In the organization of the pen and valve connections, it is my purpose to provide special means for regulating the position of the valve with a view of making the flow of fluid differential, to accomodate varying unusual conditions, due to the uneven thickness of the fabric.

Another important feature of my invention is to provide means for preventing the

dampening fluid being applied to the tabs of the collars, irrespective of its curve or outline, to avoid stains and disfigurement.

Other objects and advantages will be hereinafter referred to and particularly pointed out in the claims.

In the drawings, Figure 1 is a side elevation of a machine embodying my invention. Fig. 2 is a plan view of the same. Fig. 3 is a plan view of the base of the machine below line 1—1, Fig. 1. Fig. 4 is a vertical section on the line 2—2, Fig. 2. Fig. 5 is a front elevation of my improved machine. Fig. 6 is a transverse section on the line 3—3, Fig. 4. Fig. 7 is an enlarged front end view of the machine, the pen and valve actuating mechanism being shown in operative position in dotted lines. Fig. 8 is a horizontal transverse section on the line 4—4, Fig. 7. Fig. 9 is a front elevation showing a modification. Fig. 10 is a detail plan view of the same. Fig. 11 is a front elevation of a further modification. Fig. 12 is a detail plan view of the same. Fig. 13 is a similar view illustrating the position of a collar being automatically thrown to one side to prevent the wetting fluid staining the collar tab. Fig. 14 is a detail end elevation of a modified form of pen. Fig. 15 is a plan view of said pen, in position on a collar.

The same numerals refer to like parts in all the figures.

1 indicates a base, supported on legs 2, and mounted on the base is a support 3.

In bearings 4 fixed to the support 3, is a rocker arm 5, to the outer free end of which is fastened a tubular pointed pen 6, connected to a tube 7, passing through a clamp 8, forming a part of an automatic valve. The arm 5, is adjustably mounted in the bearing 4 to permit of the pen being laterally adjusted. The opposite end of the tube being attached to a reservoir 9 located above the plane of the base. To the horizontal portion 5^a of the rocker arm 5 is fastened an approximately vertical arm 10, having an adjusting screw 11 at its upper end which has secured to it a spring 12, the opposite end of the spring being fastened to the support 3. Intermediate the screw 11 and rocker arm 5 and opposite the clamp 8, the arm 10 is provided with a second set screw 13. The screw 13 has a jam nut 14 and passes freely through an opening in arm 10, and then passes through a threaded opening 15 in a

stop 16. Stop 16 has wings 17 which fit snugly the sides of arm 10, and projecting from the wings is the stop proper 18, adapted to abut against the post 20 to limit the inward movement of the screw against the tubing 7. The clamp 8 is formed with a cut away portion opposite the end of screw 13, while its back wall forms an abutment against which the screw pinches the tube to cut off, or regulate the flow of fluid to the pen. The clamp member 8 is provided with a sleeve 19 to fit over a post 20 on the support 3, the sleeve being properly fixed in position on the post by a set screw 21. When it is desired to adjust the pen laterally, the screw 5^b is released and the arm 5 is moved in its bearing and the opening in the arm 10, until the point of the pen is properly located, after which screw 5^b is tightened and the parts are held in fixed relation. The point of the pen is normally in line with the upper surface of the base or support, 1, while the reservoir 9 which supplies it with fluid is situated at some convenient point above the plane of the automatic valve and base, but preferably on a boss projecting from the support 3. A hand valve 23 on a short pipe depending from the reservoir affords means for manually controlling the volume of fluid passing to the tube, and on a plate surrounding this valve is an index to enable the operator to observe and intelligently regulate the flow of fluid.

