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MOISTENING DEVICE FOR TOBACCO PACKAGING MACHINES.

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1,365,400. **Patented Jan. 11, 1921.**

Fig. 1.

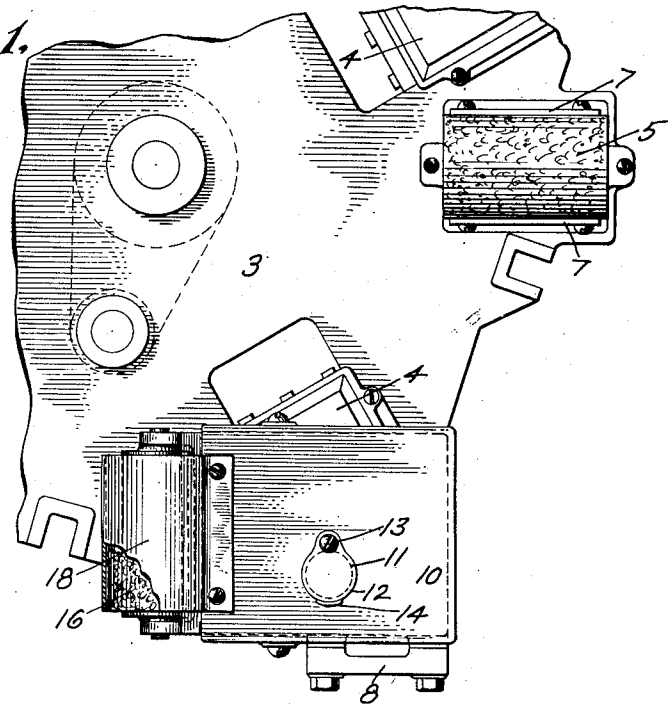
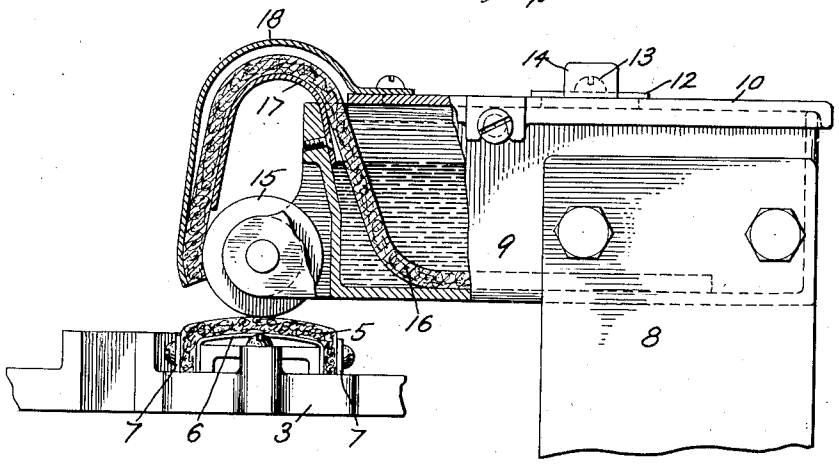


Fig. 2.



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UNITED STATES PATENT OFFICE.

GEORGE WILBUR GWINN, OF BROOKLYN, NEW YORK, ASSIGNOR TO AUTOMATIC PACKING & LABELING COMPANY, A CORPORATION OF NORTH CAROLINA.

MOISTENING DEVICE FOR TOBACCO-PACKAGING MACHINES.

1,365,400. Specification of Letters Patent. Patented Jan. 11, 1921.

Application filed May 18, 1920. Serial No. 382,276.

To all whom it may concern:

Be it known that I, GEORGE W. GWINN, a citizen of the United States, residing at Brooklyn, county of Kings, and State of New York, have invented a new and useful Improvement in Moistening Devices for Tobacco-Packaging Machines, of which the following is a specification.

This invention relates to an improvement in moistening devices for tobacco packaging machines.

In machines for packaging tobacco in which a plunger is used to ram the tobacco into a partially formed inclosing wrapper, considerable trouble is experienced due to the accumulation of a sticky substance exuding from the tobacco and adhering to the operating surface of the plunger. This sticky substance must be removed at frequent intervals in order to prevent the retreating plunger from carrying with it a part of the tobacco charge, and ordinarily the machine must be stopped every time the plunger is cleaned. The main object of the present invention is the production of a moistening device for such machines which will automatically wipe the operating surface of the plunger every time it is operated, thus eliminating machine stoppage and increasing machine output. With this and other objects not specifically mentioned in view, the machine consists in certain constructions and combinations which will be hereinafter fully described and then specifically pointed out in the claims hereunto appended.

In the accompanying drawing, which forms a part of this specification and in which like characters of reference indicate the same or like parts, Figure 1 is a plan view of a device constructed in accordance with the invention and shown in operative position on a fragment of a tobacco packaging machine well known in the art; and Fig. 2 is a side elevation of the device shown in Fig. 1, but on an enlarged scale and partly shown in section.

