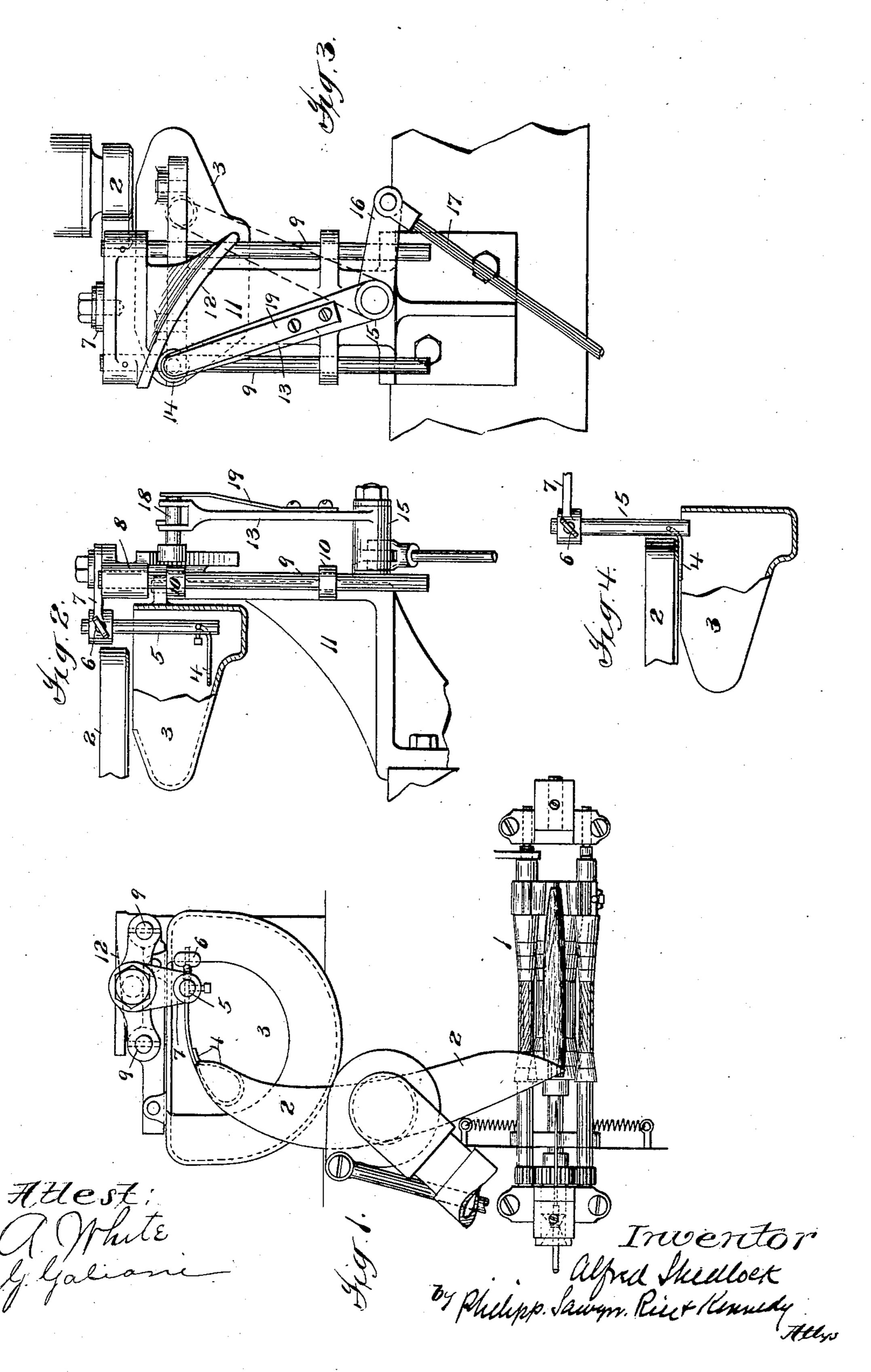
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## ADHESIVE APPLYING MECHANISM.

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## UNITED STATES PATENT OFFICE.

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## ADHESIVE-APPLYING MECHANISM.

No. 863,106.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Alfred Shedlock, a citizen of the United States, residing at Jersey City, county of Hudson, and State of New Jersey, have invented cer-5 tain new and useful Improvements in Adhesive-Applying Mechanism, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

This invention relates to certain improvements in adhesive applying mechanism, and has for its object to produce an adhesive applying mechanism which shall be simple and economical in construction and effective in operation.

With this and other objects in view, the invention consists in certain constructions and in certain parts, improvements and combinations as will be hereinafter fully described and then specifically pointed out in the claims hereunto appended.

Referring to the accompanying drawings:—Figure 1 20 is a plan view of one embodiment of the improved adhesive applying mechanism, this mechanism being shown in connection with certain parts of a cigar wrapping machine. Fig. 2 is an elevation, partly in section, of the adhesive applying mechanism. Fig. 3 is 25 a side elevation of the construction shown in Fig. 2. Fig. 4 is a detail sectional view.

In the particular embodiment of the invention which has been chosen for illustration, the adhesive applying mechanism is utilized for applying the adhesive to the tip end of a cigar wrapper just prior to the completion of the wrapping operation, though it is obvious that the invention might be utilized in machines of other kinds.

Referring to the drawings which illustrate a preferred embodiment of the invention, 1 indicates a cigar rolling mechanism, said mechanism being conventionally illustrated. This machine is of the ordinary roller type, and it is of course apparent that any other form of wrapping mechanism might be used in place of it.

