

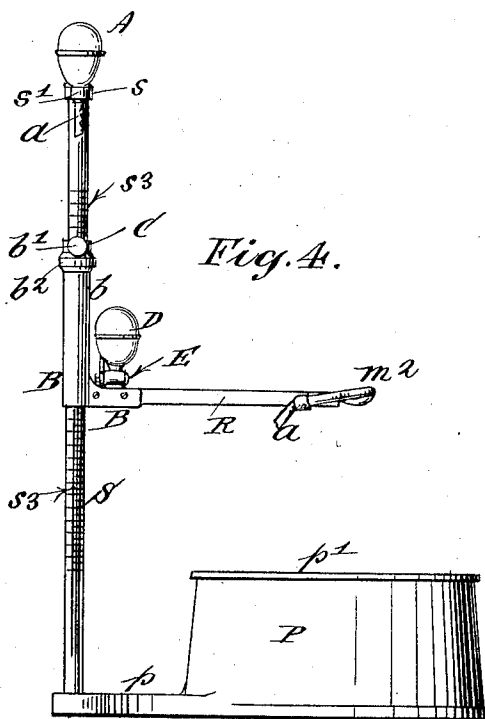
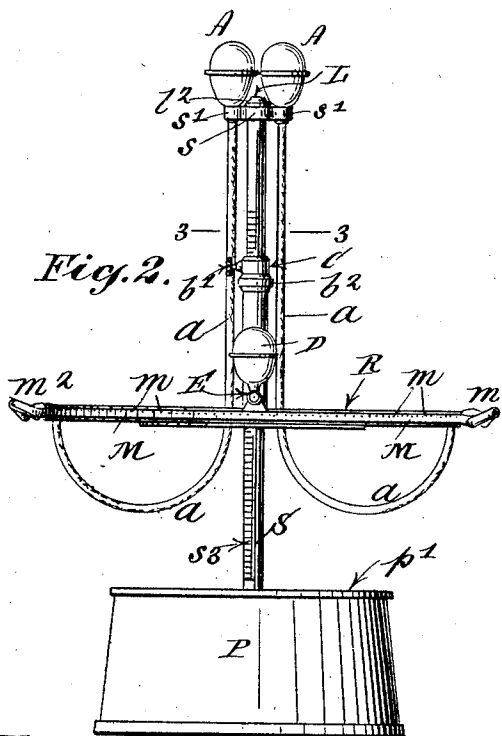
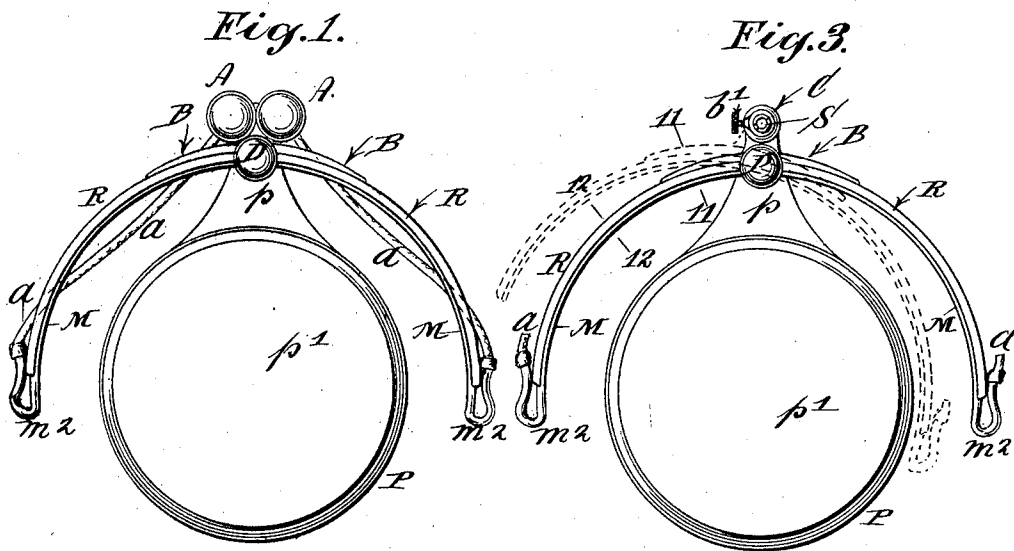
J. L. GUTMAN.  
GARMENT MARKING DEVICE.

