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C. F. RÖBER ET AL
APPARATUS FOR SUPPLYING ADHESIVE
Filed June 14, 1940

Serial No.
340,600
2 Sheets-Sheet 1

Fig. 1

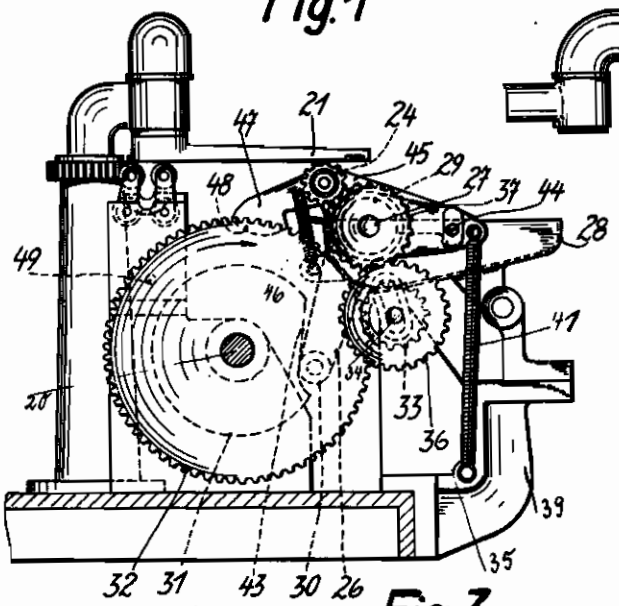

Fig. 2

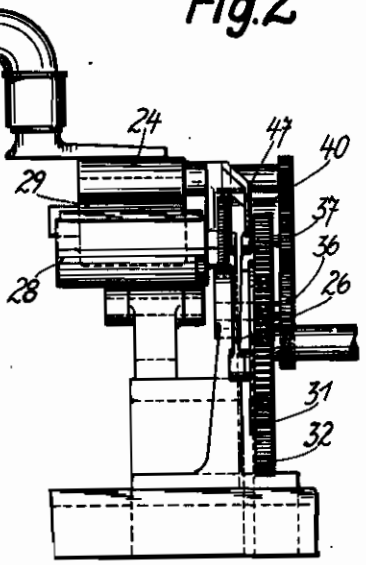

Fig. 3

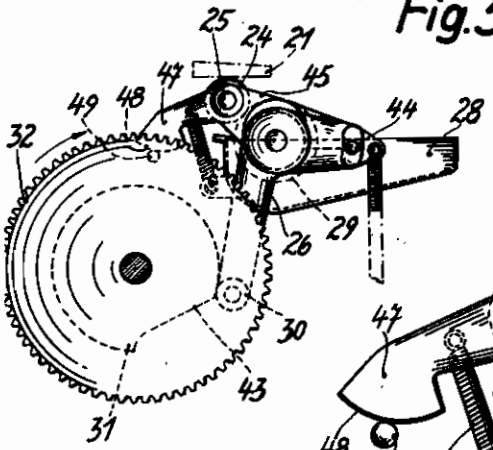

Fig. 4

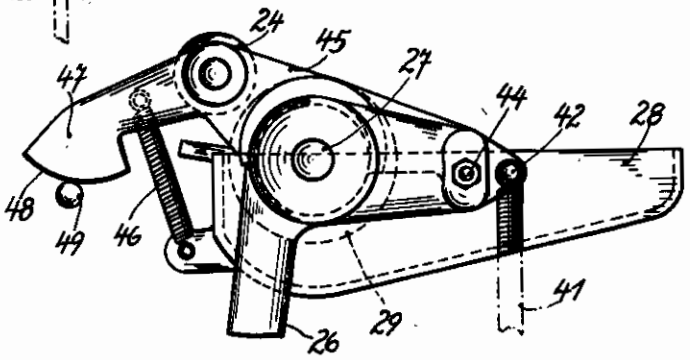

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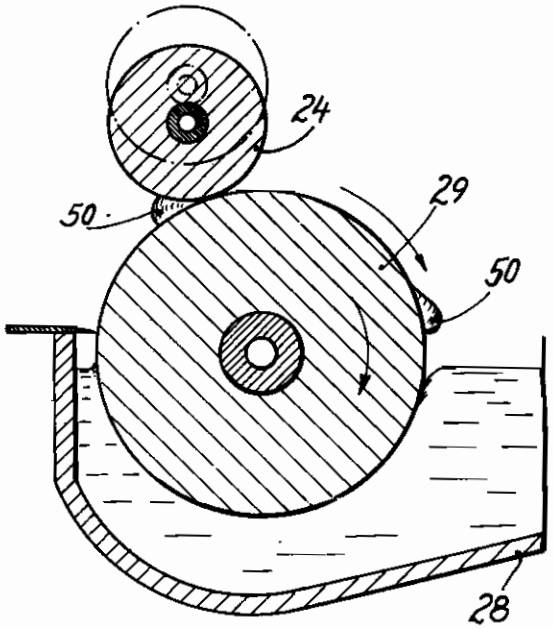
Fig. 5



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ALIEN PROPERTY CUSTODIAN

APPARATUS FOR SUPPLYING ADHESIVE

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Application filed June 14, 1940

When supplying adhesive f. i. to labels, edge-strips, outsideleafs of cigars and the like it is important that the adhesive supplying roller which finally supplies the adhesive to the work piece, is always covered with an equal adhesive layer. A hindrance for forming such equal layer is the fact that a certain quantity of adhesive sticks together and damps up in the corner existing between the adhesive feeding roller partly dipping into the adhesive storage of an adhesive receptacle and the supplying roller on which the equal layer is to be formed when these two rollers engage each other. The reason for the mentioned fact is that the adhesive feeding roller must always carry abundant adhesive and that it is impossible to maintain a perfect equal adhesive layer on said roller. The said quantity of adhesive accumulating and sticking together moves irregularly and is inequally divided and therefore prevents the forming of a really equal adhesive layer on the supplying roller especially if said layer must be as thin as possible.