A rocking lever 25 on a shaft 27 mounted in bearings 25^b on the support 3, and the free downwardly extending end 26 of the lever is normally approximately on a plane with the surface of the base, and is in the path of the collar being operated upon, and is lifted thereby. Fast on the horizontal shaft 27 of the rocking lever 25 is a short arm 28, connected by a rod 29 with one arm 30 of a tilting yoke or frame 31. The rod 29 passes freely through an opening in the arm 30, and between the underside of the said arm and a pin or stop 33 on the rod, is interposed a coiled spring 34. On the end of another arm 35 of the yoke 31 are two ears 36, through which passes a rod 37, which is normally below and in line with the curved edge of the tab of a collar placed on the base. A spring 39 encircles the rod 37, and it bears against a pin 40 and the lower ear 36.

Mounted in bearings under the base 1 is a power shaft 45, having suitable clutch 46, and power wheel 47, and at one end is mounted a wheel 48 provided with a smooth periphery. Above the shaft 45, and in the hollow portion of the support 3 is mounted, on trunnions 50, a tilting shaft carrying frame 51, in which is mounted a shaft 52, having at one end a wheel 53 provided with a roughened periphery 54, and at the opposite end of the shaft is keyed a gear wheel meshing with a similar gear 56 on shaft 45. The

wheels 48 and 53 constitute the means I employ for feeding the collar during the dampening operation, and to prevent these wheels coming together to allow the ready introduction of a collar between them also prevent undue wearing of the corrugations of the wheel 53, and eliminating the noise incident to the corrugations when the wheel is in operation, I provide a screw 59, which is adjustably mounted in the frame 51 and passes through an enlarged opening 60, the head of the screw resting on the support 3. In order to obtain sufficient friction to feed the collars between the rollers, I arrange a spring 63 to bear on the frame 51, and adjust the tension of the spring by a threaded nut 64.

The invention as described, operates substantially as follows: The end 70 of a collar 71, forced under the pen 6, in the direction of the arrow *a*, Fig. 7, lifts the pen the thickness of the collar and rocks the rocker arm 5, and throws out the arm 10. This movement of arm 10 withdraws the stop arm 18 from the post 20, also the end of screw 13 from the tube 7, and opens what I have termed an automatic valve, which allows the fluid to pass to the point of the pen. It is to be understood that the operator in feeding a collar directs the seam against the pen, for it is to be remembered that according to my invention, the pen acts as a guide as well as a means for directing the dampening fluid to the collar. The operator continues to push the collar in toward the feed rollers 48 and 53, where it is gripped and pulled along. Just at the time the rollers take hold of the collar, the latter engages the lower end 26 of the rocking lever 25, which elevates it and through the connections, the yoke 31 is lifted, and with it the rod 37. The movement of rod 37 is retarded by contacting with the body of the collar, and the spring 39 is compressed, so that immediately the rear end of the collar passes over the end of the rod, the spring 39, will quickly force it up along side the edge of the tab. As before stated when the operator feeds a collar to the machine, she is careful to see to it that the pen is close to the seam 75, and as most turn over collars are folded along or in correspondence with this seam, and further that the inner edge 76 of the tabs 77 are in alignment with the seam, it will be obvious that when the rod 37, jumps up under the influence of its spring, it will be positioned next to and in contact with the said edge 76. The advance movement of the collar, due to its being fed forward by the rollers, the edge of its rear tab being positively guided against the upper end of the rod 37, throws the rear tab of the collar out of the path of the pen, with the result that, notwithstanding the fact that the supply of fluid has just been cut off, and the pen may be wet, the tab will

be so guided as to absolutely avoid contact with it, and cannot become soiled or disfigured.

5 The peculiar mounting of the pen connection makes a yielding or elastic point of contact of the pen with the collar, so that any irregularity in the thickness of the fabric is reflected to the supply of fluid, and the collar is uniformly dampened.

10 Another important feature of this invention resides in the fact that the pen through which the dampening fluid is introduced to the collar is the sole guiding medium for the collar, and that the said pen as soon as it is
15 elevated begins to discharge the dampening fluid, so that the source of fluid supply is opened and controlled from and at the point of damp. And by the arrangement of the pen and valve, immediately the rear end of
20 the collar is reached, the valve closes, and by reason of the relative size of the opening in the pen, a vacuum is formed which supports the liquid in the pen. This prevents the liquid flowing to the support and soiling
25 the succeeding collar being dampened.

