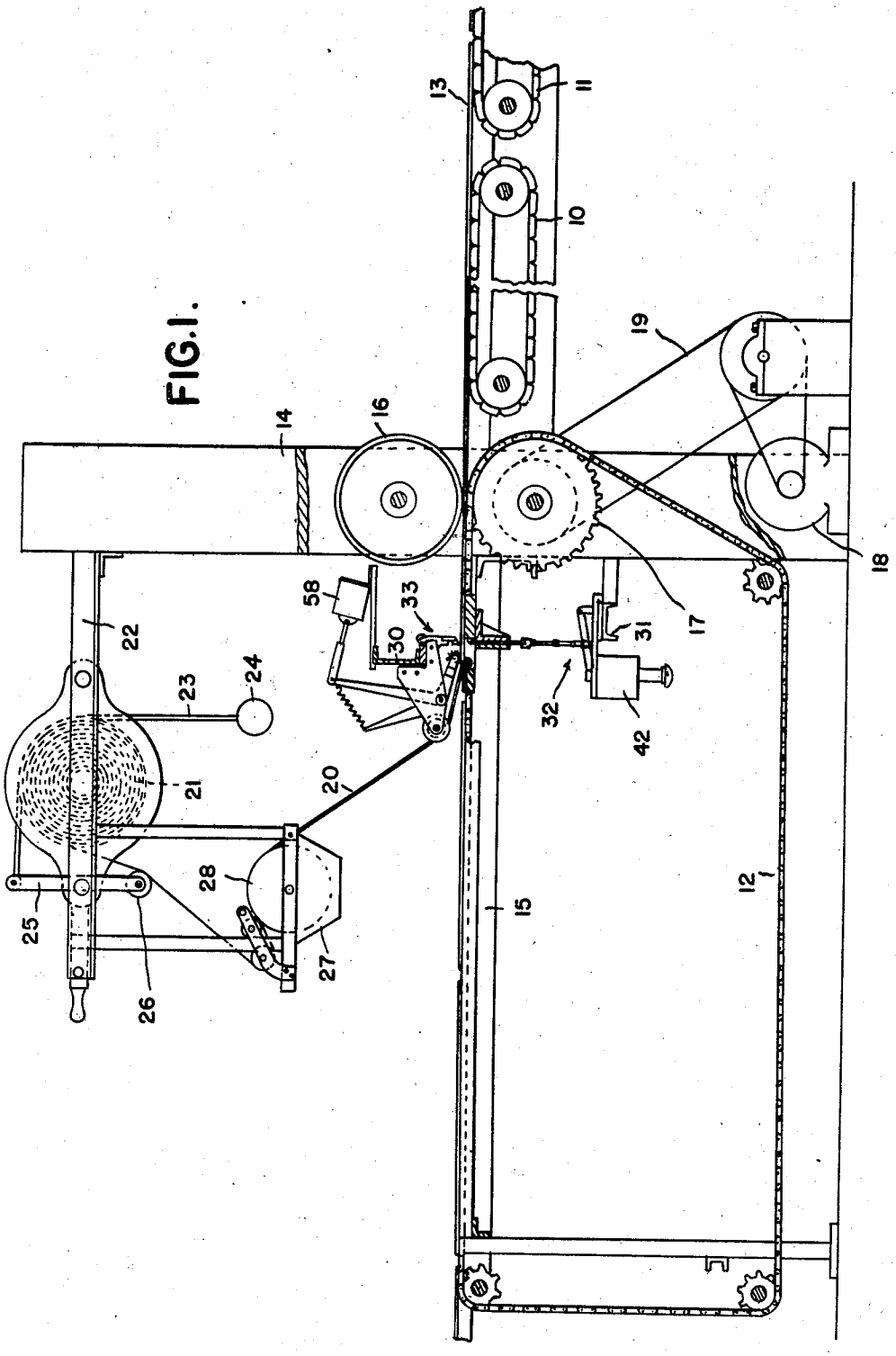
Sept. 2, 1941. H. M. RATLEY ET AL 2,254,394

CUTOFF APPLYING MEANS

Filed Sept. 16, 1940 4 Sheets-Sheet 1

FIG. 1.



