

March 23, 1943.

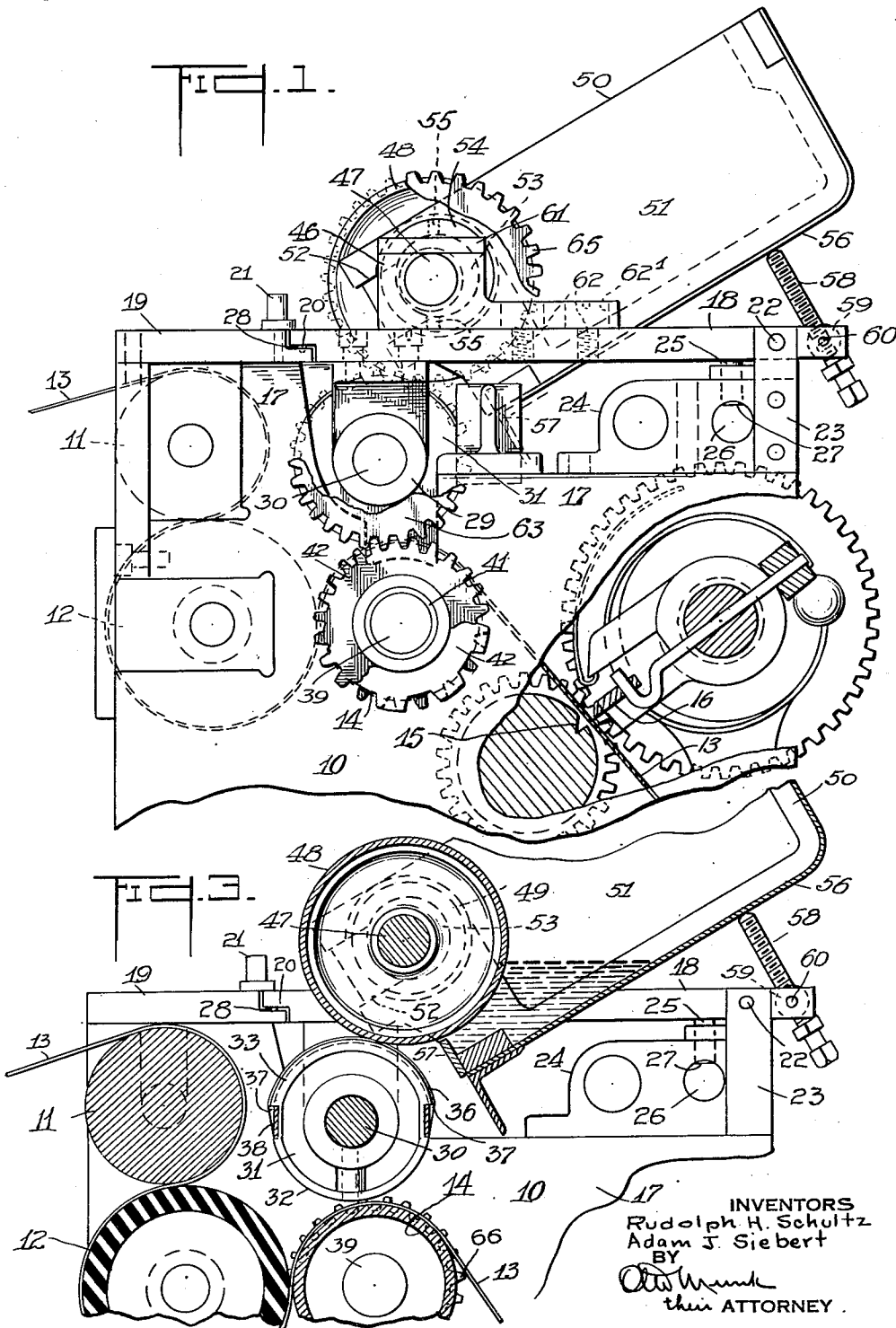
R. H. SCHULTZ ET AL

2,314,519

ADHESIVE APPLYING ATTACHMENT

Filed Aug. 3, 1940

3 Sheets-Sheet 1



March 23, 1943.