For the purpose to remove such disadvantage according to the invention means are provided for disengaging the supplying roller and if desired also the transfering rollers inserted between the supplying and the feeding roller from the adhesive feeding roller and to reengage same immediately by means of a gearing controlled by the mean drive.

In this way by the short disengaging of the supplying roller from the feeding roller it is effected that the quantity of adhesive existing in the corner is taken away by the feeding roller and carried beyond the engaging point of the two rollers, whereupon at once a new coacting of the two rollers begins before the adhesive of the feeding roller has time enough to set.

It must be said that it is not undesirable generally that a small quantity of adhesive accumulates in the said corner as that adhesive favours the forming of an equal adhesive layer on the supplying roller but the excessive accumulating of adhesive in said corner is very disadvantageous and will be prevented according to the invention.

In much cases it may be necessary that the disengaging takes place once or also several times during each revolution of the rollers, while in other cases the disengaging is only necessary after a number of revolutions of the rollers. Preferably the controlling means for controlling the disengagement may be adjustable correspondingly.

It is to be understood that it is generally known in combination with inking rollers to provide means enabling the disengaging of the ink transfering rollers from each other or from the printing block also during the working of the machine. However in these cases the disengaging of the transfering rollers has the purpose to facilitate the cleansing of the rollers or to avoid the ink to be incrusted during a transitory standstill and not to avoid or to equalize a sticking together of the ink in the corner between the rollers.

The drawings show by way of example an embodiment of the invention in combination with an adhesive supplying device of a cigar making machine known per se.

Fig. 1 is a side view of the adhesive supplying device,

Fig. 2 is a front view thereof,

Fig. 3 is a portion of Fig. 1, showing the parts in another working position,

Fig. 4 is a portion of Fig. 2 in an enlarged scale and

Fig. 5 shows the adhesive feeding roller and the supplying roller and the removing of the accumulated adhesive existing between the two rollers.

On the arm **39** forming a part of the machine or apparatus frame the adhesive receptacle **28** is mounted. Into the adhesive contained therein the adhesive feeding roller **29** dips, said roller being rotatably mounted on the shaft **27** journalled on opposite sides of the adhesive receptacle. The shaft **27** also carries a bell-crank lever **26** which may oscillate about that shaft. On the one end of said bell-crank lever an antifriction-roller **30** is provided engaging a curved disc **31** fixed on a shaft **20** journalled in the machine frame. On the opposite end of said bell-crank lever the one end of a spring **41** is fastened, the other end of which is fixed to the frame **39**. The spring holds the roller **30** in engagement with the curved disc **31** and if the roller engages the part **43** of the circumference of said disc, the bell-crank lever rotates in the clockwise direction.

Near the one end of the bell-crank lever **26** another lever **45** is pivoted to it by the pivot **44**. This lever is the bearing for the adhesive supplying roller **24** engaging the adhesive feeding roller **29** and supplying the adhesive to the outside-leaf of a cigar, said leaf being supported by the leaf carrier **21**. Near the front end **47** of said lever **45** the one end of a spring **46** is fastened, the other end of which is connected with the machine frame. This spring pulls the lever **45** against an abutment provided on the lever **26** but not shown in the drawings, so that the lever **45** participates in the oscillating movements of the bell-crank lever **26**. If therefore the lever **26** rotates about

the axis 27 in the clockwise direction, the lever 45 also rotates in the same sense. Hereby the roller 24 is lifted and engages the outside-leaf on the leafcarrier 21 for the purpose to apply the adhesive.

The end 47 of the lever 45 is provided with a curved path 48 adapted to engage an abutment 49 fastened on the side face of a spur wheel 32 on the shaft 20. If the abutment strikes against the curved path 48, the lever 45 is swung about the pivot 44 against the action of the spring 46. Hereby the roller 24 is disengaged from the adhesive feeding roller 29 and the accumulated adhesive 50 (Fig. 5) may pass between the two rollers and return into the adhesive receptacle. After the abutment 48 has passed the curved path 48 the spring 46 returns the lever 45 again to its former position and reengages the rollers 24 and 29.

The spur wheel 32 which is driven by the main drive of the machine meshes with a spur wheel 33 mounted on a shaft 34 fastened on the block 35 forming a part of the machine frame. The spur wheel 33 is firmly connected with another spur wheel 36 meshing with a spur wheel 37 on the shaft 27 which also bears the roller 29, so that the said roller is driven by means of the described gearing. To avoid a slipping of the roller 24 a spur wheel 40 is fastened on the end of the shaft 25 bearing the roller 24, said wheel 40 meshing with the spur wheel 37.

Although we have described and illustrated the invention in combination with a cigar making machine it is to be understood that it also may be used in combination with other machines and that many alterations may be made without departing from the spirit of the invention.

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