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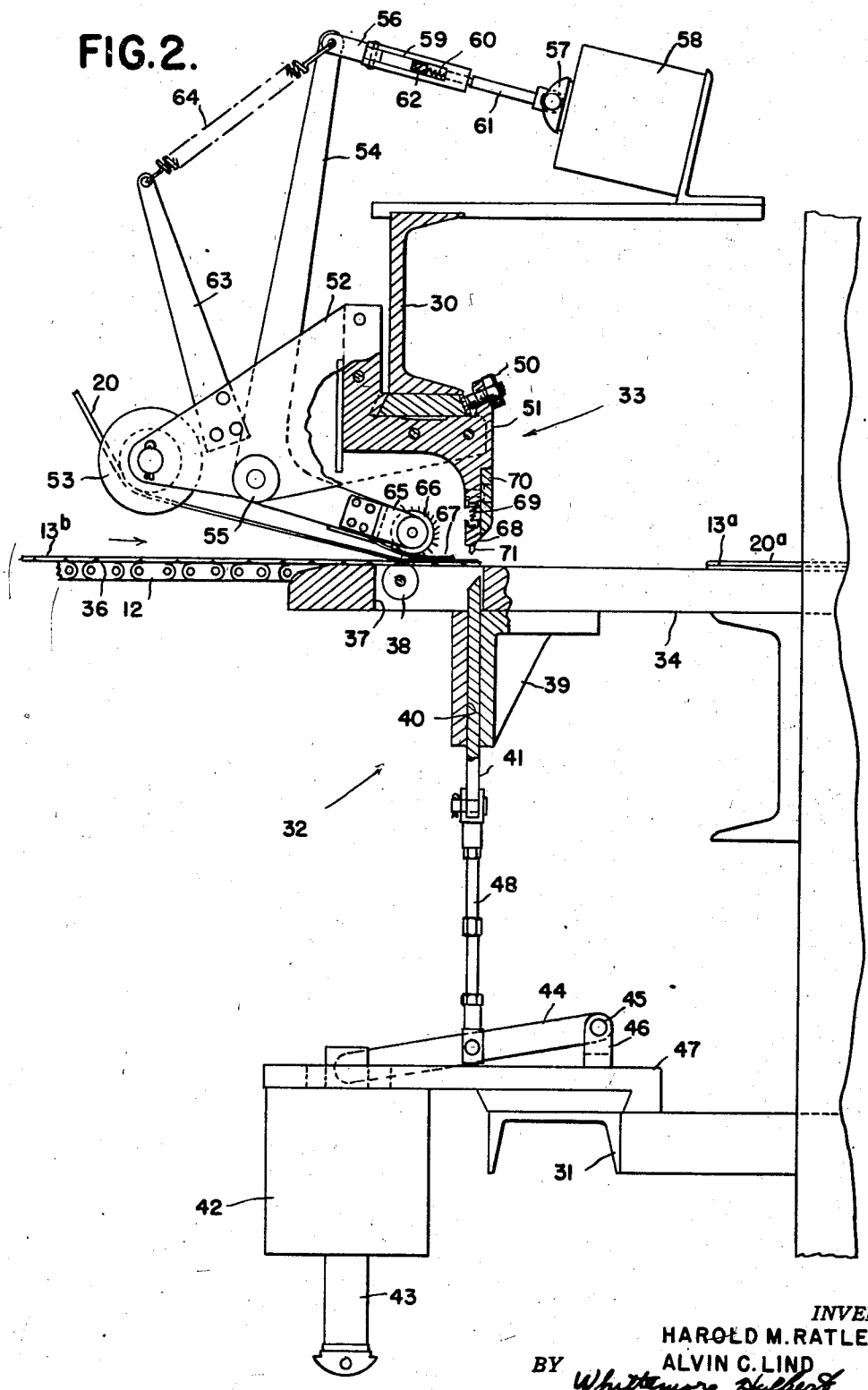
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Sept. 2, 1941. H. M. RATLEY ET AL 2,254,394

CUTOFF APPLYING MEANS

Filed Sept. 16, 1940 4 Sheets-Sheet 2

FIG. 2.



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Sept. 2, 1941. H. M. RATLEY ET AL 2,254,394

CUTOFF APPLYING MEANS

Filed Sept. 16, 1940 4 Sheets-Sheet 3

FIG.3.

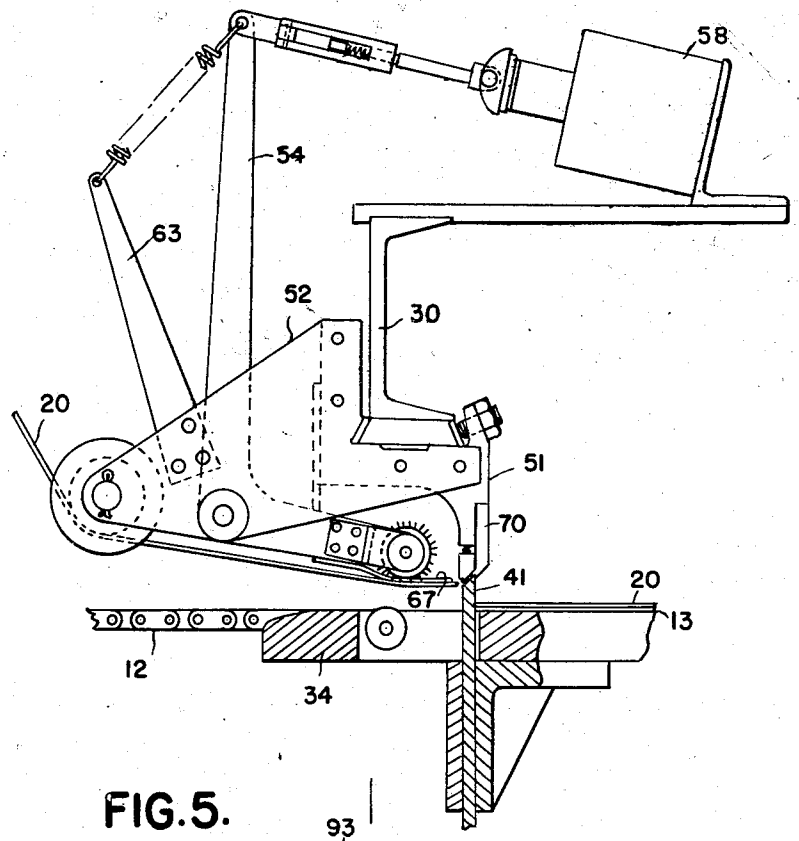


FIG.5.

