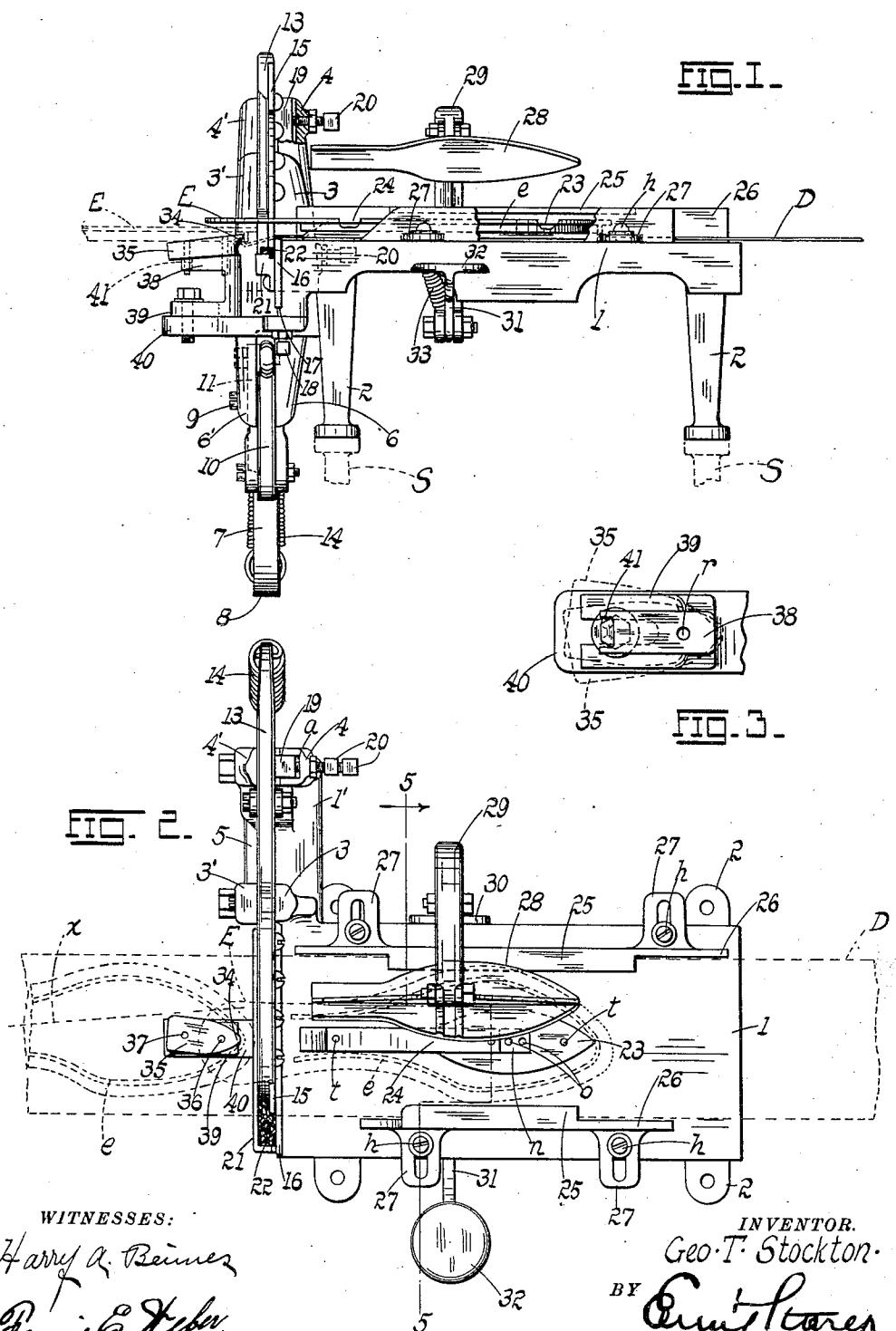


G. T. STOCKTON.
INSOLE DUCK CUTTER AND PASTER.
APPLICATION FILED MAR. 22, 1911.

999,065.

Patented July 25, 1911.