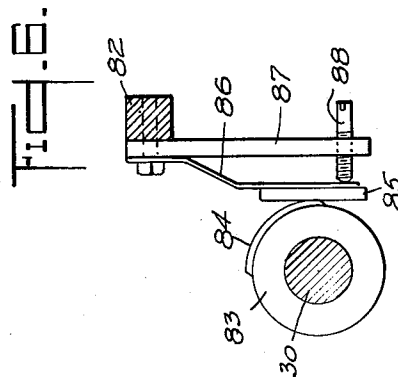
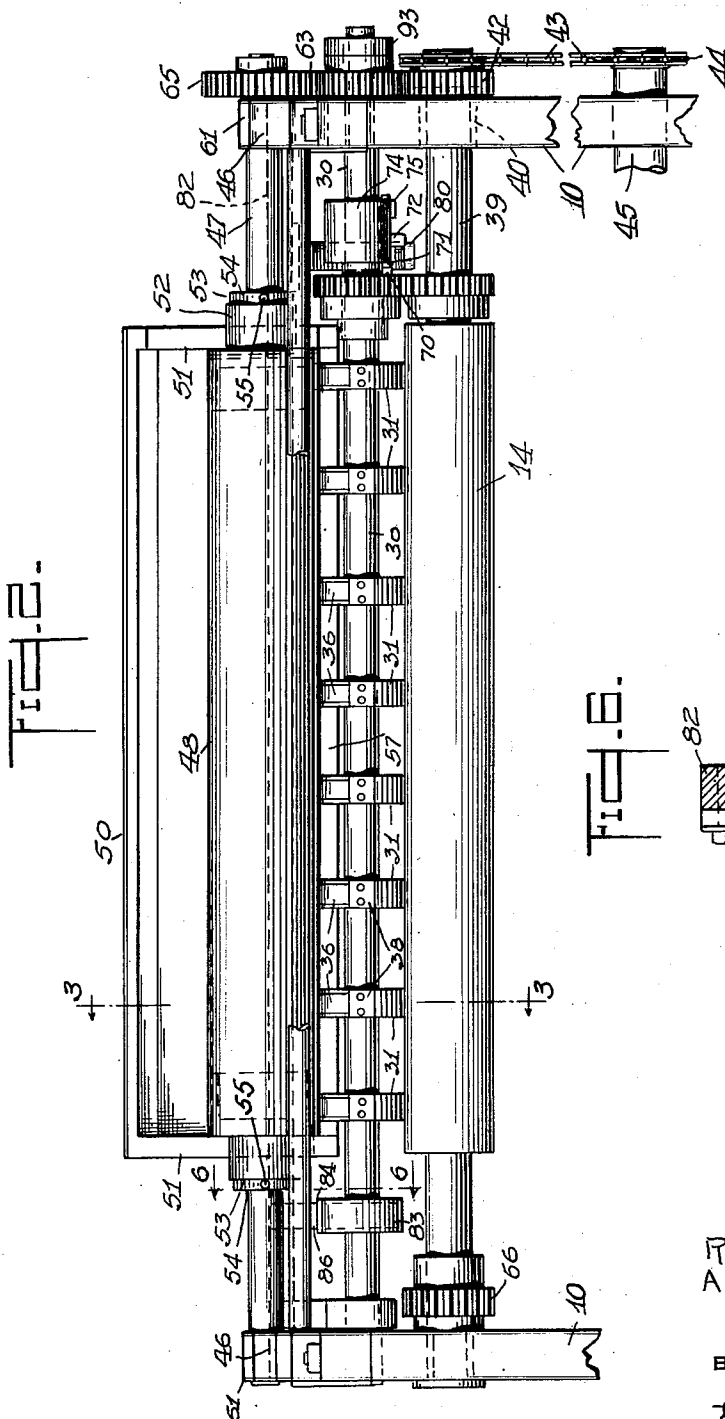
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ADHESIVE APPLYING ATTACHMENT

Filed Aug. 3, 1940

3 Sheets-Sheet 2



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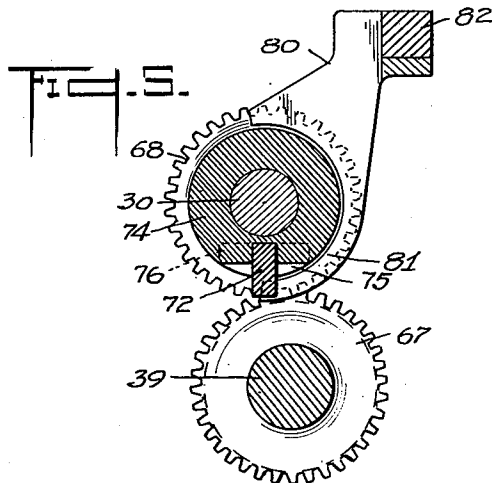
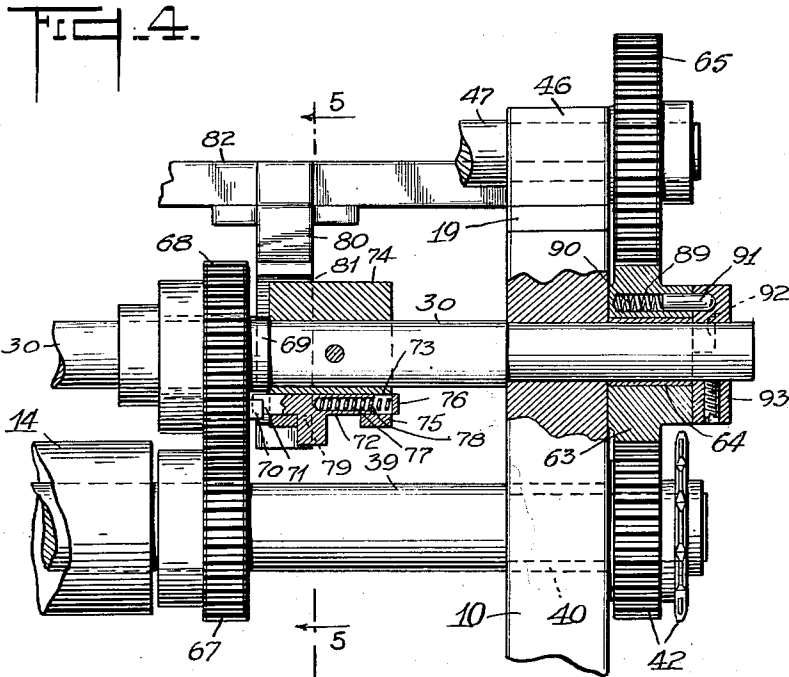
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ADHESIVE APPLYING ATTACHMENT