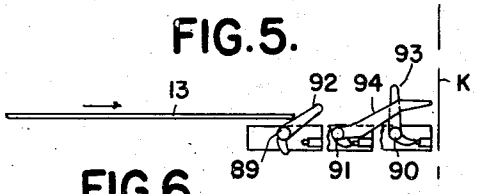


FIG.6.

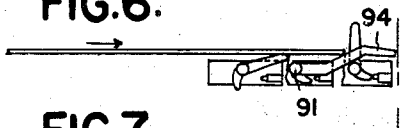


FIG.7.

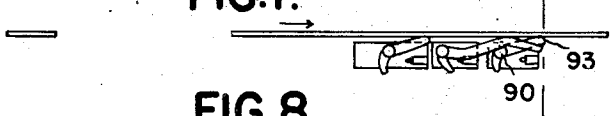


FIG.8.

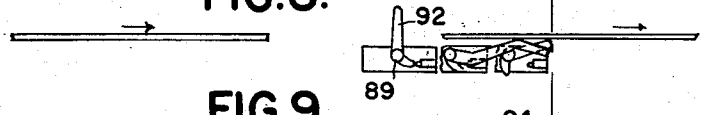


FIG.9.

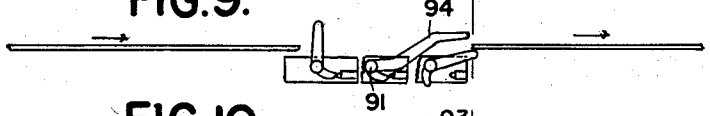
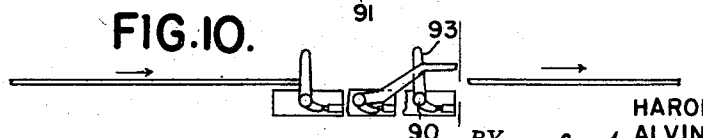


FIG.10.



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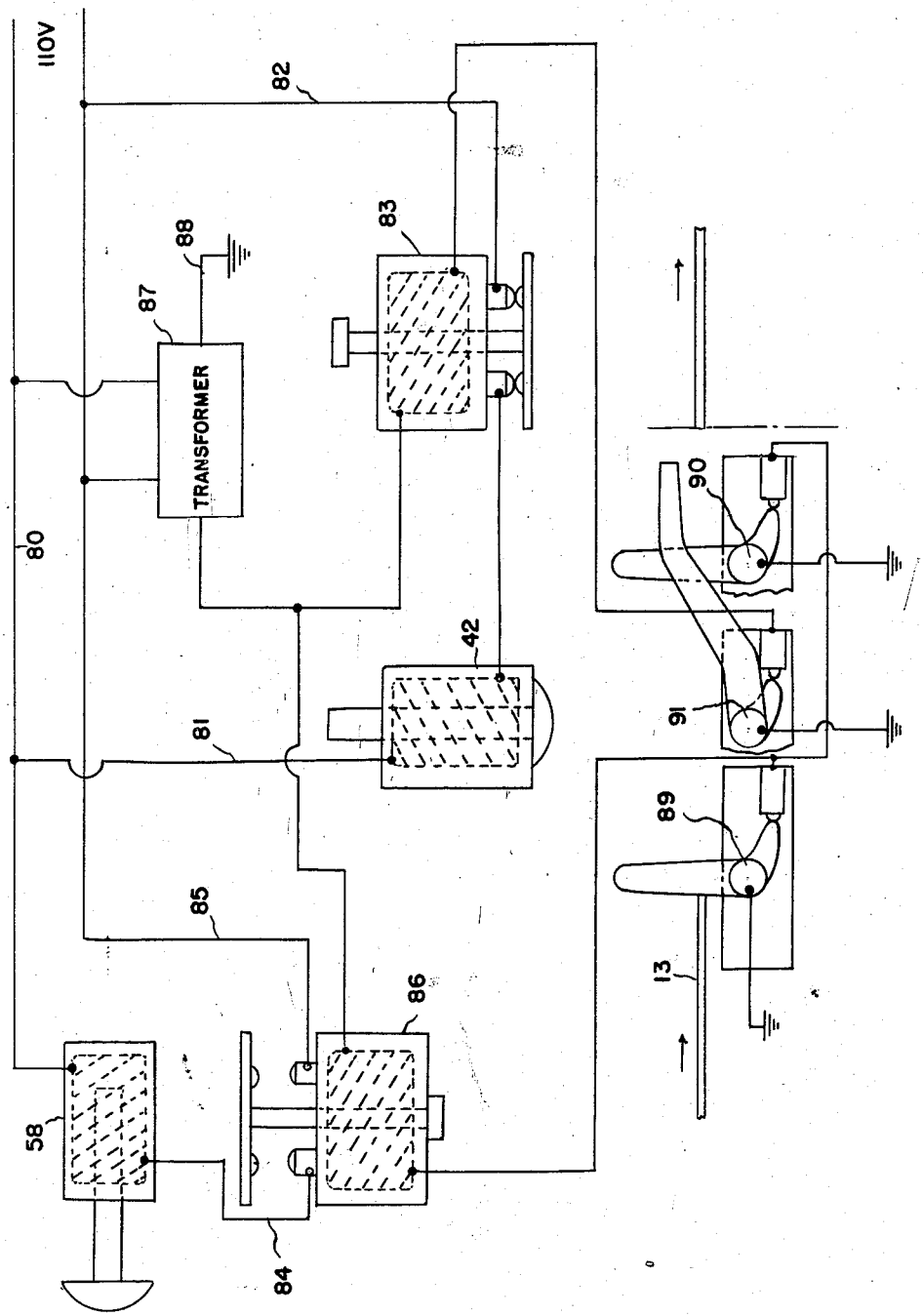
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CUTOFF APPLYING MEANS