APPLICATION FILED JULY 30, 1909. RENEWED DEC. 30, 1910.

1,002,680.

Patented Sept. 5, 1911.

2 SHEETS-SHEET 1.



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2 SHEETS—SHEET 2.

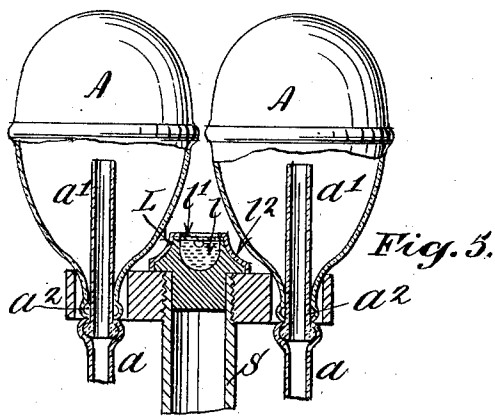


Fig. 5.

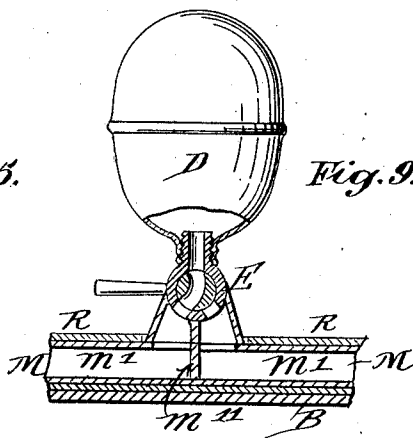


Fig. 9.

Fig. 7.

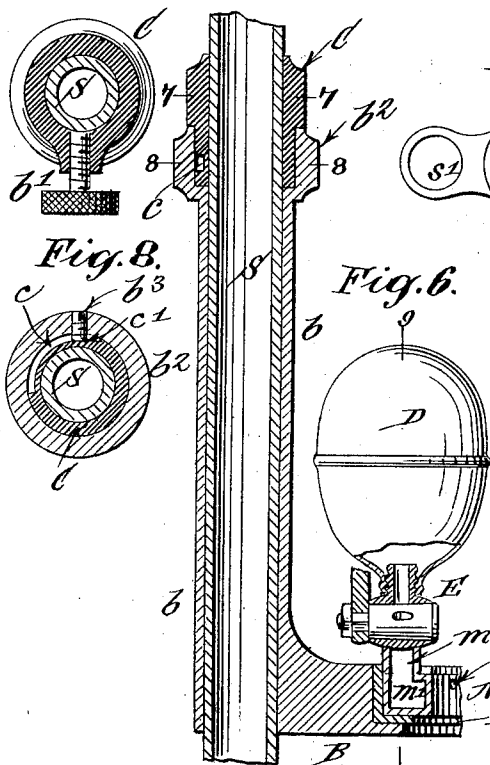


Fig. 6.

Fig. 8.

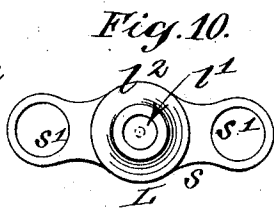


Fig. 10.

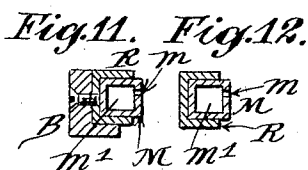


Fig. 11. Fig. 12.

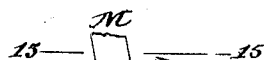
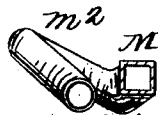


Fig. 13.

Fig. 14.



Fig. 15.



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# UNITED STATES PATENT OFFICE.

JULIUS L. GUTMAN, OF NEW YORK, N. Y.

GARMENT-MARKING DEVICE.

1,002,680.

Specification of Letters Patent.

Patented Sept. 5, 1911.

Application filed July 30, 1909, Serial No. 510,479. Renewed December 30, 1910. Serial No. 600,087.

To all whom it may concern:

Be it known that I, JULIUS L. GUTMAN, a citizen of the United States, residing in the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Garment-Marking Devices, of which the following is a specification.