Filed Aug. 3, 1940

3 Sheets-Sheet 3



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UNITED STATES PATENT OFFICE

2,314,519

ADHESIVE APPLYING ATTACHMENT

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Application August 3, 1940, Serial No. 351,026

15 Claims. (Cl. 91-14)

This invention relates to an adhesive applying attachment for automatic rewinding machines, and has reference particularly to an attachment of this character used especially on rewinding equipment producing rolls of building papers and other large size stock, each roll having its trailing end pasted to the under layer of the material in order to prevent unwinding thereof, since this type of roll is not wrapped or packaged, as is the case with the smaller rolls.

One type of rewinding equipment especially adapted to accommodate the present attachment is described and illustrated in United States Letters Patent No. 1,966,525, issued July 17, 1934.

It is the object of the present invention to provide an adhesive applying attachment for rewinding machines in which the adhesive is applied to the portion forming the trailing end of a continuously moving web of material being rewound, and the object is attained by means of paste discs intermittently speeded up to the traveling speed of the material and the contacting therewith for a predetermined distance to transfer the paste to the material.

This and other objects of this invention are accomplished by means of the equipment herein-after described in the specification, set forth in the appended claims and illustratively exemplified in the accompanying drawings, in which:

Figure 1 is a side elevational view of a portion of a rewinding machine showing the present invention attached thereto;

Figure 2 is a front elevation view of the attachment;

Figure 3 is a substantially longitudinal sectional view of the paste attachment taken on lines 3-3 of Figure 2;

Figure 4 is a view partly in section of the driving mechanism controlling the movement of the paste applying discs;

Figure 5 is a substantially longitudinal sectional view of the drive taken on lines 5-5 of Figure 4;

Figure 6 is a substantially transverse sectional view taken on lines 6-6 of Figure 2.

Referring to the drawings, 10 denotes the upright side standards of a rewind machine having a vertically adjustable steel idler roller 11 disposed over and spaced slightly from a rubber feed roller 12. The web of material 13 traveling from the mill roll passes over and about the steel roller 11, then forwardly about the rubber roller 12 and over a driven roller 14 and then downwardly to pass between the female cutting cylinder 15 and knife cylinder 16. These elements constitute a 55

part of the rewind machine disclosed in United States Patent No. 1,966,525.

The upper elevation of each side wall carrying the parts described above is provided with a lateral ledge portion 17 upon which a ledge cap or frame 18 is mounted. The ledge 17 is stepped, having the forward portion, carrying the steel roller 11, the higher, and upon this high portion a fixed plate 19 of the ledge cap 18 is disposed, 10 the rear end of the fixed plate 19 of the ledge cap being provided with a step 20 and a screw bolt lock 21 which is arranged to project just over the step. The ledge cap 18 is under-cut at its forward free end to seat upon the step 20 and to receive the overhanging flange of the lock 21 to hold the two parts 18 and 19 in a fixed position relative to each other and to the ledge 17. The ledge cap 18 adjacent the outer end is pivotally mounted upon a pin 22 carried at the upper end 20 of an upright 23, the latter being carried by a bearing block 24 fixed on the lower step of the ledge 17. It will be understood, of course, that there is a similar arrangement of ledge cap, upright 23, and bearing block on both the side standards 10. Adjustment of the ledge caps 18 about their pivotal axis is effected by means of upright bolts 25 each thereof being mounted in the bearing block 24 directly beneath and in contact with the ledge cap and closely adjacent the pivotal connecting pin 22. The bolt 25 at its lower or inner end rests upon the cylindrical surface of a rotary adjustable member 26, a portion of which is flattened to provide a low cam surface 27 which is movable under the bolt 25 to allow the same to retract and the ledge cap to assume its lateral position, illustrated in Figure 1. To turn, the member 26 causes the flat 27 to move away from beneath the bolt 25 and the high or cylindrical surface to take its place, whereby the bolt 25 is projected upwardly and with it the ledge cap 18. The lock 21 may either be removed entirely or merely raised to accommodate the raised position of the ledge cap 18. A centering pin 28 is carried by the under-cut portion of the ledge cap 18 to seat in the surface of the shoulder 20 of the fixed portion 19.

Pasting attachment

The pasting arrangement is carried upon the two pivotally mounted ledge caps 18 and comprises depending bearing brackets 29 attached to the under sides of the caps 18 adjacent their free ends, the brackets carrying a paste sector shaft 30. The mid portion of the shaft 30 carries a plurality of spaced paste discs 31, each of which

consists of a metal wheel having a fiat metal rim 32, constituting approximately one-half the periphery thereof, and a grooved rim 33 making up the other half. The groove 33 carries a rubber strip 36 and in an axially disposed depression 37 in the periphery between each end of the rim 32 and the adjacent end of the groove 33, a brass plate 38 is arranged. The rubber strip 36 of each disc 31 provides the medium by means of which paste is transmitted to the trailing end portion of the web 13 as it moves with the latter and roller 14 in the operation of the rewind machine.