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FIG.4.



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Patented Sept. 2, 1941

2,254,394

UNITED STATES PATENT OFFICE

2,254,394

CUTOFF APPLYING MEANS

Harold M. Ratley, Highland Park, and Alvin C. Lind, Detroit, Mich., assignors to National Automotive Fibres, Inc., Detroit, Mich., a corporation of Delaware

Application September 16, 1940, Serial No. 357,067

15 Claims. (Cl. 154—41)

The present invention relates to apparatus for applying strip material to articles.

The embodiment illustrated in the present application is designed particularly for applying strip material, such for example as a strip of unvulcanized rubber, to panel boards as an intermediate step in the method of manufacturing decorated upholstered trim panels. It will be observed, of course, that the invention has a considerably wider field of utility, and in general is useful wherever it is desired to apply strip material adhesively or otherwise to a series of articles.

In the manufacture of upholstery trim panels as disclosed in copending application of Harold M. Ratley, Serial No. 251,276, it is desired to adhesively secure a strip of unvulcanized rubber to one face of panel boards. This strip material is applied continuously across the panel board, although the apparatus illustrated in the present application is suitable for applying strip material to only a portion of the panel board rather than completely across the panel board.

In the prior Ratley application referred to, the continuous strip material was applied to a series of panel boards without severance of the strip material. Since the panel boards were spaced apart a short distance and in some cases this spacing of the panel boards cannot be avoided, there was a considerable wastage of the strip material between intermediate panels.

We have devised the present apparatus for use in applying strip material without wastage, and the apparatus which we have devised includes an automatic cut-off for severing the strip material at the trailing edge of the panel board as the same advances past the applicator station, means for arresting the advance of the strip material until the next succeeding panel board is in position for application, means for retaining the free end of the strip material out of the path of advance of the panel boards so as to avoid wiping the adhesive therefrom, means for moving the cut end of the strip material into engagement with the panel at a desired point, either at the leading edge thereof or otherwise, and means for thereafter feeding the strip material at the same rate of advance as the panel board and applying the same to the panel board. In the present disclosed embodiment of the invention we have shown the moving parts of the apparatus as actuated by solenoids controlled by trip switches adapted to be engaged by the panels as they advance, but it will be appreciated that instead of electrical apparatus other automatic means could be employed, or the actuation of movable parts could, if desired, be carried out manually. We prefer, however, to provide the automatically actuated electrical equipment disclosed herein.

With the foregoing general remarks in mind, it is an object of the present invention to provide novel apparatus for applying strip material to a series of advancing articles.

It is a further object of the invention to provide novel apparatus for applying strip material to a series of articles, severing the strip material between adjacent articles to avoid wastage thereof, timing the advance of the strip material so as to apply the same to designated portions of the articles, and retaining the free end of the continuous strip material out of the path of advance of the articles until one of the articles reaches the position for application of the strip material.

In carrying out the foregoing objects, we have devised certain novel devices, and it is accordingly an object of the present invention to provide novel apparatus of the type disclosed herein for carrying out the broad objects of the invention.

Other objects of the invention will be apparent as the description proceeds, and when taken in conjunction with the accompanying drawings, wherein:

Figure 1 is a side view with parts in section of the complete apparatus for applying strip material;

Figure 2 is an enlarged fragmentary side elevation, with parts in section, of the severing and applying mechanism, with the parts shown in one position thereof;

Figure 3 is a view similar to Figure 2 with the parts shown in a second position;

Figure 4 is a wiring diagram for the actuating means; and

Figures 5 to 10 are a series of diagrammatic views showing the relationship of the switches during a sequence of operation.