In Fig. 13 is shown a plan in diagrammatic form, illustrating one of the hardest collar outlines to dampen with a machine, and yet such a peculiar shape tab is just as
30 easy to handle as one having a straighter outline. In Fig. 13 the pen 6 is shown in full lines, just being lifted by the introduced end of a collar, while the dotted line position *b* indicates the position of the collar
35 at the moment the rod 37 is released from under the body of the collar to engage the edge of the rear tab at the opposite end, and the dotted line *c* indicates the collar turned out of alinement with the pen, the rod 37 engaging the edge of the tab. This diagram
40 clearly shows how the collar is turned to one side from its seam guided path, so that the pen will not touch the tab at all. If therefore the operator is careful in introducing
45 the collar to the machine, the first tab will not come into contact with the pen, while the tab at the opposite end of the collar will be automatically turned from the path of said pen, as described. Of course, it must be
50 understood that in order to accomplish these results, it is necessary that the end 26 of the rocker arm, and the point of the pen be properly located with relation to the line of the seam. The collar having reached a point
55 in its transit under the pen, the rod 37 is free to rise and also the pen drops to its normal position under the influence of the spring 12 exerted on the arm 10. As the arm
60 10 is drawn toward the support 3 by the spring the end of the screw 13 pinches the tube 7 against the wall of the clamp and the passage of the fluid is stopped, the stop 18 preventing the screw bearing too hard against the tube. As the collar continues its
65 transit and passes the center of the feed roll-

ers, the end 26 of the rocker arm 25 falls to its normal position under the influence of the weight of the yoke 31, and as the yoke tilts, the rod 37 also falls to its normal position ready to permit another collar to pass
70 unobstructed. The collar leaves the rollers, the upper one having been slightly rocked on the trunnions 50 and against its spring 63, and the latter now exerts its pressure and the said roller assumes its normal position.

75 From the description it will be seen that I have provided a dampening device, wherein the pen coacting with the thickness of the collar controls absolutely the volume of fluid, and furthermore the pen against the
80 collar seam is the sole guiding element to direct the collar from one end of its surface to the other where it is to be dampened. And that the rod 37 while set by the collar, and in no way interferes with the pen, acts
85 automatically to relieve said pen of its guiding function, allows it to return to its normal position, and in so doing swings the collar out of the path of travel of the pen and insures the end tab being free of the damp-
90 ening fluid.

My invention is susceptible of many minor changes without departing from the spirit of the present improvement, paramount of
95 which is the various ways by which the pen and automatic tab throw out device may be constructed. For instance, as shown in Figs. 9 and 10, the pen 80 is off set a little, and the tab throw out device 81, is operated from
100 above, and actuated by the collar lifting the upper friction wheel 82. An arm is attached to the bearing of said wheel, and it carries a rod 83 having a screw threaded end, which engages an opening in the short arm of a
105 lever 84, pivoted to the support 3 at 85. A spring 86 is interposed between the arm and the end of lever 84, and a nut on the threaded rod permits of adjustment, the opposite end of lever 84 having secured to it a
110 depending tab throw out device rod 81, whose lower end is normally above the plane of the top of the collar, and as the latter is fed toward the feed rollers, the rod 81 is elevated and spring 86 is compressed to set
115 the tab throw out device. Immediately, however, the collar reaches the rollers the lever 84 is rocked and drives the end of the tab throw out device down on the collar and places its spring under tension, and when
120 the end of the collar is reached, the end of said rod is forced down and engages the edge of the tab and turns the collar to one side as before described.