The roller 14 is carried by a drive shaft 39, which is journaled at its ends in bushings 40 mounted in the side frames 10. One end of the shaft 39 projects beyond the frame 10 and is provided with a bushing 41 upon which a combined gear and sprocket 42 is idly mounted. The sprocket is driven by a chain 43 from a sprocket 44 mounted on the camshaft 45 of the rewind machine.

The two adjustable ledge caps 18 on their upper faces carry adjustable bearing brackets 46 in which the ends of a paste pot roller shaft 47 are journaled. The paste pot roller 48 is a brass cylindrical member closed at its ends, each thereof being provided with a hub 49 to receive and be fixed to the shaft 47. The paste pot proper is denoted 50 and comprises a rectangular fountain of a width substantially less than the distance between the two side frames 10. The side walls 51 of the fountain embrace the ends of the roller 48 and are provided with yoke-shaped sockets 52 which bear upon eccentric bushings 53 mounted on the shaft 47 beyond the closed ends of the paste roller 48, the bushings 53 being provided with outside flanges 54 to abut the outer end faces of the sockets 52. Diametrically opposite, radial openings 55 are drilled in the flanges 54 to accommodate a spanning tool for the purpose of rotating the bushings 53 and changing the working position of the paste pot 50.

The bottom wall 56 of the paste pot or fountain 50 is considerably deeper than the lowest point reached by the periphery of the paste roller 48 and its forward edge beneath the roller carries a doctor blade 57, which projects towards the peripheral surface of the roller 48, and which is adjustable with respect thereto by movement of the eccentric bushings 53 of the paste pot 50. In its normal working position the paste pot 50 is inclined downwardly and forwardly in the direction of the brass paste roller 48 and it is adjustably supported in this position by means of pivotally mounted adjusting screws 58. The ends of screws abut the bottom 56 of the paste pot adjacent its rear wall, and are pivotally carried by sockets 59 arranged on pins 60 projecting from rearward extensions of the ledge caps 18 beyond their pivotal connecting pins 22.

The entire paste pot 50 and brass doctor or paste roller 48 are removable from the rewind machine by means of steel caps 61 which are arranged over the paste roller shaft 47 and which are removable to free the said shaft.

A handle, not shown, is provided for the adjustable members 26, whereby, by rotating the latter, the bolts 25 are projected to lift the pivoted ledge caps 18 and the entire pasting unit so as to move the rubber paste discs 31 out of contact with the surface of the web on the main feed roller 14. Therefore, by relative adjustment of the ledge caps 18 through the medium of the

bolts 25, it is possible to attain the correct relation between the rubber paste discs or segments and the underlying feed roller 14, and as a result of such adjustment the paste segments may be regulated to bear lightly or heavily against the web 13 and roller 14 about which the web is supported when the machine is in operation. The brass doctor or paste roller 48 is adjustable with respect to the rubber paste discs 31 in order that contact between them may be either light or heavy. This is accomplished by releasing screws 62 in the ledge caps 18, which screws project through slots 62' in the brackets 46, and by laterally moving them either towards or away from the discs 31. In addition, the size of the gap between the brass doctor roller 48 and the doctor blade 57 in the paste pot 50 can be varied by adjusting the eccentric bushings 53 by means of which the paste pot 50 is held onto the brass paste roller shaft 47. As a result of this means of regulating the paste feed, a heavy or light deposit of paste or adhesive may be allowed to pass onto the surface of the roller 48 from the paste pot 50.

25 *Drive for paste pot roller and paste discs*

Referring now to the means for driving the paste applying attachment, it has already been explained that a chain and sprocket connection, 42, 43 and 44 is provided between the cam shaft 45 and the shaft 39, the combined gear and sprocket 42 being mounted to idle on the shaft 39, as shown in Figure 4. The sprockets 42 and 44 are the same in size and number of teeth so that, when the cam shaft 39 makes one revolution, the combined sprocket and gear 42 will also make one revolution. The gear of the sprocket 42 is in mesh with a gear 63 loosely mounted on a bushing 64 on the paste sector shaft 30 and a gear 65 is in mesh with the gear 63 and is fixed on the brass paste or doctor roller shaft 47 to drive the doctor roller 48.

In accordance with the operation of the rewind machine, a roll of rewind material is produced with every complete revolution of the cam shaft 45 and by means of the sprocket and chain connection from the cam shaft to the paste attachment, the paste roller 48 will not make quite one revolution for each revolution of the cam shaft and for each roll produced on the rewinder. This is due to the fact that each of the two sprockets 42 and 44 has twenty-five teeth, one-half inch circular pitch, and the spur gear of the sprocket 42 and gear 63 have thirty-one teeth, eight inch pitch. The gear 65 meshing with 63 and driving the doctor roller 48, has forty teeth.