Referring first to Figure 1, we have indicated a conveyor system comprising a plurality of belts 10 and 11 and a conveyor chain 12 for advancing a series of panel plates indicated at 13 past the means for applying the strip material.

A supporting structure indicated generally at 14 is provided adjacent a table 15 over which the conveyor chain 12 moves. A roller 16 is carried by the supporting structure 14, which also carries a sprocket 17 driving the chain 12. We have indicated a motor 18 driving the sprocket 17 by

means of suitable drive means, such as belts or chains 19.

Strip material 20, which in the embodiment illustrated is in the form of narrow strips of unvulcanized rubber, is provided in a roll indicated generally at 21 and is supported on a bracket 22. The roll 21 is mounted for free rotation, and in order to prevent coasting of the roll after withdrawal of the strip material 20 has ceased, we provide a band 23 with frictional contact over a portion of the roll and having a weight 24 carried thereby. The band 23 is secured to a free end of a member 25, the lower end of which carries an idle roller 26 adapted to engage strip material 20 as the same is withdrawn from the roll 21.

Depending from the bracket 22 is a receptacle 27 for containing a supply of a suitable adhesive material. Carried by the receptacle 27 is a roller 28, the lower portion of which is adapted to be submersed within the fluid adhesive contained within the receptacle; the roller being mounted for free rotation so that as the strip material is drawn thereover the roller 28 rotates and applies the adhesive material to the strip material 20.

Extending transversely of the conveyor system are angle irons 30 and 31, suitably carried by the supporting structure 14 or otherwise secured, as desired. In Figure 1 we have indicated generally at 32 the severing mechanism, and generally at 33 the applicator mechanism. Details of these mechanisms are more apparent from an inspection of Figures 2 and 3, to which reference is now made.

A bedplate 34 is provided over which the panels 13 are advanced in the direction of the arrow in Figure 2. Panels 13 are engaged by pins indicated at 36 carried by the chain 12. The pins 36 provide for positive advance of the panels, even though resisted by other mechanism later to be described. The bedplate 34 has an opening 37 therein in which is mounted a roller 38. Beneath the bedplate 34 is a bracket 39 having an opening 40 therein for slidably receiving and guiding a knife 41.

The knife 41 is actuated by means of a solenoid 42 having a vertically movable plunger 43 to which is connected a lever 44 journalled as indicated at 45 to a bifurcated arm 46 carried by a supporting fixture 47. The fixture 47 is mounted on the angle iron 31 and is adjustable thereabout to position the knife in registry with the strip material, as will later appear.

The knife 41 is connected by means of an adjustable link 48 to a mid portion of the lever 44. It will be apparent that actuation of the solenoid 42 shifts the plunger 43 upwardly and the knife 41 is correspondingly moved upwardly across the path of advance of successive panels.

The applicator mechanism is mounted above the table 34 and is likewise adjustable as a unit longitudinally of the angle iron 30, this adjustment being permitted by reason of the provision of the clamping or locking bolt 50. The applicator structure includes a main bracket 51 to which are secured a pair of supporting plates 52. Plates 52 have journalled between them a guide roll 53 for receiving and guiding the strip material 20 into position. Bell crank 54 is journalled between the plates 52 as indicated at 55, the upper end of the bell crank 54 being connected resiliently by means of a link 56 to the plunger 57 of a solenoid 58.

The link 56 includes a bifurcated member 59 having a compression spring 60 suitably secured therein, and a second link element 61 having a cross piece 62 extending between the furcations of the bifurcated element 59 so as to engage the compression spring 60. As a result of this, when the solenoid 58 is energized, the bell crank 54 is swung in a clockwise direction, as seen in Figure 2, with a substantially constant force due to the compression of the spring, although the opposite end of the bell crank 54 may be engaged in different positions due to variations in thickness of the material being operated on.

Rigidly secured to one of the plates 52 is an arm 63, and a tension spring indicated at 64 connects the outer end of the arm 63 and the outer end of the bell crank 54, biasing the same in a counterclockwise direction, as seen in Figure 2.

The opposite end of the bell crank 54 is provided with a pair of plates 65 between which is journalled a pin roller 66, a plurality of sharp pins being provided on the roller. Also secured to the lower end of the bell crank 54 is a flat leaf spring 67, for a purpose which will presently appear.

The bracket 51 carries a pad 68 slidably mounted thereon and urged downwardly to the position shown in Figure 2 by means of a compression spring 69. This assembly includes a detachable plate 70. The pad 68 is movable upwardly from the position shown in Figure 2 to the position illustrated in Figure 3 when the knife 41 is moved upwardly. A pin 71 is carried by the lower end of the pad 68.