My improvements relate to garment marking devices in which a marking powder is ejected through a series of holes in the convex surface of a horizontal marking tube, as set forth in Letters Patent No. 870,209 issued November 5th, 1907.

The object of the present invention is to attain more perfect control of the marking powder, and a more perfect alinement thereof as ejected from the marking tube; to prevent clogging, and provide adequate means for blowing out and cleaning the marking tube, and to otherwise improve and perfect the garment marking device as a whole.

The invention, which is the result of investigation and experiment undertaken for the purpose of obviating difficulties encountered in placing this type of marker on a commercial basis, consists in the specific construction and arrangement of parts hereinafter described and claimed.

In the accompanying drawings, Figure 1, is a top view of my improved garment marking device; Fig. 2, a front elevation thereof; Fig. 3, a horizontal section taken upon plane of line 3—3— Fig. 2; Fig. 4, a side elevation; Fig. 5, is a sectional elevation upon an enlarged scale of the upper end of the standard &c.; Fig. 6, is a similar view of a portion of the standard, adjustable bracket sleeve &c.; Fig. 7, is a transverse section taken on plane of line 7—7— Fig. 6; Fig. 8, a transverse section taken on plane of line 8—8— Fig. 6; Fig. 9, is a sectional elevation taken on plane of line 9—9— Fig. 6; Fig. 10, is a top view of the cross head and spirit level on top of the standard; Fig. 11, is a vertical transverse section taken upon plane of line 11—11— Fig. 3; upon an enlarged scale; Fig. 12, is a similar view taken upon plane of line 12—12— Fig. 3; Fig. 13, is a top view of the end loop of one of the marker tubes; Fig. 14, is an end view of the same; Fig. 15, is a section taken on plane of line 15—15— Fig. 13.

P, is a platform, preferably of cast metal and of circular form on which the person wearing the garment to be marked is to stand. It also acts as a base and support for the standard S, which is rigidly secured to the rear arm or extension *p*, of said platform P. The longitudinal axis of the standard S, is set accurately at right angles to the bearing surface *p'*, of the platform base P, so that when the latter is horizontal the standard S, will be absolutely vertical; and in order that this essential position may be attained with correctness the top of the standard S, is formed with a spirit level L, so that any inclination of floor support may be detected and corrected, as it is most important that the person wearing the garment to be marked stand perfectly upright and parallel to the standard S, in order to attain the best results in marking.

The standard S, by preference consists of a metallic tube the lower end of which is screwed into or otherwise rigidly attached to the extension *p*, of the base P. Fitting in the upper end of this standard tube is the cup *l*, containing the spirit level and covered with the glass *l'*, and cap *l*<sup>2</sup>.

The attachment of the standard S, to the extension *p*, of the platform P, is important in that it not only renders them inseparable and rigid, but it also renders positive and maintains the proper relation of the marking tubes M and platform P,—the marking tubes M, when properly set, being concentric to the center of the platform P, as shown in Figs. 1 and 2.

The marking tubes M are of peculiar construction in that their inner concave surfaces are flat or substantially so, and the eject holes *m*, are situated at or near the upper portion of the marker tubes, opening into the passages *m'*, *m'*, above the center thereof, as will be readily seen by reference to Figs. 11, and 12. This arrangement of the eject holes *m*, tends to prevent their clogging, since any powder remaining in the tube after a blast will settle to the bottom of the tube and below the eject holes *m*. In fact this construction virtually provides each marking tube M, with a longitudinal pocket or trough for the accommodation of residual powder, leaving the eject holes *m*, free and unobstructed for the next blast.

I use two quarter circle marking tubes M,

because I find that I can thereby attain more perfect results in marking as compared with the use of a marking tube having a single semi-circular passage as in the Letters Patent hereinbefore referred to. Of course in practice, and as shown in the accompanying drawings, a single semi-circular tube may be used, divided or partitioned centrally at  $m''$ , Fig. 9, but this is a minor detail of construction, the essential feature being that two quarter circle marking tubes are provided, each of which is connected at its outer end with its own independent blast tube  $a$ .