The main feed roll 14 and its shaft 39 are rotated by means of a driven gear 66 keyed to the shaft 39, which also carries a second spur gear 67 made up of two sections and clamped to the shaft adjacent the end of the feed roller adjacent the idler gear 42. The gear 67 meshes with and drives a spur gear 68 turning loosely about a bushing 69 on the paste sector shaft 30 located substantially directly over the main feed roller shaft 39. The outer face of the gear 68 carries the projecting end of a pin 70 which is located axially of the axis of the gear just outside the bushing 69, and which moves in a clock-wise direction to engage a latch bolt 71.

The latch bolt 71 is a T-shaped bar, which is square in transverse section, and which has its cross piece 72 slidably mounted in a longitudinal groove 73 disposed in the surface of a housing 74.

The housing 74 is a hub shaped member mounted on and fixed to the sector disc shaft 30 adjacent the bushing 69 which projects beyond the gear face 68 to provide the space necessary to permit the pin 70 and latch bolt 71 to cooperate. The latch bolt 71 is held in the hub 74 by means of a pair of spaced sector plates 75 disposed transversely over the ends of the groove 73, a stop plate 76 being secured to the outer end of the hub over the end of the groove 73.

The latch bolt 71 is provided with a bore 77 in the end of the cross piece 72 adjacent the stop plate 76 to accommodate a compression spring 78 which tends to yieldably project the opposite end of the cross piece 72 outwardly and into the path of the pin 70. The stem of the bolt 71 projects downwardly from the groove 73 and limits the longitudinal movement of the bolt by engagement with the sector plates 75. The stem of the bolt 71 is provided with a curved edge 79 at one corner to engage a cam 80 and cause the bolt 71 to be withdrawn during substantially one-half its circular movement. The cam 80 comprises a semi-circular bar, which straddles one-half of the hub 74 at the end thereof from which the bolt 71 projects, and which in projected position of the bolt has its cam surface 81 on a vertical plane with the center portion or upright axis of the bolt stem, so that as the curved edge 79 of the latter engages the receiving end of the cam surface 81, it will cause the bolt to retract and the end thereof to move out of the path of the pin 70. The cam 80 is securely mounted on a square bar 82, spanning the space between the frames 10, and being used to carry the paper guides for guiding the leading end of the web 13 into the rewinder on threading the machine.

The purpose of the pin and latch arrangement is to enable the sector discs 31 to pick up speed equal to the material or paper speed during the period of movement and contact of the paste applying rubber strip 36 with the paper web as it passes over roller 14. The roller 14 and its shaft 39 travel at paper speed, while the machine is in operation, but the doctor roller 48 and the sector discs 31 may only make one complete revolution for each complete revolution of the cam shaft 45 and production of a single roll, so that the discs 31 must turn intermittently at cam shaft and paper speeds. As a consequence, the high or paper speed of shaft 39 and its gear 67 is imparted to gear 68 and pin 70 about the bushing 69 on the sector disc shaft 30, which, as just explained, makes only one revolution for each revolution of the cam shaft 45. During the interval when the length of paper material is passing at paper speed to the rewind unit, the shaft 39 and hub 74 move the stem of the bolt 71 along the cam sector 80 at cam shaft speed and the bolt 71 is retracted and out of the path of the pin 70 which is revolving at paper speed. As soon as the cam surface 81 is passed, the bolt 71, under tension of the spring 78, is projected to bring the end into the path of the pin 70, which carries the hub 74 with it for approximately one-half revolution, the rate of movement of the hub shaft 74, shaft 30 and sector discs 31 being at paper speed. During the paper speed semi-rotation of the sector discs 31, the rubber strips 36, traveling in contact with the paper, transfer to the latter the bands of adhesive subsequently picked up from the doctor roll 48.

When the sector discs 31 have completed their paste applying movement at paper speed, it is necessary to retract the bolt 71 and free it of

the pin 70, which continues to travel at paper speed. This is accomplished by the portion 78 of the bolt 71 engaging the cam surface 81. It is necessary at this stage to quickly reduce the speed of the hub 74, shaft 30 and sector discs 31 to the speed of the cam shaft 45. A brake is provided for the purpose and comprises a hub 83 keyed to the sector disc shaft 30 adjacent the inner side of one of the frames 10. The hub 83 carries peripherally thereof a brake band 84, which covers substantially one-quarter of the periphery of the hub, and which is disposed in the same sector of the shaft as that embraced by the leading half section of the cam surface 81, so that as soon as the hub 74 is free of the pin 70, the brake band 84 will be engaged by a brake shoe 85 and the hub 74, shaft 30 and sector discs 31 will be brought to a halt. At this point in the operation, the sector bands 36 are out of contact with the web and the plate 38 is beneath and spaced from the paste roller. The shoe 85 is carried on a spring arm 86 fixed at one end to a bar 87, depending from the square bar 82, and adjustably pressed towards the hub 83 and band 84 by means of a set screw 88 in the lower free end of the bar 87.

