

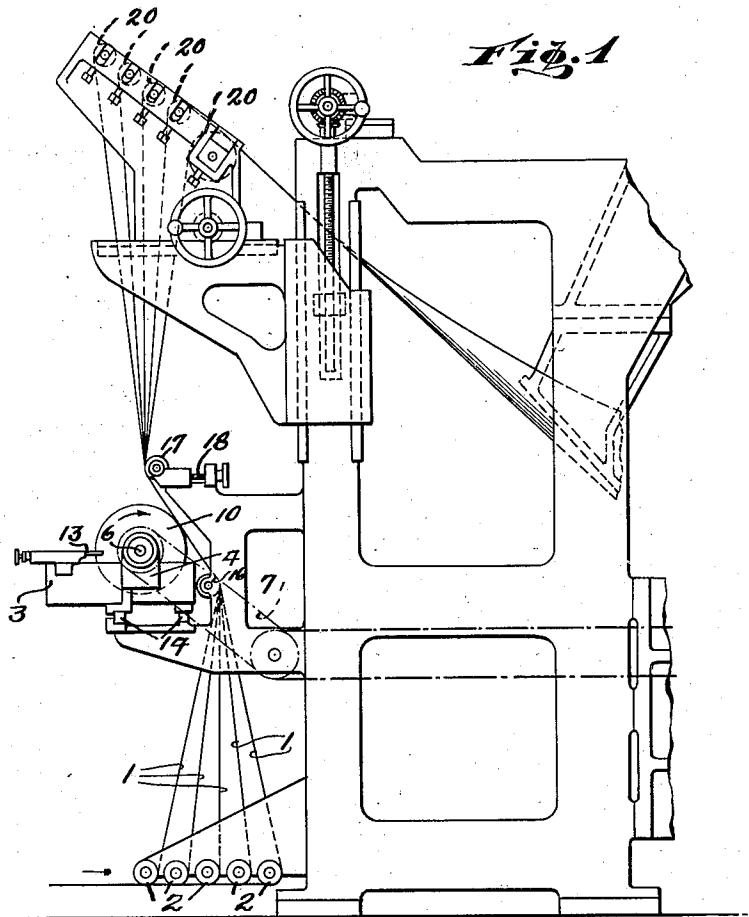
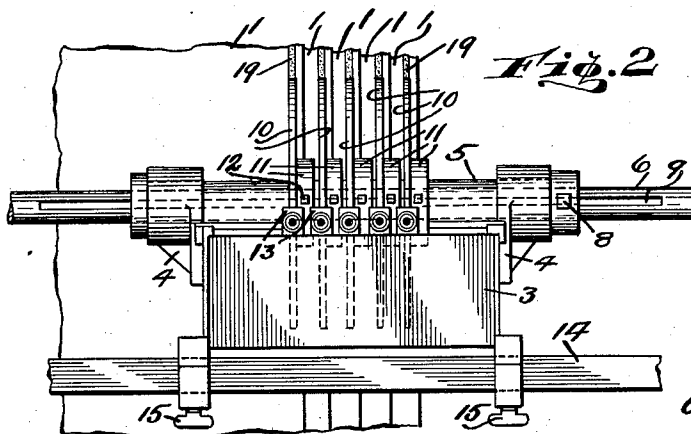
Aug. 4, 1936.

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2,049,514

ADHESIVE APPLYING MECHANISM FOR TUBING MACHINES

Original Filed Nov. 2, 1931



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UNITED STATES PATENT OFFICE

2,049,514

ADHESIVE APPLYING MECHANISM FOR
TUBING MACHINES

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Original application November 2, 1931, Serial No.
572,561. Divided and this application Febru-
ary 28, 1934, Serial No. 713,297

4 Claims. (Cl. 91—12)

This invention relates to an improvement in bag making machines of the type disclosed in my copending application Serial No. 572,561, filed November 2, 1931, of which this application is a division, and the present invention is directed primarily to the adhesive applying mechanism and the apparatus employed in connection therewith.

In the drawing:

Fig. 1 is a fragmentary view in elevation of the starting end of a bag making machine showing the paste-applying mechanism to which the present application is directed; and

Fig. 2 is an elevational view of the paste-applying mechanism.

The paste-applying mechanism of the present invention is particularly adapted for use in connection with the manufacture of multi-wall bags and hence the several webs of paper designated 1 which enter the machine from any suitable source of supply, pass about spaced guide rollers shown at 2, a guide roller being provided for each web.

The guide rollers 2 are located adjacent the lower part or base of the machine frame and above these guide rollers I provide gluing or pasting mechanism comprising a tank 3 carrying brackets 4 in which is mounted a sleeve 5.

Passing through the sleeve 5 is a shaft 6 supported, as will be understood, in suitable bearings at each side of the machine frame. The shaft 6 may be driven by a chain 7, for instance.

The sleeve 5 is provided with a bolt 8 adapted to cooperate with a keyway 9 in the shaft 6 to establish an adjustable driving connection between the shaft and sleeve, this construction as will be evident permitting of adjustment of the sleeve 5 longitudinally of the shaft.

Carried on the sleeve 5 intermediate the bearings 4 are a plurality of adhesive applying discs 10. Five of these discs are shown in the drawing merely for purposes of illustration. The number of discs may be varied as desired, it being understood that a disc is provided for each web of paper.