The operation of the apparatus thus far described will now be apparent. A panel 13*a* has just passed the apparatus and has had applied thereto a strip 20*a* of rubber. The leading edge of a following panel 13*b* has just passed beneath the pin 71 and strip material 20 is now being applied thereto. The pin roller 66 penetrates the strip material 20 and engages into the upper surface of the panel board 13*b*. The pin roller 66 is mounted for free rotation and as the panel 13*b* is positively advanced by reason of its engagement with the pins 36 on the chain 12, the pin roller 66 is positively rotated and feeds the strip material 20 forwardly at the same rate of advance as panel 13*b*. At the same time pressure of the pin roller 66 presses the strip material into firm contact with the upper surface of the panel board and applies the same thereto. When the trailing or following edge of the panel board 13*b* reaches the pin roller 66, the solenoid 58 is deenergized and the bell crank 54 is rocked in a counterclockwise direction under the influence of the spring 64. This raises the pin roller 66 out of contact with the panel board.

When the trailing or following edge of the tirm panel 13*b* reaches the knife 41, the solenoid 42 is energized, bringing the knife upwardly into engagement with the pad 68. This condition is illustrated in Figure 3, in which figure it will be noted that the knife 41 has moved upwardly in shearing engagement with the inner surface of the plate 70 and has pushed the pad 68 upwardly against the compression spring 69. This has the effect of severing the strip material at the trailing edge of the panel board and at the same time the free end of the continuous strip material is impaled upon the pin 71. The spring 67 is above the strip material 20 due to the previously referred to upward motion of the pin roller 66 and associated parts.

As a result of this, the free end of the strip material is held upwardly out of the path of advance of the trim panels. This is a very important feature since it prevents the next ad-

vancing trim panel from wiping off the adhesive carried by the lower surface of the strip material 20.

When the next succeeding panel is in appropriate position, the solenoid 58 is energized, thus moving the pin roller 66 and the spring 67 downwardly. Movement of the spring 67 downwardly frees the end of the strip material from the pin 71 and the pin roller 66 pierces or penetrates the strip material and engages the next succeeding panel. Continued advance of the panel positively withdraws strip material from the roll 21 and applies the same to the upper surface thereof, as will be obvious. It will be apparent that the strip material need not be applied from the leading edge rearwardly, but instead may be applied from any desired point intermediate the leading and trailing edges. With the present illustrated embodiment, the cutoff necessarily takes place only at the trailing edge, but it will be appreciated that, if desired, the cut-off operating on the upper surface of the trim panel could be provided so that the strip material could be positioned over any desired portion of the trim panel.

In order that the operation of the means for applying the strip material may be entirely automatic, we provide a plurality of switches along the table 34, in position to be engaged by the advancing trim panels. These switches are connected to the solenoids 42 and 58 by means of the circuit illustrated in Figure 4, which will now be described.

The solenoid 42 is connected to power line 80 by means of connections 81 and 82 controlled by the normally open relay 83. The solenoid 58 is connected to the line 80 by connections 84 and 85 controlled by the normally closed relay 86. A transformer 87 is connected across the line 80 and is shown as provided with a ground connection 88. The relays 83 and 86 are adapted to be actuated from this low voltage transformer, and a circuit from the transformer through the normally closed relay 86 is provided which includes switches 89 and 90 which are in parallel, and a second circuit through the normally open relay 83 which includes the switch 91 is provided.

Referring now particularly to Figures 5 to 10, the switch 89 is normally closed but includes an arm 92 projecting upwardly into the path of trim panels 13. The switch 90 is also normally closed but includes an upwardly projecting arm 93 which also projects into the path of the trim panels 13. Intermediate the switches 89 and 90 is provided a switch 91, which is also normally closed and which has an extending arm 94. It will be obvious that arm 94 is of a conformation so as to provide a carry-over of substantial length. As a matter of fact, an advancing trim panel, such as 13, opens the switch 91 and maintains the switch open until just immediately before closure of the third switch 90.

In Figures 5 to 10 we have superimposed a broken line K, which indicates the location of the knife relative to the switches. For simplicity, the switches have not been included in the detail figures previously described.

The switches 89, 90 and 91 are all normally closed, and when they are all closed, normally open relay 83 is closed, and normally closed relay 86 is open. When normally open relay 83 is closed, the solenoid 42 is energized and the knife 41 is in upper position. When normally closed relay 86 is open, solenoid 58 is deenergized and the pin roller 67 is in upper position.

When an advance panel strikes the arm 92 of the switch 89, as shown in Figure 5, no changes occur for the reason that the switch 90, which is in parallel with the switch 89, remains closed. Further advance of trim panel 13 opens the switch 91, as shown in Figure 6. Opening of the switch 91 breaks the circuit through the normally open relay 83, permitting the relay to open, thus breaking the circuit to solenoid 42 which, in turn, permits the knife 41 to drop under the influence of gravity, or a spring, if desired.