In order to rotate the sector disc shaft 30 at cam shaft speed during the semi-circular movement of the hub and bolt 71 over the cam surface 81 and still allow the sector shaft 30 to pick up to paper speed, the idler gear 63 on the sector shaft is provided with an axial bore 89, which projects through its hub and well into the body of the gear itself, and which accommodates a compression spring 90 at its inner end and a pin 91 at the outer end. The pin rides in a cam slot 92 of a collar 93 keyed to the sector shaft 30, so that, as the gear 63 rotates at cam shaft speed, it imparts the same speed to the collar 93 and shaft 30 through the pin 91, but when the shaft 30 and collar 93 pick up to paper speed, the collar 93 and its cam slot 92 merely travel faster than the gear 63 and the pin 91, which rides out of the slot 92 to free the gear 63 from the collar. As a consequence, the brake 85 is engaged by the band 84 and the sector shaft 30, hub 74 and sector discs 31, are brought to a halt until the gear 63 carries the pin 89 around and into engagement with the end of the cam slot 92, whereby the collar 93 is turned at cam shaft speed and with it the shaft 30 and associated parts.

Operation

The operation of the attachment and associated parts of the rewind machine is as follows: The paste pot 50 is adjusted to the proper angle by means of the screw adjustment 58 and the rewinding machine is set in motion. The web of material 13 being rewound is threaded about the steel idler roller 11 and then around the rubber feed roller 12 to the driven roller 14 from which it passes to the cutting rollers 15 and 16. It is to be noted that the driven roller 14 travels at paper speed and that the knife or cutting rollers 15 travel at cam shaft speed, which means that the entire length of web to be rewound passes over rollers 11, 12 and 14 and is wound on a core for each rotation of the cam shaft 45 and operation of the cutting rollers 15 and 16. The paste attachment, as already explained, comprises the paste sector discs 31, which make one complete revolution with the cam shaft 45, and apply bands of paste to the portion of the continuously moving web, which becomes the

trailing end of a rewind length after being severed by the knives and which adheres to the under coil of the web on the roll to hold the latter from unwinding.

Paste is picked up from the paste pot 50 on the surface of the rotating brass paste roller 48 running at cam shaft speed and after passing the doctor blade 57, the remaining film of paste is transferred to the rubber strips 36 on the sector discs 31, which at this stage is rotating at cam shaft speed with the rubber strips in contact with the doctor roller 48. At the point where the web is to be severed adjacent the paste sections 31, the bolt 71 is released by the cam face 81 and is immediately engaged by the pin 70, which imparts movement at paper speed to the paste sectors 31. The leading ends of the rubber strips 36 are, at this point, just coming into contact with the surface of the web so that they actually move with the latter at the same speed and singly deposit the paste in parallel longitudinal bands upon the web. When the rubber strips 36 pass the web at paper speed, the cam 80 is engaged by and retracts the bolt 71 and frees the sector shaft 30, which is halted by the brake 84, and then, as the pin 91 catches up with the end of the slot 93, cam shaft speed is imparted to the sector shaft 30, while the sector strips 36 contact the paste roller and receive a film of paste.

Thus, the web 13, continuously traveling at paper speed, receives an application of paste from the paste sector discs traveling at paper speed for approximately one-half of their rotation, after which the discs 31 are halted and then turned to complete the revolution at cam shaft speed where the low or non-rubber strip peripheral portions of the discs are out of contact with the web and the rubber strips are moving into contact with the brass roller 48. The cutting rollers or blades 15 and 16 moving at the speed of the cam shaft through the gear train connecting them, are timed to sever the web 13 just as the trailing ends of the paste bands pass between the cutting units.

Having now described the present invention and the manner in which the same operates, what I claim and desire to secure by Letters Patent is:

1. In a paste attachment for rewind machines of the character described, the combination of a roller feeding a continuously moving web of paper or other material being rewound at a predetermined speed, a paste fountain having a paste roller to feed paste out of the fountain at a predetermined speed, rotary paste transfer means operating between the paste roller and web, means to rotate the transfer means at the speed of the paste roller to pick up paste therefrom, and further means to increase the speed of the transfer means to that of the feed roller to bring the transfer means into rolling contact with the web to transfer the paste.

2. In a paste attachment for rewind machines of the character described, the combination of a roller feeding a continuously moving web of paper or other material being rewound at a predetermined speed, a paste fountain having a paste roller to feed paste out of the fountain at a predetermined speed, paste transfer means between the paste feed roller and the web comprising discs, each thereof having a paste carrying peripheral sector of a length less than one-half the entire circumference of the disc, means to rotate the discs at the predetermined

speed of the paste roller to bring the sector in rolling contact therewith and to pick up paste from the paste roller, and further means to increase the speed of the discs to the speed of the feed roller to bring the sector into rolling contact with the web to transfer the paste thereto.

3. In a paste attachment for rewind machines of the character described, the combination of a roller feeding a continuously moving web of paper or other material being rewound in predetermined lengths and at a predetermined speed, means for severing the web when the predetermined length has passed the feed roller, a paste fountain and paste roller to feed paste out of the fountain at a predetermined speed, a plurality of sector discs operating between the paste roller and web passing over the feed roller to pick up paste from the paste roller and transfer it to the web, operating means making one complete revolution for each operation of the severing means and imparting rotary movement to the sector discs to bring them into rolling contact with the paste roller, further means operating from said feed roller to increase the speed of the sector discs to that of the web to bring the sector discs into rolling contact with the web to apply the paste, and a brake to halt the rotary movement of the sector discs when the rolling contact thereof with the web is completed and the said operating means again takes up its operation of continuing the rotation of the sector discs at the speed of the paste roller.