Each of the adhesive applying discs 10 is provided with a hub 11 and each hub in turn with a bolt 12 whereby each disc is independently held against turning on the sleeve 5.

It will be apparent that by loosening the bolt 8 the sleeve 5 and discs 10 may be adjusted as a unit longitudinally of the shaft 6 while by loosening the bolts 12 the discs 10 may be adjusted individually on the sleeve 5.

Each of the adhesive applying discs 10 is pro-

vided with a scraper 13 each of which is adjustable and by which the adhesive on the discs 10 may be controlled.

The tank 3 is mounted on rails 14 extending transversely of the machine, the tank being adjustable longitudinally of these rails. Thumb screws 15 hold the tank in adjusted position.

By this construction the tank 3 and discs 10 may be adjusted transversely of the machine as a unit if desired merely by loosening the bolt 8 and thumb screws 15, thereby permitting the tube 5 to slide along the shaft 6 and the tank 3 along the rails 14.

The webs of paper 1 after leaving the spaced guide rollers 2 and before reaching the discs 10 pass about a roller 16 which lies intermediate the guide rollers 2 and the paste-applying discs 10.

After passing the paste-applying discs the webs 1 pass about a roller 17. This roller is adjustable by means of adjusting mechanism 18 to move the paper webs toward and away from the adhesive applying discs 10. By adjusting the roller 17 the pressure of the paper webs against the adhesive applying discs may be varied as will be evident.

It will be seen from the foregoing that the paper webs 1 are brought into the machine as they pass around the guide rollers 2 in spaced relation. It will be understood, of course, that viewed in plan the webs 1 are offset with respect to each other as will be seen from Fig. 2 of the drawing. The webs are brought together at the roller 16 remaining in this condition as they contact the adhesive applying discs 10. These discs are driven in the direction of the arrow thereon from which it will be seen that they travel oppositely to the web and adhesive as shown at 19 will be applied to the edge of each web. The webs leaving the discs, as above noted, pass about the rollers 17 and as will be seen from Fig. 1 of the drawing the webs are led about one side of the roller 16 and the opposite side of the roller 17 so that the necessity of mounting a roller behind the paper webs abreast of the discs 16 to maintain the webs in desired contact with the edges of the discs is eliminated. Inasmuch as the roller 17 is adjustable the paper webs are contacted with the adhesive applying discs 10 with the desired pressure, the paper yielding sufficiently so as automatically to take care of the varying thicknesses of the paper due to using more than one web and with the webs in overlapped relation.

After having received their coating of paste and after having left the roller 17 the webs pass upwardly about spaced adjustable rollers 20, a roller

being provided for each web, and from thence pass to the tube forming mechanism.

As mentioned above the present application is concerned only with the adhesive applying mechanism so that the mounting of the rollers 20, etc. will not be gone into in any detail.

It will be apparent from the foregoing that the present invention provides adjustable adhesive applying mechanism adapted to handle a plurality of webs simultaneously in the application of adhesive to the webs constituting the walls of a multi-wall bag, the arrangement being such that the several webs being handled are fed into the machine in spaced relation to each other and brought together before reaching the adhesive applying mechanism, contacting the adhesive applying discs and then fed to spaced guiding rollers from which the webs pass into the machine for further operations.

It will be seen also that my construction is such that the necessity of providing a roller or rollers abreast of the adhesive applying discs 10 is eliminated and by mounting the roller 17 in an adjustable manner the pressure of the paper webs against the adhesive applying discs may be controlled or regulated to any desired degree.

What I claim is:—

1. In a tube making machine, adhesive applying mechanism in the path of webs passing through the machine and comprising in combination an adhesive tank or reservoir, a shaft rotatably mounted thereon, a sleeve on said shaft and rotatable therewith and adjustable longitudinally thereof, a plurality of adhesive applying discs mounted in spaced relation on said sleeve, a hub for each disc and means for attaching the hub to said sleeve.

2. In a tube making machine, adhesive applying mechanism in the path of webs passing through the machine and comprising in combination an adhesive tank or reservoir mounted on the machine frame and adjustable transversely of the machine, a shaft rotatably mounted on said tank, a sleeve on said shaft, a plurality of adhesive applying discs mounted in spaced relation and independently adjustable on said sleeve, said sleeve being adjustable to adjust the discs as a unit.

3. In a tube making machine, adhesive applying mechanism in the path of webs passing through the machine and comprising in combination an adhesive tank or reservoir mounted on the machine frame and adjustable transversely of the machine, a shaft rotatably mounted on said tank, a sleeve on said shaft secured thereto for rotation therewith and adjustable longitudinally thereof, and a plurality of discs adjustably mounted in spaced relation on said sleeve.

4. In a tube making machine, adhesive applying mechanism in the path of webs passing through the machine, and comprising in combination an adhesive tank or reservoir, rails extending transversely of the machine and supporting said reservoir, said reservoir being adjustable longitudinally of said rails, brackets carried by said tank or reservoir, a sleeve mounted for rotation in said brackets, said sleeve being adjustable longitudinally in said brackets, a rotatable shaft passing through said sleeve for rotating said sleeve, and a plurality of adhesive applying discs mounted in spaced relation on said sleeve, each of said discs being individually adjustable on said sleeve.

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