In the modification disclosed in Figs. 11 and 12, I have shown a lever 90 pivoted at
125 91, one end 92 being normally elevated in the path of a collar, and its opposite end having a projection 93 formed of spring metal, the projection being below the collar plane. When a collar is fed to the machine
130

it passes over the projection 93, and contacts with the end 92 and depresses it, which also creates a spring tension at the end 92 against the bottom of the collar, so that, like in the other forms described, when the end of the collar is reached, the pressure of the spring is liberated and the projection is forced out against the edge of the end tab.

It is frequently desirable to dampen a collar adjacent the seam, and to accomplish this, I attach a guide 95 to the pen, as shown in Figs. 14 and 15, by means of which the pen may be disposed at any distant point from the seam and yet be dampened along a coincident line.

What I claim as new is:

1. In a machine for dampening fabric along a predetermined line, the combination with a fabric support, a pen, means for laterally adjusting the pen, a fluid supply tank, means connecting the pen with the fluid supply tank, and means operated by the passage of a collar under the pen to control the flow of the dampening fluid.
2. In a machine for dampening fabric along a predetermined line, the combination with a fabric support, a pen, a fluid supply tank, a flexible connection between the pen and the supply tank, means for laterally adjusting the pen, and means controlling the flow of fluid, said means being operated by the passage of a collar under the pen.
3. In a machine for dampening fabric along a predetermined line, the combination with a fabric support, a pen, a fluid supply tank, an elastic connection between the pen and the supply tank, a rocking arm having a projection impinging the elastic connection, the rocking arm connected to the pen and being actuated by the collar passing under said pen to control the fluid.
4. In a machine for dampening fabric along a predetermined line, the combination with a fabric support, a pen, a fluid supply tank, means connecting the supply tank and pen, a valve, and means connecting the valve and pen, the passage of a collar under the pen actuating the valve.
5. In a machine for dampening fabric along a predetermined line, the combination with a fabric support, a pen having its point normally in the plane of the support, means for holding the pen in normal position, means for adjusting the pen, a source of supply of fluid, means connecting the pen and the supply of fluid, a valve, means connecting the valve and pen, the pen being elevated by a collar to be operated upon.
6. In a machine for dampening fabric along a predetermined line, the combination with a pen connected to a source of supply of fluid, means for adjusting the pen laterally, a valve, and means actuated by the movement of the pen to a normal position

to close said valve, the pen being moved by a collar to be dampened to open the valve.

7. In a machine for dampening collars along a predetermined line, the combination with a collar support, a pen connected to a source of fluid supply, said pen forming a guide for the collars in transit during the dampening operation, and means for feeding the collars.

8. In a machine for dampening collars along a predetermined line, the combination with a pen connected to a source of fluid supply and adapted to lie in the path of a collar to be operated upon, a tab throw out device in the path of the collar but normally out of the plane of the same, and means operated by the collar to place the tab throw out device under tension and against the body of a collar, said tension forcing the tab throw out device past the plane of the collar and in contact with the edge of the collar tab when the pen reaches the end of the collar body and automatically throws the tab out of the plane of the pen.

9. In a machine for dampening collars along a predetermined line, the combination with a pen connected to a source of fluid supply, of a tab throw out device, said tab throw out device located to automatically assume position against the edge of a collar tab immediately the collar body passes the pen for throwing said tab out of plane of the pen, and means for operating the tab throw out device.

10. In a machine for dampening collars along a predetermined line, the combination with a pen connected to a source of supply of fluid, said pen also serving as a guide while the dampening operation is in progress, of a tab throw out device, means operated by the passage of a collar for setting the tab throw out device, and means connected to the tab throw out device for automatically forcing it against the edge of a collar tab immediately the collar body passes the pen for throwing said tab out of plane of the pen.

11. In a machine for dampening collars along a predetermined line, the combination with a pen, a fluid supply receptacle connected to the pen, means controlling the discharge of fluid, said latter means being operated by the passage of a collar under the pen, a tab throw out device consisting of a bar adapted to engage the edge of a collar tab, and means creating pressure to force the bar in operative position, said latter means being operated by the passage of a collar being dampened.