Further advance of a panel 13 eventually opens the switch 90, as indicated in Figure 7. When the switch 90 is opened, the circuit through the normally closed relay 86 is broken, the parallel ground connection through the switch 89 having previously been open. This results in closure of the relay 86 with the result that the solenoid 58 is energized, thus moving the pin roller downwardly. It will be observed from Figure 7 that this occurs when the leading edge of the panel 13 is substantially in line with the knife edge, or in other words is substantially in line with the free end of the continuous strip material 20. Movement of the pin roller 66 downwardly, which is accompanied by a corresponding movement of the leaf spring 67, moves the adhesive coated strip material 20 downwardly into contact with the upper surface of the trim panel. The pin roller is urged downwardly with sufficient force so that the pins carried thereby penetrate the strip material and engage the upper surface of the trim panels. At this time all of the switches 89, 90 and 91 are open and remain open for so long as the trim panel overlies all of the switches. Eventually, as shown in Figure 8, the trailing edge of the trim panel passes over the actuating arm 92 of the switch 89, permitting the same to close. Closure of the switch 89 again completes the circuit through the normally closed relay 86, thus opening the relay and breaking the circuit to the solenoid 58. When the circuit to the solenoid 58 is broken, the bell crank 54 moves in a counterclockwise direction, as seen in Figure 3, thus lifting the pin wheel 66 and the leaf spring 67 out of engagement with the strip material and panel board.

This, as will be observed in Figure 8, occurs when the trailing edge of the panel 13 is approaching, but has not yet reached the plane of the knife edge indicated by the broken line K.

Further movement of the trim panel 13, as indicated in Figure 9, eventually causes the panel to drop off the carry-over arm 94 of the switch 91, permitting the same to close. Closure of the switch 91 completes the circuit through the normally open relay 83, thus closing the same and completing a circuit to the cutter blade solenoid 42, which results in upward movement of the cutter blade 41 so as to cut the strip material 20 at the rear of the panel board 13.

Upon a very slight further advance of the trim panel 13, as indicated in Figure 10, the panel board drops off the arm 93 of the switch 90, permitting the same to close. This does not effect either of the solenoids for the reason that this switch is in parallel with the switch 89, which was closed previously.

It will be understood that while the pin roller 66 is raised slightly before the trailing edge of the panel 13 reaches the knife 41, the strip material 20 will continue to be drawn along the trim panel by reason of the fact that it is adhesively united to a substantial area thereof. On the other hand, the use of the pin roller is very desirable to start

the feeding of the strip material 20 when the same is first moved into contact with the panel board. This is partly because the strip material 20 has a fluid adhesive applied to its under surface and there would be a tendency for the strip material to slip on the upper surface of the panel board unless means were provided of positively feeding the same in sequence therewith.

The particular arrangement of switches shown in Figures 5 to 10 provides for applying strip material continuously from the leading edge to the trailing edge of the panel. It will be possible, of course, as is readily apparent, to cause the strip material to be applied to the panel board, commencing at any point desired rearwardly of the leading edge. Thus, for example, if desired, the strip material may be retained in elevated position while the first half, or any predetermined portion of the panel board passes the applicator, after which the pin roller may be moved downwardly, thus commencing the application of strip material from that point rearwardly on the panel board.

The apparatus illustrated herein is well adapted for the rapid production of trim panels and results in the application of strip material to the panel boards with absolute uniformity and without any wastage of the strip material. It is only necessary for the operator to position the panel boards in series on the moving conveyor and the apparatus herein disclosed automatically applies strip material to the panel boards as they traverse the mechanism.

It will, of course, be apparent that any number of strips may simultaneously be applied to the panel board, it being necessary only to duplicate so much of the apparatus illustrated herein as is necessary. It will be apparent, of course, that a single solenoid may actuate any desired number of the pin wheels, and likewise a single solenoid may actuate any number of cutter knives.

While we have illustrated a particular set-up in which the pin roller 66 is raised a substantial interval before the knife 41 is actuated, it will also be apparent that the pin wheel, if desired, may be moved upwardly simultaneously with upward motion of the knife 41. Where this is done, it may be that the strip material 20 will remain impaled on the pins of the roller 66 so that this member will retain the strip material in elevated position with the assistance of the pin 71 carried by the pad 68.

While we have illustrated and described but a single embodiment of the apparatus for applying strip material to a series of articles, it will be understood that this disclosure has been made solely to enable those skilled in the art to practice the invention, the scope of which is indicated by the appended claims.

What we claim as our invention is:

1. Apparatus for applying strip material to a series of continuously advancing articles, comprising: a conveyor for advancing said articles in spaced relation, a support adjacent said conveyor for continuous strip material, a knife movable across the path of said articles to sever strip material between adjacent articles, a pin for impaling the free end of said strip material after severance of a length thereof, said pin being located to position the said free end out of the path of advance of said articles, and means for moving said free end into engagement with a following article when said article arrives in position to receive said strip material.

2. Apparatus for applying strip material to a series of continuously advancing articles, comprising: a conveyor for advancing said articles in spaced relation, a support adjacent said conveyor for continuous strip material, a knife movable across the path of said articles to sever strip material between adjacent articles, a pin for impaling the free end of said strip material after severance of a length thereof, said pin being located to position the said free end out of the path of advance of said articles, and means for moving said free end into engagement with a following article when said article arrives in position to receive said strip material, said last means comprising a roller adapted to press said strip material against said article so as to withdraw strip material from said support.