I prefer to make the marking tube M square or nearly so in cross section (as shown in Figs. 11 and 12) except at their outer ends where they gradually merge into circular form in cross section,—the blast tubes  $a$ , being attached to their extremities. Between the outer extremities and the square portion of each tube M, I form a semi-circular loop  $m^2$ , for two purposes; first to impart to the blast of air and marking powder a gyratory motion and insure ease of entrance into the square or marker portion of the tube, and secondly, to obviate an abrupt and sharp ending of the tube which would be objectionable in that it becomes entangled in the garment of the person stepping or standing upon the platform P. Furthermore by the use of the loops  $m^2$ , the connections with the blast tubes  $a$ , are relegated to the rear of the marking tubes, out of the way, but in a position most convenient for the manipulation and disposition of the blast tubes  $a$ , and connections.

In order to prevent the sagging of the marking tubes M, and render them rigid and true in alinement, I mount them in a semi-circular reinforcing channel R, preferably of cast iron or other suitable metal, to which the marking tubes M are rigidly secured. The reinforcing channel R is in turn rigidly secured to a horizontal bracket B, which is formed with a vertical sleeve  $b$ , fitting over the standard S, and suspended adjustably thereon by means of a binding screw  $b'$ . This binding screw  $b'$ , is mounted in a collar C, coupled to the flanged upper end of the sleeve  $b$ , by a screw stud  $b^2$  Fig. 8, on the head  $b^2$ , of the sleeve  $b$ , which screw stud  $b^2$ , projects into a horizontal groove  $c$ , in the collar C, as will be seen by reference to Figs. 6, and 8. When the screw stud  $b^2$ , is in contact with the shoulder  $c'$ , at one end of the groove  $c$ , the bracket B, is in position for marking, with the tubes M concentric to the platform P. The groove  $c$ , however allows the bracket B, and tubes M, &c., to be swung to one side if desired, sufficiently to give free access to the platform P, and facilitate mounting thereon by the individual wearing the skirt to be marked, after which the bracket B, is swung back into position

with the stud  $b^2$ , against the shoulder  $c'$ , thereby again bringing the marking tube M, concentric with the platform P.

At the upper end of the standard S, is a cross head  $s$ , formed with loops  $s'$ ,  $s'$ , the edges of which constitute rests for the blast bulbs A, to which the blast tubes  $a$ , are connected indirectly through the medium of the stand tubes  $a'$ . The lower end of each stand tube  $a'$ , is beaded, to expand and hold the end of the blast tube  $a$ , and the lower end or mouth of each blast bulb A, is provided with a ring  $a^2$ , fitting over the stand tube  $a'$ , as will be seen by reference to Fig. 5.

The loops  $s'$ , are of sufficient diameter to admit of the passage of the blast tubes  $a$ , so that the blast bulbs may be raised and conveniently manipulated. When it is desired to charge the blast bulbs with marking powder, the stand tubes  $a'$ , are withdrawn, the powder introduced by means of a funnel, and the stand tubes replaced in the blast bulbs. The stand tubes are important in that they prevent the clogging of the blast tubes  $a$ , since the powder naturally settles at the bottom of the blast bulbs and around the stand tubes. Hence the powder is supplied to the blast tubes only from the upper parts of the blast bulbs A, when the latter are compressed, thereby insuring an even flow and admixture of air and powder, with no excess of the latter. As a result neither the blast tubes  $a$ , nor the marker tubes M are overcharged with powder, and the marking is done smoothly and evenly.

In order to provide means for effectually blowing out and cleaning the marker tubes M, occasionally as may be found necessary, I provide an auxiliary blast bulb D, connected with a three-way cock E, as shown in Fig. 9. This three-way valve E is interposed between the inner ends of the marking tubes M, so as to be available for either; and when not in use is turned so as to cut off both of said tubes from communication with the blast bulb D.

The eject holes  $m$ ,  $m$ , are sufficient in number to insure an adequate marking of the garment, and are arranged in a longitudinal horizontal series in each marker tube.

The standard S, is marked with a scale  $s^2$ , to act as a guide in effecting the vertical adjustment of the marking tubes with relation to the platform P.

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

1. In a garment marking device, the combination of a base platform and a standard rigidly rising therefrom, of a spirit level mounted on said standard, an adjustable slide on said standard, means for holding said slide in prescribed positions on the standard, a marking tube on said slide formed with a series of eject holes at right angles to the said standard, means for in-

roducing air at the ends of the tubes, and means for introducing air intermediate such ends, for the purposes set forth.