12. In a machine for dampening collars along a predetermined line, the combination with a pen connected to a source of supply of fluid, and adapted to discharge the fluid only when the collar is in contact with the pen, the thickness of the collar controlling

the volume of the discharged fluid, and mechanism for automatically changing the line of travel of the collar for preventing the fluid contacting with the collar tab.

13. In a machine for dampening a collar along a predetermined line, the combination with mechanism for discharging an automatically controlled volume of fluid on a collar, and mechanism for automatically turning a collar from the said discharging means for preventing the fluid discharging on or contacting with the collar tab.

14. In a machine for dampening a collar along a predetermined line, the combination with mechanism for discharging a supply of fluid on a collar, and mechanism for turning a collar from the said discharging mechanism, both said mechanisms being controlled by the collar.

15. In a machine for dampening a collar along a predetermined line, the combination with mechanism for discharging a predetermined supply of fluid on a collar, mechanism for turning a collar from the said discharging mechanism, both said mechanisms being controlled by the collar, and a pair of rollers feeding the collar.

16. In a machine for dampening a collar along a predetermined line, the combination with a collar feeding means, a fluid pen, of a device for turning a collar out of the path of the pen when the collar tab is reached, and means for operating said device by the collar when the feeding means take hold of the collar.

17. In a machine for dampening a collar along a predetermined line, the combination with a fluid pen, of a device for turning a collar out of the path of the pen when the collar tab is reached, said device being put under tension and in contact with the collar by the collar, to be automatically thrown adjacent the edge of the tab.

18. In a machine for dampening a collar along a predetermined line, the combination with a fluid pen operated by a collar to control the discharge of the dampening fluid, of a tab throw out device, said tab throw out device being spring actuated and mounted in a tilting frame, and means in the path of a collar to tilt the frame to place the spring actuating the tab throw out device under tension to force the end of said tab throw out device past the thickness of the body of the collar and in contact with the edge of a collar tab to turn the collar out of the path of the pen.

19. In a machine for dampening a collar along a predetermined line, the combination with a support, a fluid pen connected to a source of fluid supply, a valve, a connection between the valve and the pen for regulating the passage of fluid, means for adjusting said connection, means for normally holding the point of the pen to the plane of the sup-

port, the pen being operated by a collar being dampened, a valve for manually controlling the flow of the fluid, and means for feeding a collar in contact with the pen.

20. In a machine for dampening collars along a predetermined line, the combination with a support, a fluid pen connected to a source of fluid supply, a valve actuated by the thickness of a collar and controlling the fluid at and from the point of damp, means for throwing the rear tab of a collar out of alignment with the pen, and a lever in the path of a collar to set the tab throwing means, said lever being actuated by the passage of a collar.

21. In a machine for dampening a collar along a predetermined line, the combination with a support, a fluid pen connected to a source of fluid supply, and adapted to be moved by the collar to control the discharge of the fluid, a tab throw out device adapted to be set by the collar to change the path of the latter when the collar tab is reached, a lever in the path of the collar to set said tab throw out device, and a yielding connection between the lever and the tab throw out device.

22. In a machine for dampening a collar along a predetermined line, the combination with a support, a fluid pen connected to a source of fluid supply, and adapted to be moved by the collar to control the discharge of the fluid, a normally inactive tab throw out device adapted to be set by the collar to change the path of the latter when the collar tab is reached, an arm in the path of the collar to set said tab throw out device, means for putting the tab throw out device under tension when set, and a yielding connection between the tab throw out device and the arm.

23. In a machine for dampening a collar along the line of folding, the combination with a collar support, of a pen, a source of supply of dampening fluid located above the plane of the support and connected to the pen, the pen being operated by a collar to discharge the fluid thereon and mechanism for throwing the rear tab of a collar out of the path of the pen.