4. A paste attachment for a rewind machine, as claimed in claim 3, in which said paste fountain is provided with a doctor blade directed towards the surface of the paste roller to regulate the degree of paste being carried out of the fountain, and including adjustable supporting means for said fountain to regulate the space between doctor blade and paste roller.

5. In a paste attachment for a rewind machine for rewinding rolls from a continuously moving web of paper or other materials, the combination of a supporting frame adjustably carried on the rewind machine, a paste roller journaled in bearings on said frame, a paste fountain eccentrically supported on the paste roller and provided with a doctor blade movable towards and away from the paste roller through change in the relative position of the fountain, a shaft loosely carried by the frame, sector discs fixed on the shaft and movable into rolling contact with said paste roller during a portion of one complete rotation thereof and into rolling contact with the continuously moving web during the remaining portion of the rotation to first transfer paste at the speed of the paste roller to said sector discs and thereafter from the discs to the moving web at the speed of the latter, means to rotate the said shaft at the speed of the moving web during contact of the discs therewith, means for disconnecting the shaft from said means during contact of the discs with the paste roller, and means to continue the movement of the discs at paste roller speed to complete one complete rotation of the discs.

6. In a paste attachment for a rewind machine for rewinding rolls from a continuously moving web of paper or other materials, the combination of a supporting frame adjustably carried on the rewind machine, a paste roller journaled in bearings on said frame, a paste fountain eccentrically supported on the paste roller and provided with a doctor blade movable towards and away from the paste roller through change in the relative posi-

tion of the fountain, a shaft loosely carried by the frame, sector discs fixed on the shaft and movable into rolling contact with said paste roller during a portion of one complete rotation thereof and into rolling contact with the continuously moving web during the remaining portion of the rotation to first transfer paste at the speed of the paste roller to said sector discs and thereafter from the discs to the moving web at the speed of the latter, means to drive the said shaft at the speed of the moving web during contact of the discs therewith, comprising a driven member rotating at web speed and loose on said shaft and provided with a projection parallel to the shaft, a hub fixed on the shaft adjacent the driven member and provided with a retractable projecting bolt disposed in the path of movement of the said projection to engage the latter, and carrying the shaft and discs around at web speed while the discs are in contact therewith, a cam retracting said bolt during movement of said discs in contact with the paste roller to permit the shaft and discs to rotate at paste roller speed for a portion of one complete revolution of the discs, driving means moving at paste roller speed and connected to said shaft to rotate the same while the discs are contacting the paste roller, and a brake automatically applied to said shaft when the cam retracts the bolt and disconnects the hub from the driven member moving at web speed to bring the shaft and discs to a halt until the driving means connects itself with the shaft.

7. In a paste attachment for a rewind machine for rewinding rolls from a continuously moving web of paper or other materials, the combination of a supporting frame adjustably carried on the rewind machine, a paste roller journaled in bearings on said frame, a paste fountain eccentrically supported on the paste roller and provided with a doctor blade movable towards and away from the paste roller through change in the relative position of the fountain, a shaft loosely carried by the frame, sector discs fixed on the shaft and movable into rolling contact with said paste roller during a portion of one complete rotation thereof and into rolling contact with the continuously moving web during the remaining portion of the rotation to first transfer paste at the speed of the paste roller to said sector discs and thereafter from the discs to the moving web at the speed of the latter, said frame carrying the fountain, paste roller and discs being divided transversely thereof and pivotally mounted to allow the pivoted portion to swing out of line with the fixed portion, and means operating in connection with the pivoted portion to raise and lower the latter to adjust the contact pressure between the discs and web.

8. In a paste attachment for a rewind machine for rewinding rolls from a continuously moving web of paper or other materials, the combination of a supporting frame adjustably carried on the rewind machine, a paste roller journaled in bearings on said frame, a paste fountain eccentrically supported on the paste roller and provided with a doctor blade movable towards and away from the paste roller through change in the relative position of the fountain, a shaft loosely carried by the frame, sector discs fixed on the shaft and movable into rolling contact with said paste roller during a portion of one complete rotation thereof and into rolling contact with the continuously moving web during the remaining portion of the rotation to first transfer paste at the speed of

the paste roller to said sector discs and thereafter from the discs to the moving web at the speed of the latter, a screw support for the free end of the paste fountain to adjust the latter about its eccentric support thereby regulating the gap between the doctor blade and the surface of the paste roller.

9. In a paste attachment for a rewind machine for rewinding rolls from a continuously moving web of paper or other materials, the combination of a paste fountain and paste roller rotating at a predetermined speed, and paste sector discs making one complete revolution for one revolution of the paste roll and for each completed rewind roll, driving means to first revolve the discs at web speed for the period they are in rolling contact with the web and then to rotate them at paste roller speed for the period they are in rolling contact with the roller, a supporting frame having bearing blocks in which said paste roller is journaled, eccentric bushings for the ends of said paste roller, and bearings on said fountain to embrace the eccentric bushings to adjustably support the fountain with respect to the paste roller.