2. In a garment marking device, the combination of a base platform and a standard consisting of a hollow tube rigidly rising therefrom, of a spirit level mounted on said standard, an adjustable slide on said standard, means for holding said slide in prescribed positions on the standard, a marking tube on said slide formed with a series of eject holes at right angles to the said standard, means for introducing air at the ends of the tubes, and means for introducing air intermediate such ends, for the purposes set forth.

3. In a garment marking device of the character described, the combination of a vertical standard, an adjustable bracket on said standard, means for holding said bracket in prescribed positions on said standard, a curved marking tube on said bracket formed with a central vertical dividing partition extending across the tube, and with a horizontal series of eject holes formed in the concave side of said marking tube, and means for introducing into each extremity of said marking tube an air blast carrying a marking powder, for the purpose described.

4. In a garment marking device of the character described, a curved marking tube formed with a vertical dividing partition extending across the tube, a concave surface which is substantially flat vertically, and with a series of eject holes opening through said concave surface above the center of the tube, means for introducing air into each extremity of said tube and means for introducing into said tube an air blast carrying a marking powder, whereby the latter is ejected from the upper portion of said tube for the purpose of preventing the clogging of the eject holes.

5. In a garment marking device of the character described, the combination with the vertical standard of an adjustable bracket mounted thereon, a curved marking tube mounted on said bracket and formed with horizontal series of eject holes, a three way valve interposed centrally between the ends of said tube, means dividing said tube into two sections, and an air blast bulb connected with said three way valve, for the purpose described.

6. In a garment marking device of the character described, the combination of the vertical standard, a vertically adjustable bracket thereon, a marking tube mounted on said bracket and formed with a series of eject holes disposed at right angles to the standard, and a vertical dividing partition extending across the tube, a blast tube connected with said marking tube, a blast bulb connected with said blast tube, means

for introducing air into each extremity of said tube and a stand pipe connected with said blast tube and projecting upward into the blast bulb, for the purpose described.

7. In a garment marking device of the character described, a marking tube formed with a series of eject holes the outer end of said marking tube terminating in a loop, to the end of which a blast tube is attached, said blast tube, and a blast bulb attached thereto and an auxiliary blast bulb connected with said marking tube intermediate its ends for the purpose described.

8. In a garment marking device of the character described, a curved marking tube formed with a series of eject holes above the center of said tube, the latter being substantially square in cross section and merging at its outer end into a loop which is circular in cross section, and to which the blast tube is attached, said blast tube, and a blast bulb attached thereto for the purpose described.

9. In a garment marking device of the character described, the combination with the vertical standard, of an adjustable bracket mounted thereon, a curved marking tube mounted on said bracket and formed with a horizontal series of eject holes, said marking tube being formed with a central vertical partition dividing it into two sections, blast tubes and blast bulbs connected with the extremities of the tube and a cross head on the top of said standard formed with loops for the support of said blast bulbs and blast tubes, substantially as set forth.

10. In a garment marking device of the character described, the combination of a vertical standard, an adjustable bracket on said standard, means for holding said bracket in prescribed positions on said standard, a reinforcing channel rigidly secured to said bracket, a curved marking tube rigidly secured within and to said reinforcing channel and formed with a horizontal series of eject holes, and means for introducing into said marking tube an air blast carrying a marking powder, for the purpose described.

11. In a garment marking device of the character described, the combination of a standard, a bracket thereon, a curved marking tube on the bracket formed with a central transverse vertical dividing partition, and a series of educt holes, and means for introducing into each extremity of said marking tube an air blast carrying a marking powder.

12. In a garment marking device of the character described, the combination of a standard, a bracket thereon, a curved marking tube on the bracket formed with a central transverse vertical dividing partition, a series of educt holes, means for introduc-

ing into each extremity of said marking tube an air blast carrying a marking powder, and auxiliary means for introducing an air blast intermediate the ends of said marking tube.

13. In a garment marking device of the character described, the combination of a standard, a bracket thereon, a curved marking tube on the bracket formed with a central transverse vertical dividing partition, a series of educt holes, means for introduc-

ing into each extremity of said marking tube an air blast carrying a marking powder, auxiliary means for introducing an air blast intermediate the ends of said marking tube, and valve-controlled means intermediate the tube and the auxiliary air blast means.

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