24. In a machine for dampening a collar along the line of folding, the combination with a collar support, of a pen, means for laterally adjusting the pen, a fluid receptacle located above the plane of the support, a tubular connection between the fluid receptacle and the pen, the pen being made operative by a collar moved between it and the support.

25. In a machine for dampening a collar along the line of folding, the combination with a collar support, of a pen, a fluid receptacle, a valve for controlling the discharge of the fluid, the movement of the valve being controlled by a collar contacting

with the pen, means for adjusting the valve and also the point of the pen with relation to the support, and means for feeding a collar in contact with the pen.

26. In a machine for dampening a collar along the line of folding, the combination with a collar support, of a pen, a fluid receptacle, a conduit connecting the fluid receptacle and pen, a valve, said valve being operated by movement imparted to the pen when a collar is inserted for dampening, the pen in operating bearing against a collar seam acting as a collar guide, and independent means for closing the valve after the pen passes from the face of the collar.

27. In a machine for dampening a collar along the line of folding, the combination with a collar support, of a fluid pen connected to a source of fluid supply, and means for automatically throwing a collar tab out of plane of the pen, said means comprising an operative device in the path of the collar which is engaged by said collar to set the automatic throwing means to engage the tab after the dampening operation is completed.

28. In a machine for dampening a collar along the line of folding, the combination with a collar support, of a fluid pen connected to a source of fluid supply, the pen acting on the seam of a collar to guide the same and to control the discharge of fluid to the collar.

29. In a machine for dampening fabric along a predetermined line, the combination with a fabric support, a pen acting as a guide and communicating with a source of supply of fluid, the flow of dampening fluid being controlled by the collar operated upon acting on the pen, and an adjustable yielding connection holding the pen against the surface of the collar.

30. In combination, means for dampening a predetermined line on a collar, means for laterally adjusting the dampening means, and means for preventing the collar tab contacting with the dampening means.

31. In a machine for dampening fabric along a predetermined line, the combination with a fabric support, a dampening device normally below the plane of a collar, said device being connected to a source of supply of fluid, means for laterally adjusting the dampening device, and a valve opened by the collar acting on the dampening device.

32. In a machine for dampening fabric along a predetermined line, the combination with a fabric support, a dampening device normally below the plane of a collar, said device being connected to a source of supply of fluid, a valve opened by the collar acting on the dampening device, and means actuated by the collar for throwing the tab of a collar out of alinement with the dampening device.

33. In combination, means for dampening the folding lines of collars, said means also serving as a collar guide, and means adapted to deflect the tab ends of the collars away from said dampening means.

34. In combination, means for dampening the folding lines of collars, said means also serving as a collar guide, and means in advance of the dampening means to deflect the tab ends of the collars away from said dampening means.

35. In combination, means for applying moisture to the folding line of collars, including a spring pressed moistening device, said device also serving as a collar guide, and a spring pressed tab end guide to deflect the tab ends out of the line of the moistening device.

36. In combination, means for dampening a predetermined line on a collar, means for preventing the collar tab contacting with the dampening means, means for feeding the collar, and means adjacent the feeding means for setting the means for preventing the tab contacting with the dampening means.

37. In combination, a collar support, a tank, a pen having a duct and communicating with the tank, the free end of the pen being approximately in line with the surface of the support and acting as a guide for the collar, means controlling the liquid, and means for feeding a collar, the pen being operated by the collar to operate the liquid controlling means.

38. In combination, a collar support, a tank, a pen, means connecting the pen and tank, feeding mechanism, means for throwing the tab out of alinement with the feeding mechanism, and means operating the tab throwing means, said operating means being located to be encountered by the collar at the time the feeding mechanism commences to feed the collar.

39. In a machine for dampening fabric along a predetermined line, the combination with a fabric support, dampening means controlling the discharge of fluid, said dampening means being operated by the passage of a collar under the dampening means, a tab throw out device consisting of a pin adapted to engage the edge of a collar tab, and means creating pressure to force the pin in operative position, said latter means being operated by the passage of a collar being dampened.