In carrying the invention into effect, there is provided a source of moisture supply, a moisture applying device associated with said source of supply and deriving moisture therefrom, and a traveling plunger-wiping pad intermittently contacting with said device to receive moisture therefrom and adapted to contact with and thus wipe the operating surface of the machine plunger. In the best constructions, a series of traveling plunger-wiping pads, which intermittently and successively contact with the moisture supplying device and with the machine plunger, is employed; and the plunger-wiping pads are mounted on an intermittently rotatable turret forming a part of the packaging machine proper. The above indicated parts and devices may be varied in construction within the scope of the claims. The particular device selected to illustrate the invention is but one of many possible concrete embodiments of the same, and the invention therefore is not to be restricted to the precise details of the specific structure shown and described.

Referring to the drawings, 3 indicates an intermittently rotating turret of a tobacco packaging machine provided with a series of packaging pockets 4 and a corresponding series of plunger-wiping pads 5 formed of felt or other suitable moisture retaining substance, each pad being held in place on the turret by means of a supporting plate 6 and side plates 7 screwed to the turret, as clearly shown in the drawing.

Rising from the main frame of the machine in connection with which the device is used, is a bracket 8 which supports an inclosed reservoir 9 provided with a removable cover 10. The cover 10 has a filling aperture 11 therein, and this aperture is normally closed by means of a covering plate 12 pivoted on a screw 13 and having an upturned lug 14 by means of which it may be swung to one side to expose the filling aperture 11.

For the reason that water coming in contact with tobacco during a packaging operation tends to produce mold, the liquid used in the reservoir 9 is preferably an innocuous mixture of glycerin and rum which has no injurious effect upon the tobacco. The reservoir 9 is adapted to hold sufficient liquid to last throughout a half day's run without machine stoppage.

Associated with the reservoir 9 and supported thereby, is a moisture applying roller 15 which lies in the path of the plunger-wiping pads 5 as the turret is rotated and contacts with said pads. For the purpose of keeping the surface of the roller 15 moist there is provided a wick 16 partly immersed in the liquid in the reservoir and supported by a curved plate 17 screwed to the reservoir

wall nearest said roller. This wick is protected by a covering plate 18 screwed to the cover 10 before referred to and adapted to hold the free end of the wick constantly against the roller 15. As the turret intermittently rotates, the plunger-wiping pads 5 successively come into contact with and rotate the roller 15 so that moisture is transferred from the roller to the pad in contact therewith and a freshly moistened part of the roller surface is brought to position to transfer its moisture to the next pad. The pads 5 are thus kept constantly moistened and immediately after the plunger has descended and rammed a charge of tobacco through one of the pockets 4, before referred to, the adjacent pad comes into contact with its lower operating surface and wipes it clean, thus preventing accumulation thereon of the sticky substance which exudes from the tobacco.

What is claimed is:

1. In a tobacco packaging machine, the combination with a source of moisture supply, of a moisture applying device associated with said source of supply, and a traveling plunger-wiping pad intermittently contacting with said device to receive moisture therefrom.

2. In a tobacco packaging machine, the combination with a source of moisture supply, of a moisture applying device associated with said source of supply, and a series of traveling plunger-wiping pads intermittently and successively contacting with said device to receive moisture therefrom.

3. In a tobacco packing machine, the combination with a source of moisture supply, of a moisture applying device associated with said source of supply, and an intermittently rotatable turret provided with a series of plunger-wiping pads successively contacting with said device to receive moisture therefrom.

4. In a tobacco packaging machine, the combination with a source of moisture supply, of a moisture applying roller associated with said source of supply, and a traveling plunger-wiping pad intermittently contacting with and rotating said roller to receive moisture therefrom.

5. In a tobacco packaging machine, the combination with a liquid reservoir supporting a moisture applying device, of a traveling plunger-wiping pad intermittently contacting with said device to receive moisture therefrom.

6. In a tobacco packaging machine, the combination with a liquid reservoir supporting a moisture applying roller, of a traveling plunger-wiping pad intermittently contacting and rotating said roller to receive moisture therefrom.

7. In a tobacco packaging machine, the combination with a liquid inclosed reservoir supporting a moisture applying roller and a spout inclosing a wick for keeping said roller moist, of a traveling plunger-wiping pad intermittently contacting with and rotating said roller to receive moisture therefrom.

8. In a tobacco packaging machine, the combination with a liquid inclosed reservoir supporting a moisture applying roller and a spout inclosing a wick for keeping said roller moist, of an intermittently rotatable turret provided with a series of plunger-wiping pads successively contacting with and rotating said roller to receive moisture therefrom.

In testimony whereof, I have signed my name to this specification.

GEORGE WILBUR GWINN.