Whatever be the style of machines with which the adhesive applying mechanism is used, the article to which the adhesive is to be applied will be carried on a suitable support. In the particular construction illustrated, the support for the article to be pasted is a wrapper carrier and is marked 2 in the drawings.

A description of the specific construction of this wrapper carrier is not necessary to an understanding of the invention. It may be remarked, however, that the wrapper carrier, as shown, is a suction carrier of the form fully described in Patent 654,203, granted July 24, 1900, to Patterson and Arents, as assignees of Oluf Tyberg, this carrier being given movements to receive the wrapper and properly present it to the bunch in

the rolling mechanism. Reference is made to this patent for a full description of the mechanism by 55 which this carrier is operated.

The adhesive applying mechanism may be varied widely in its details of construction. Preferably, however, it will include an adhesive tank or receptacle as 3, and the adhesive will be transferred from this 60 tank or receptacle to the article to which it is to be applied by suitable lifter mechanism. When the adhesive applying mechanism is to be used to apply adhesive to a cigar wrapper, it will be preferably of such a character as to applying it in an outline 65 which is generally of loop form. In the construction heretofore employed in applying adhesive to cigar wrappers, the adhesive has been applied to the wrapper either in a dab or smear, or in a succession of drops. With these forms of adhesive applying mechanism, 70 there is difficulty in applying the adhesive at the points where it is especially needed, that is to say, on the edges of the wrapper, and there is, furthermore, liability of applying too much adhesive, so that when the wrapper is pressed down on the bunch, the adhe- 75 sive is forced out between the overlying portions of the wrapper.

In the present construction the lifter mechanism embodies a loop 4 which may be conveniently formed of wire, and this loop is submerged in the adhesive in 80 the tank. When the loop is moved out of the adhesive in the tank, the surplus adhesive runs off it and the lifter deposits the adhesive which it carries in a loop like form, as clearly indicated in dotted lines in Fig. 1. It is obvious that by properly forming this loop, 85 lines of adhesive may be applied close to the edges of the wrapper, and a single line may be carried across the wrapper, as is indicated by the dotted curved line in the figure referred to. The adhesive is thus applied at the precise points or places needed and in a 90 small quantity, so that the adhesion of the wrapper is secured without the disadvantages resulting from a surplus supply of paste.

The mechanism for operating the lifter may be widely varied. As shown, this wire loop lifter 4 is 95 attached to a vertical rod 5 which in turn is secured by a set screw 6, or in any other suitable manner, to an arm 7 which projects from a cross head 8. This cross head 8 is provided with two guide rods 9 which move in suitable brackets 10 secured to the frame 11 of the 100 machine.

The mechanism for operating the cross-head may be of any desired character. As shown, the cross-head is provided with a cam 12 and operating in connection with this cam is an arm 13 provided with a cam roll 14. 105 This arm 13 extends from a hub 15 mounted on a suit-

able stud projecting from the frame of the machine. This hub is provided with a second arm 16 to which is connected a link 17 said link running to any suitable operating part of the machine. In Fig. 2, the lifter and its connected operating parts are shown in the position they assume when the lifter is submerged in the tank, and in Fig. 4, the lifter is shown in the position it assumes when it is in contact with the wrapper when it is held on the under side of the suction carrier 2.

10 After the lifter has delivered its adhesive to the wrapper, it is desirable that it be caused to move away from the carrier as quickly as possible, so as not to delay the action of the carrier which comes to a momentary stop in its movement at the proper time to receive 15 the adhesive. In the construction illustrated, therefore, the arm 13 is given sufficient movement to cause its roller 14 to pass out of engagement with the cam, as is indicated in dotted lines in Fig. 3. As the roller moves back, therefore, it runs over the side of the cam 20 which is inclined backward, and the roller is so mounted as to yield laterally, slip off the side of the cam and snap under it. While this may be effected in any suitable manner, the roller 14 is carried on a short shaft 18 which is journaled in forks of the arm 13, and a 25 spring 19 is provided which bears against the end of the shaft 18. As the roller moves backward, therefore, it is given a lateral movement by the side of the cam

sufficient to allow it to pass over the edge of the cam,

and after it has passed over this edge the spring throws it in beneath the cam into the position illustrated in 30 Fig. 3.

Changes and variations may be made in the construction by which this invention is carried into effect. It is to be understood, therefore, that the invention is not to be limited to the details of construction herein shown and described.

What is claimed is:—

1. The combination with a wrapping mechanism, of a lifter, a wrapper carrier, a paste receptacle, means for producing a relative movement between the carrier and the 40 receptacle, and means for applying adhesive in a loop form to the wrapper on the carrier.

2. The combination with a wrapping mechanism, of an adhesive receptacle, a wrapper carrier moving over the receptacle, a looped lifter, and means for moving the lifter 45 from a submerged position in the adhesive receptacle against the wrapper on the carrier, substantially as described.

3. The combination with an adhesive receptacle, of a looped lifter, a lifter head, means for guiding the head, a 50 cam operating arm, and a spring controlled roller mounted in the arm whereby the roller is permitted to lift the cam on one movement of the arm and travel over it on the other movement, substantially as described.

In testimony whereof, I have hereunto set my hand, in 55 the presence of two subscribing witnesses.

ALFRED SHEDLOCK.

Witnesses:

ARTHUR C. BLATZ, SYDNEY I. PRESCOTT.