40. In a machine for dampening fabric along a predetermined line, the combination with dampening means connected to a source of fluid supply, a tab throw out device in the path of the collar but normally out of the plane of the same, and means operated by the collar to place the tab throw out device under tension, said tension to force the tab throw out device past the

plane of the collar and in contact with the edge of the collar tab when the end of the collar body reaches the dampening means and automatically throws the tab out of the plane of the dampening means.

41. In combination, means for dampening a predetermined line on a collar, a source of supply of liquid, the supply of liquid to the dampening means being controlled by the passage of a collar being dampened, means for creating tension on the dampening means, and means for adjusting the dampening means laterally.

42. In a machine for dampening collars along a predetermined line, the combination with dampening means, a tab throw out device located to automatically assume position against the edge of a collar tab immediately the collar tab reaches the dampening means for throwing said tab out of the plane of the dampening means, and means actuated by the collar for operatively setting the tab throw out device.

43. In a machine for dampening collars along a predetermined line, the combination with dampening means operated by a collar to control the discharge of the dampening fluid, a tab throw out device, said tab throw out device being spring actuated and mounted in a tilting frame and means in the path of the collar to tilt the frame to place the spring actuating the tab throw out device under tension to force the end of said tab throw out device past the thickness of the body of the collar and in contact with the edge of the collar tab to turn the tab out of the path of the dampening means.

44. In a machine for dampening fabric along a predetermined line, the combination with a collar support, dampening means, a rock shaft connected to the dampening means, a valve, and means connecting the shaft and the valve, said means being actuated by the collar operated upon acting on the dampening means.

45. In a machine for dampening collars along a predetermined line, the combination with a support, dampening means adapted to be moved by the collar to control the discharge of the fluid, a tab throw out device adapted to be set by the collar to change the path of the collar when the collar tab is reached, a lever in the path of the collar to set said tab throw out device and a yielding connection between the lever and the tab throw out device.

46. In a machine for dampening collars along a predetermined line, the combination with dampening means adapted to discharge the fluid only when the collar is in contact with the dampening means, the thickness of the collar controlling the discharge of fluid, and means for automatically changing the line of travel of the collar to prevent the fluid contacting with the collar tab.

47. In a machine for dampening collars along a predetermined line, the combination with a collar support, spring pressed dampening means connected to a source of fluid supply, said dampening means contributing to guide the fabric in transit during the dampening operation, and means for feeding the collar, said feeding means also serving to force the seam of a collar against the dampening means.

48. In a machine for dampening collars along a predetermined line, the combination with dampening means, a tab throw out device, said tab throw out device located to automatically assume position against the edge of a collar tab immediately the collar tab reaches the dampening means for throwing said tab out of the plane of the dampening means, and means for operating the tab throw out device.

49. In a machine for dampening fabric along a predetermined line, the combination with a pivoted pointed dampening device, means supplying the dampening device with dampening fluid, and means in advance of the dampening device for engaging opposite sides of the fabric to feed the latter during the dampening operation, said means being separable independently of the pivotal movement of the pointed dampening device, means permitting said feeding means to be separated by a collar being dampened, the fabric acting on the dampening device controlling the flow of fluid.

50. In a machine for dampening collars along a predetermined line, the combination with a support, means connected to a source of fluid supply for dampening the collar, a valve actuated by the thickness of a collar and controlling the fluid at the point of damp, and means for throwing the rear tab of a collar out of alinement with the pen.

51. In combination, means for dampening the folding lines of collars, means for preventing the collar tabs contacting with the dampening means, and means controlled by the passage of a collar for regulating the dampening fluid.

52. In combination, means for dampening the folding lines of collars, means for preventing the collar tabs contacting with the dampening means, and means actuated by the collar for placing the means which prevents the collar tabs being dampened in condition for operation immediately the tab is reached.