2 SHEETS—SHEET 1.



WITNESSES:

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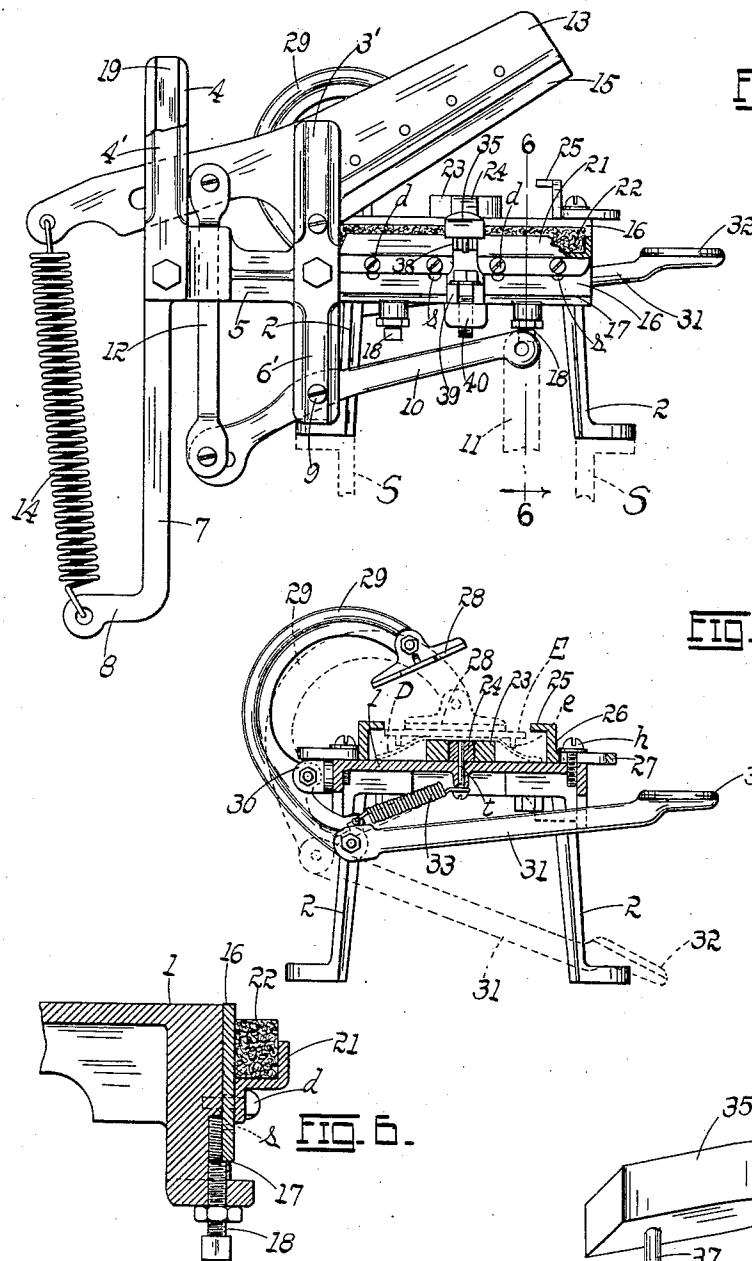
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UNITED STATES PATENT OFFICE.

GEORGE T. STOCKTON, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-THIRD TO GEORGE A. SHIPLEY, OF ST. LOUIS, MISSOURI.

INSOLE-DUCK CUTTER AND PASTER.

999,065.

Specification of Letters Patent. Patented July 25, 1911.

Application filed March 22, 1911. Serial No. 616,261.

To all whom it may concern:

Be it known that I, GEORGE T. STOCKTON, citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Insole-Duck Cutters and Pasters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

10 My invention has relation to improvements in insole-duck cutters and pasters; and it consists in the novel details of construction more fully set forth in the specification and pointed out in the claims.

15 In the drawings, Figure 1 is a side elevation of the machine; Fig. 2 is a top plan thereof; Fig. 3 is a top plan of the bearing for the gage-block; Fig. 4 is an end elevation of the machine; Fig. 5 is a vertical cross-section on the broken line 5—5 of Fig. 2; Fig. 6 is an enlarged cross-sectional detail on the line 6—6 of Fig. 4; and Fig. 7 is a perspective view of the gage-block detached.

25 The present invention is an improvement on the cutter and paster forming the subject-matter of my pending application for Letters-Patent, filed October 15, 1910, Serial Number 587,305; and while contemplating the several objects and possessing the several advantages of the invention covered by said pending application, the present improvement has the additional advantage in that it provides means for mechanically holding the

35 insole to the adhering surface of the web of duck; means for guiding the duck web or sheet through the cutter; means for adjusting the stationary knife-blade; means for centering the insole deposited on the duck;

40 means for adjusting the arresting device for the insole according to the position of the toe relative to the center line of the insole, depending whether the insole is a "right" or "left"; means for oiling the blades of the cutter; and further and other structural features the advantages of which will be fully apparent from a detailed description of the invention, which is as follows:

45 Referring to the drawings, D represents a sheet or web of duck leading from any suitable source of supply, generally a roll (not shown) to which the insole E is pasted, the latter adhering to the web D for a distance corresponding substantially to the

length of the lip e formed on the insole and around which the duck is creased and beaten by the insole machine (not shown) to reinforce the lip preparatory to sewing the welt thereto. These features are of course, well understood in the art and form no part of the present invention. The duck-web D passes, or is drawn normally over the bed 1 of the present machine, said bed being provided with legs 2 resting on and bolted to the tops of the standards S (shown dotted) or to any equivalent fixed supports. Cast with the bed-plate or bed 1 is a bracket 1' from which project upwardly the arms 3 and 4, a casting 5 provided with arms 3' and 4' being bolted opposite the bracket 1', the arms 3', 4', being so spaced as to come opposite their corresponding arms 3, 4, thus forming pairs of upwardly projecting fork-members 3, 3', and 4, 4', respectively, the fork 4, 4', being the longer or higher of the two. The members 3, 3', have downward extensions forming similar bottom fork-members 6, 6', and the outer end of the casting 5 has formed integrally therewith a terminal depending arm or bracket 7 having a right-angled deflected arm 8 as shown (Fig. 4). The bottom fork members 6, 6', receive between them the pivotal pin or screw 9 of a vertically oscillating lever 10 to the end of whose long arm is adapted to be coupled the upper end of a link 11, operated by a foot-lever (not shown) or in any other suitable mechanical manner as set forth in my pending application aforesaid. The end of the short arm of the lever 10 is loosely coupled to a vertically reciprocating bar 12 operating freely through the casting 5, the upper end of said bar being connected to an oscillating blade-carrier lever 13 in a manner so as to allow for the oscillation of the blade with a reciprocation of the bar, the same as in my pending application aforesaid. The free end of the rear arm of the lever 13 is coupled to the adjacent end of a retracting spring 14, the opposite end of the spring being fastened to the arm or finger 8 of the bracket 7, the blade-lever 13 being guided in its oscillations between the fork-members 4, 4'.

50 Coöperating with the blade 15 of the lever 13 is a complementary stationary blade 16, which when in its lowest position may rest on a ledge 17 (Fig. 1), but as the blade wears away it may be raised or adjusted toward the oscillating blade 15 by the ad-

justing screws 18 mounted in the casting forming the bed. In the member 4 is formed a groove *a* which receives a filler-block or take-up 19, the screws 20, 20, being used to keep the block in forcible engagement with the rear arm of the lever 13, whereby the blade 15 carried by the opposite arm of the lever will be kept in a permanently shearing proximity to the stationary 5 blade 16. Vertical adjustment of the blade 16 is allowed for by the slots *s* formed therein which slots receive the screws *d* which carry the angle-piece or pad-holder 21 said angle-piece serving to support in 10 proper position against the blade 16, a strip or pad of felt 22 or equivalent material impregnated with oil or equivalent lubricant to keep the edge of the blade 15 oiled as said blade comes between the blade 16 and the 15 pad.

The sheet D passes over the blocks 23, 24, the former being of a form approaching the body of the insole E deposited thereover, and the latter (24) being a narrow strip to 20 afford support for the shank of the insole, elongation or contraction of the support thus formed being allowed for by a recess *n* formed in the block 23 which recess receives the member 24, the telescopic relation 25 permitting of the adjustments referred to according to the length of insole to be supported. As the medial portion of the web D passes over this raised formation (23, 24) it is raised above the face of the bed 1, the 30 sides of the web being allowed to droop the same as in my pending application, so as to avoid disturbing the lip *e*. The bed is provided with a series of holes *o* engaged by securing pins *t* on the members 23, 24, 35 whereby said members are locked to the bed when they are once adjusted. The drooping sides of the web D are protected by the overhanging ledges or flanges 25 of the guards 26, the latter being provided with 40 slotted lugs or brackets 27 engaged by screws *h* by which the guards may be adjusted to and from the longitudinal center of the bed, or across the bed, said adjustment being desirable to accommodate not only different 45 widths of web D, but to space the ledges 25 the necessary distance apart to allow for the deposit on the adhesive surface of the web, of an insole any width, the ledges 25 thus serving to center the insole as the same is 50 deposited over the blocks 23, 24. Once the insole is deposited on the web D (over the formations 23, 24), the same is pressed mechanically down against the web by the plate 28 (corresponding in a general way to the 55 60 tour of the insole, Figs. 1, 2) at the free end of the long arm of a curved lever 29 mounted pivotally between the lugs or ears 30 in the rear of the machine, the short arm of the lever having rigidly secured thereto an arm 65 31 extending under the bed plate and ter-