10. In a paste attachment for a rewind machine for rewinding rolls from a continuously moving web of paper or other materials, the combination of a paste fountain and paste roller rotating at a predetermined speed, and paste sector discs making one complete revolution for one revolution of the paste roll and for each completed rewind roll, driving means to first revolve the discs at web speed for the period they are in rolling contact with the web and then to rotate them at paste roller speed for the period they are in rolling contact with the roller, a pivotally mounted supporting frame having bearing blocks in which the paste roller is journaled at its ends, eccentric bushings carried by the paste roller inwardly of the bearing blocks, journal bearings carried by the fountain at the front thereof to embrace the eccentric bushings to adjustably support the fountain, a doctor blade carried by the front portion of the fountain and directed towards the paste roller to control the amount of paste carried out of the fountain on said roller, and means to support the rear of the fountain above the front, said means being adjustable to swing the fountain about the eccentric bushings, whereby the gap between the surface of the paste roller and the edge of the doctor blade is regulated.

11. In a paste attachment for a rewind machine for rewinding rolls from a continuously moving web of paper or other materials, the combination of a paste fountain and paste roller rotating at a predetermined speed, and paste sector discs making one complete revolution for one revolution of the paste roll and for each completed rewind roll, driving means to first revolve the discs at web speed for the period they are in rolling contact with the web and then to rotate them at paste roller speed for the period they are in rolling contact with the roller, each paste sector disc comprising a wheel having a grooved peripheral sector of substantially one-half its circumference, a paste carrying strip fitting the groove and having its paste carrying surface projecting above the groove, said wheel having depressions crosswise of the ends of the sector, and plates mounted in said depressions to form leading and trailing ends to the paste carrying strip.

12. In a paste attachment for a rewind machine for rewinding rolls from a continuously moving

web of paper or other materials, the combination of a paste fountain and paste roller rotating at a predetermined speed, and paste sector discs making one complete revolution for one revolution of the paste roll and for each completed rewind roll, driving means to first revolve the discs at web speed for the period they are in rolling contact with the web and then to rotate them at paste roller speed for the period they are in rolling contact with the roller, a supporting frame having upper bearing blocks in which the paste roller is journaled, eccentric bushings for the paste roller, journals for the front of the fountain to embrace and be supported on the eccentric bushings, and bearings depending from the frame in which a shaft carrying the paste sector discs is journaled, whereby adjustment of the eccentric bushings regulates the pressure exerted by the paste roller upon the paste sector discs.

13. In a paste attachment for a rewind machine for rewinding rolls from a continuously moving web of paper or other materials, the combination of a paste fountain and paste roller rotating at a predetermined speed, and paste sector discs making one complete revolution for one revolution of the paste roll and for each completed rewind roll, driving means to first revolve the discs at web speed for the period they are in rolling contact with the web and then to rotate them at paste roller speed for the period they are in rolling contact with the roller, a supporting frame having bearing blocks above the frame in which the ends of the paste roller are journaled, eccentric bushings for paste roller, journal bearings for the sides of the fountain at the front thereof to embrace and be supported on said eccentric bushings, a doctor blade for the front of the fountain to cooperate with the paste roller and regulate the amount of paste carried out of the fountain, means to adjustably support the rear of the fountain at an inclination towards the front and to regulate the gap between paste roller and doctor blade, bearings depending from the frame in which the paste sector discs are journaled, said eccentric bushings being adjustable to bring the paste roller towards or away from the sector discs to regulate the pressure therebetween, and in which said driving means between sector discs and paste roller comprises

a latch connection to turn the discs at web speed, means to retract the latch to free the discs and further means driving at the paste roller speed to revolve the discs until the movement at web speed takes place and thereafter to catch up and again engage to continue the rotary movement of the discs at paste roller speed.

14. In a paste attachment for a rewind machine for rewinding rolls from a continuously moving web of paper or other materials, the combination of a paste fountain and paste roller rotating at a predetermined speed, and paste sector discs making one complete revolution for one revolution of the paste roll and for each completed rewind roll, driving means to first revolve the discs at web speed for the period they are in rolling contact with the web and then to rotate them at paste roller speed for the period they are in rolling contact with the roller, a brake operating to bring the discs to a halt at the end of their movement at web speed and the start of their movement at paste roller speed.

15. In combination, a rewind machine having a driven feed roller for a continuously running web of the paper or other material to be rewound into rolls of predetermined lengths, a rotary severing unit making one revolution for each completed rewind roll produced and separating the web at the predetermined length, a paste attachment for said machine, comprising a paste receptacle and paste roller to convey paste from the receptacle, a plurality of sector paste discs interposed between the paste roller and web where it passes the feed roller, means operating to make one complete revolution of the paste roller for each roll produced and to impart rotary movement at paste roller speed to the discs for the part of the rotary movement thereof which brings them into rolling contact with the paste roller, means operating from the feed roller to revolve the discs at web speed during the portion of one revolution when the discs are in rolling contact with the web to apply the paste thereto along a transverse area which is separated from the web by the severing unit to form the trailing end of the roll.

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