No. 764,454.

PATENTED JULY 5, 1904.

I. W. GILES. COATING EYELETS. APPLICATION FILED MAR. 10, 1904.

NO MODEL.



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Patented July 5, 1904.

UNITED STATES PATENT OFFICE.

ISAAC W. GILES, OF NEW BEDFORD, MASSACHUSETTS, ASSIGNOR TO ATLAS TACK COMPANY, OF FAIRHAVEN, MASSACHUSETTS, A COR-PORATION OF MASSACHUSETTS.

COATING EYELETS.

SPECIFICATION forming part of Letters Patent No. 764,454, dated July 5, 1904.

Application filed March 10, 1904. Serial No. 197,408. (No model.)

To all whom it may concern:

Be it known that I, ISAAC W. GILES, a citizen of the United States, and a resident of New Bedford, in the county of Bristol and State of Massachusetts, have made certain new and useful Improvements in Coating Eyelets, of which the following is a specification.

Eyelets, especially such as are applied to shoes and garments, are coated with Japan or 10 other kind of varnish or paint. In applying the coat, which is commonly done by means

of rotating rolls, the funnel-shaped throats or passages of the eyelets are apt to become filled more or less, and thus obstructed by an 15 accumulation of the coating material therein. I have found that this may be proposed from

I have found that this may be removed from the eyelets and more evenly distributed on the enlarged ends or heads of the same by means of an air blast or current directed 20 through the eyelets.

In the accompanying drawings I illustrate the method and apparatus by which my invention is carried out.

Figure 1 is a perspective view including the ²⁵ main portions of the apparatus, and Fig. 2 is a detail section illustrating the attachment of the eyelets to a holder or paper-board.

The eyelets *x* are attached to a paper-board

1 by inserting them in holes therein—that is 3° to say, the eyelets, which are tapered in the usual way, are forced into holes in the board, which are made of slightly less diameter than the greatest diameter of the body of the eyelets. The eyelets are thus held by friction

35 while the coat is applied thereto. The paper boards or strips 1, holding a series of eyelets x, as shown, are successively carried forward between rolls 5 and 6, the latter being provided with circumferential grooves corre40 sponding in number and location to the lon-

gitudinal rows of the eyelets in the board 1. Thus the upper ends of the eyelets do not come in contact with the roll 6, while their lower ends or heads pass in contact with the

45 roll 5. The latter takes up varnish or other fluent coating material from the transfer-roll
4, which in turn receives it from the take-up roll 3, that rotates in a vat 2, containing a

suitable quantity of the coating material. Thus the heads of the eyelets x are coated, 50 and in this operation their throats or passages are obstructed more or less by a surplus quantity of the coating material. This is removed or distributed by means of the apparatus composed of an air-chamber 7, a pipe 8, and a 55 blower or exhaust-fan 9. The chamber 7 is made of the same or a greater width than the eyelet-carrying board or strip 1 and is also provided with a mouth or opening 7^a, the same being located on the upper side of the 60 chamber and extending nearly the width of the strip 1.

It is apparent that if a suction be created by the fan 9 air will be drawn down through the eyelets and into the chamber 7, as indi-65 cated by arrows, and, on the other hand, if the air-current be forced upward through the chamber 7 a series of blasts or currents will be directed upward through the eyelets, with the same effect as in the other case. Thus while 70 either suction or a forced blast may be employed I prefer the former as being more effective and as securing a better distribution of the Japan varnish or other material with which the eyelets may be coated. 75

A particular advantage of my method and apparatus is that a much thicker coat may be applied to the eyelets at one operation than has been heretofore practicable, and the coat is also applied in sufficient quantity to extend ⁸⁰ to the outer or peripheral edge of the bend or flange of the eyelets.

It is apparent that the mouth 7^{a} of the airchamber must be placed as close as practicable to the board 1, and it should also be arranged 85quite near the rolls 5 and 6—in fact, as near as possible.

What I claim is—

1. In coating eyelets, the improved method of removing and distributing the surplus var- 90 nish or other fluent coating material which accumulates in the throats thereof, by producing a suction below the eyelets, whereby a series of induced downward currents of air are produced, as described. 95

2. The combination, with means for apply-

ing a coating material and a strip carrying eyelets in the manner described, of an air-blast attachment comprising an air-chamber having a mouth over which the eyelets are passed, 5 and means for producing a blast, substantially

as described. 3. The combination, with an eyelet-carrying strip and rolls for applying a coating material to the eyelets, of an air-suction cham-

ber arranged contiguous to the rolls and hav- 10 ing an open mouth on the upper side, and an exhaust-fan connected with said chamber, whereby downward currents of air through the eyelets may be produced as described. ISAAC W. GILES.

Witnesses:

CHARLES W. TOBEY, ROBERT BETAGH.