minating in front of it in an expanded hand rest 32, a depression of which at the proper moment (dotted position Fig. 5) will cause the lever 29 to oscillate across the bed 1, and cause the plate 28 to press on the deposited insole E and paste the same to the web D. Upon release of the member 31, the retracting spring 33 will restore the parts to normal position. As the web D with its adhering insole is drawn out of the machine 70 under the knife 15, the toe of the lip *e* finally temporarily arrests the sheet by coming in contact with the nose 34 of the gage block 35 (on the order described in my pending application) the block in the present instance being provided with depending pins 36, 37, the former serving as a pivot for the block being received by an opening *r* (Fig. 3) formed in the platform 38 of the adjustable angle-bracket 39, the forked base of the 75 bracket being secured to an arm 40 of the bed-plate whereby adjustment of the bracket to and from the body of the bed may be made, to adjust the position of the temporary arrest of the web D, previously referred to. The other pin 37 plays between the sides of the recess 41 formed in the platform 38 the width of the recess being sufficient to permit the block 35 to oscillate about the pin 36 the required amount as the block 80 accommodates first a "right" insole and then a "left." The medial line *x* of an insole (Fig. 2) is always to one side of the toe end of the lip *e*, so that as the insole is withdrawn from the machine preparatory to 85 serving the web D by the knife 15, the toe of the lip will rock or oscillate the gage-block 35 first to one side and then the other, depending on whether the insole is a "right" or a "left" (Fig. 3). If the insole were a 90 symmetrical one with the toe of the lip *e* on the line *x* the oscillating block 35 would not be necessary. The sides of the recess 41 limit the degree of oscillation of the block by arresting the pin 37 which plays between 95 100 said sides.

The operation is very simple:—As the web D is drawn over the bed and over the blocks 23, 24, the insole E with the lip *e* facing the web is deposited on the latter over the 105 blocks, the plate 28 being brought down upon the insole so as to cause it to adhere to the web. By the time the toe of the lip *e* encounters the nose 34 of the gage-block 35, the knife 15 is brought down thus severing the web. The springs 33, and 14, restore the parts to their normal positions.

Having described my invention, what I claim is:—

1. In combination with a bed for the passage of sheet material, a formation raised above the surface of the bed and traversed by said sheet, and mechanical devices for pressing against said sheet an adhering member deposited on the sheet.

2. In combination with a bed for the passage of sheet material, a formation raised above the surface of the bed and traversed by said sheet, and mechanical devices for 5 pressing against said sheet an adhering insole deposited on the sheet over said raised formation.

3. In combination with a bed for the passage of sheet material, a formation raised 10 above the surface of the bed and traversed by said sheet, and an oscillating arm adapted to engage an insole deposited on the sheet over the raised formation and press said insole against the sheet.

15 4. In combination with a bed for the passage of sheet material, a formation raised above the surface of the bed and traversed by the medial portion of said sheet whereby said medial portion is raised and the sides 20 are allowed to droop, and guards for protecting the drooped sides of the sheet.

5. In combination with a bed for the passage of sheet material, a formation raised above the surface of the bed and traversed 25 by the medial portion of said sheet whereby said medial portion is raised and the sides are allowed to droop, the upper face of the sheet being adapted to receive an insole deposited thereon over the raised formation 30 aforesaid, and side guards adjustable across the bed for centering the insole and serving to protect the drooped sides of the sheet.

6. In a machine of the class described, 35 a bed for the passage of sheet material, a knife movable across the path of the sheet, and an oscillatable gage beyond the knife for the purpose set forth.

7. In combination with a bed for the passage of sheet material, a formation raised

above the surface of the bed and traversed 40 by the medial portion of the sheet whereby the same is raised and the sides of the sheet are allowed to droop, the raised portion being adapted to receive an insole, an arm pivotally mounted adjacent the bed and adapted to be oscillated across the bed, and a plate on the free end of said arm formed to engage the insole upon oscillation of the arm toward the bed, and to force the insole against the sheet, the exposed side of the 45 sheet being coated with adhesive whereby the insole is caused to adhere, means for centering the insole and for guarding the drooped sides of the sheet.

8. In a machine of the character described, a bed for the passage of a sheet and insole mounted thereon, a knife for severing the web, and an oscillating gage-block for temporarily arresting the sheet by engaging 50 the toe of the lip of the insole.

9. In a machine of the character described, a gage-block provided with a pivotal pin, a support therefor provided with a recess, and a second pin on the block operating in said recess.

10. In combination with a bed for the passage of sheet material, a formation raised above the surface of the bed and traversed by the medial portion of said sheet, and means on the sides for centering an insole 55 deposited on the web over the raised formation.

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

GEORGE T. STOCKTON.

Witnesses:

EMIL STAREK,
FANNIE E. WEBER.

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