53. In combination, means for dampening the folding lines of collars, means for preventing the collar tabs contacting with the dampening means, means actuated by the collar for placing the means which prevents the collar tabs being dampened in condition for operation immediately the tab is reached, and fluid supply means actuated by the passage of a collar to control the flow of fluid.

54. In combination, means for dampening the folding lines of collars, means for preventing the collar tabs contacting with the dampening means, means engaging opposite
 5 sides of the collar to feed the same, said latter means being in advance of the means which prevents the tabs being dampened, and means actuated by the passage of the collar to set the means which prevents the
 10 tab being dampened to operate immediately a tab is reached, and fluid supply means actuated by the passage of a collar to control the flow of fluid.

55. In a machine for dampening a collar
 15 along the line of folding, the combination with a collar support, of a dampening means connected to a source of fluid supply, the dampening means acting in conjunction with the collar seam to guide the collar, the pas-
 20 sage of the collar controlling the discharge of fluid, and cooperating means for forcing the collar seam against the dampening means.

56. In a machine for dampening a collar
 25 along the line of folding, the combination with a collar support, of a dampening means connected to a source of fluid supply, the dampening means acting in conjunction with the collar seam to guide the collar, the pas-
 30 sage of the collar controlling the discharge of fluid, and means for preventing the collar tab contacting with the dampening means.

57. In a machine for dampening a collar
 35 along the line of folding, the combination with a collar support, of a pen, a fluid receptacle connected to the pen, a valve, said valve being operated by movement given the pen when a collar contacts with it, said pen
 40 also serving to guide the collar, other means for cooperating with the pen to force the collar seam of the collar against the pen, and independent means for closing the valve
 45 when the pen leaves the operative face of the collar.

58. In a collar dampening machine, the
 45 combination with a support, a pen connected with a source of fluid supply, and a feeding means in advance of the pen to feed the collar under the pen, said pen coacting with
 50 the seam of a collar to guide the latter.

59. In a collar dampening machine, the
 55 combination with a support, a pen connected with a source of fluid supply, feeding means in advance of the pen to feed the collar under the pen, said pen coacting with the seam of a collar to guide the latter, and means for

throwing a collar tab out of the path of the pen.

60. In a seam-dampening machine, the combination with the dampening means, of
 60 a tab throw-out device located beneath the table, and adapted to be projected into operative position by the passing article.

61. In a dampening machine, the combination with a support, dampening means, a
 65 fluid receptacle, a conduit connecting the receptacle and the dampening means, a valve in the conduit, means connecting the valve and the dampening means, the passage of a collar being dampened actuating the valve
 70 to control the supply of fluid, a manually operable valve, and an indicator to determine the flow of liquid to the dampening means.

62. In a seam dampening machine, the combination of dampening means, which also
 75 serves as a seam guide, feed rolls, and adjustable means for separating the feed rolls and holding them in separated position.

63. In a seam dampening machine, the combination of a dampening tube, and means
 80 cooperating with the dampening tube to form a vacuum therein after the seam of the article being operated upon passes said dampening tube.

64. In a seam dampening machine, the
 85 combination of feeding rolls and dampening means including a tube located in advance of the feeding means, and a guide for guiding the seam of a collar.

65. In a dampening machine, the combination with a support, a pen having a small
 90 passageway and connected to a source of fluid supply, and a valve cooperating with the pen, said valve being automatically closed as the collar passes from the pen to close
 95 the passageway therein and thereby form a vacuum to hold the liquid in suspension.

66. In a dampening machine, in combination, a support having an opening, a tab
 100 throw out device pivoted to the support with its free end normally out of the plane of the top surface of the support, and capable of moving through the opening to a point past the surface of the support, and means for moving the free end of the tab throw out
 105 device through the opening.

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

HENRY C. MILLER.

Witnesses:

JNO. IMIRIE,

DEUIZA MATTHEWS.