3. Apparatus for applying strip material to a series of continuously advancing articles, comprising: a conveyor for advancing said articles in spaced relation, a support adjacent said conveyor for continuous strip material, a knife movable across the path of said articles to sever strip material between adjacent articles, a pin for impaling the free end of said strip material after severance of a length thereof, said pin being located to position the said free end out of the path of advance of said articles, and means for moving said free end into engagement with a following article when said article arrives in position to receive said strip material, said last means comprising a roller having pins adapted to penetrate said strip material and engage said article so as to withdraw strip material from said support.

4. Apparatus for applying strip material to a series of continuously advancing articles, comprising: a conveyor for advancing said articles in spaced relation, a support adjacent said conveyor for continuous strip material, solenoid operated severing means, a retainer pin, and a solenoid operated applicator, a switch operable by said articles to actuate said severing means to sever an applied length of strip material and to impale the free end of said strip material on said retainer pin, and a second switch operable by said articles to actuate said applicator to withdraw the said free end of said strip material from said pin and to move said strip into engagement with the following article.

5. Apparatus for applying strip material to a series of continuously advancing articles, comprising: a conveyor for advancing said articles in spaced relation, a support adjacent said conveyor for continuous strip material, a knife reciprocable across the path of advance of said articles for severing said strip material between succeeding articles, movable applicator means for pressing said strip material against said articles, means automatically operated by the advance of said articles for actuating said knife between adjacent articles, and for moving said applicator means into inoperative position during the interval when no article is in position for application.

6. In a device of the class described, a reciprocable knife, a pad cooperating with said knife having an impaling pin thereon, movable applicator means adjacent said pad comprising a roller and an element movable generally in the same direction as said knife, said knife adapted to sever a length from continuous strip material and impale the free end of said strip material on said pin, and said element adapted to withdraw said impaled end of said strip material from said pin, said roller being effective

then to press said strip material into engagement with an article advanced therepast.

7. Apparatus for applying strip material to a series of continuously advancing articles, comprising: a conveyor for advancing said articles in spaced relation, a support adjacent said conveyor for continuous strip material, severing means for severing an applied length of said strip material, applicator means including an element movable between operative and inoperative position, said applicator means being adapted to retain the free end of said strip material out of the path of advance of said articles when no article is in position for application, said element being effective when moved to operative position to shift the free end of said strip material into contact with an article as it advances into position for application, automatic means for moving said element to inoperative position, for actuating said severing means, and for moving said element to operative position in the order stated, said automatic means including solenoids for actuating said severing means and said element, and switches controlling said solenoids located in position to be engaged by said articles.

8. Apparatus for applying strip material to a series of continuously advancing articles, comprising: a conveyor for advancing said articles in spaced relation, a support adjacent said conveyor for continuous strip material, means for feeding and applying said strip material to an article as it advances, means for severing the applied length of said strip material, and means for arresting the advance of said strip material after severance of said applied length until the following article is in position for application, said means for feeding and applying said strip material comprising a roller movable from inoperative position into engagement with an article to engage strip material therewith and adapted to press said strip material against an article as it continues to advance.

9. In apparatus of the class described, means for feeding strip material from a continuous supply and applying the same to an advancing article comprising a pin roller, and means for urging said roller in a direction to press said strip material to said article, said roller being mounted for free rotation and adapted to penetrate said strip material and to engage said advancing article.

10. Apparatus for applying strip material to a series of continuously advancing articles, comprising: a conveyor for advancing said articles in spaced relation, a support adjacent said conveyor for supporting a supply of continuous strip material, a pressure roll for pressing said strip material into engagement with an article as it advances, means for moving said pressure roll away from said article, and means operable thereafter for severing said strip material and positioning and retaining the free end of said strip out of the path of travel of said articles.

11. Apparatus for applying strip material to a series of continuously advancing articles, comprising: a conveyor for advancing said articles in spaced relation, a support adjacent said conveyor for supporting a supply of continuous strip material, a pressure roll for pressing said strip material into engagement with an article as it advances, means for moving said pressure roll away from said article, and means operable thereafter for severing said strip material and positioning and retaining the free end of said strip out of the path of travel of said articles, said last means comprising an impaling pin and a shear plate above said conveyor, and a knife movable across the path of advance of said articles into position against said pin so as to impale the free end of said strip material thereon.

12. Apparatus for applying strip material to a series of continuously advancing articles, comprising: a conveyor for advancing said articles in spaced relation, a support adjacent said conveyor for supporting a supply of continuous strip material, a pressure roll for pressing said strip material into engagement with an article as it advances, a leaf spring extending forwardly from said pressure roll, a retainer pin above said conveyor, a knife movable across the path of advance of said articles and adapted to sever said strip material and to impale the severed end thereof on said pin, means for moving said roll and leaf spring between operative and inoperative positions, said leaf spring upon movement from inoperative to operative position adapted to withdraw the severed end of said strip material from said pin and to move it into engagement with an advancing article.

13. Apparatus for applying strip material to a series of continuously advancing articles, comprising: a conveyor for advancing said articles in spaced relation, a support adjacent said conveyor for supporting a supply of continuous strip material, applying means including a pressure roll movable towards and away from articles on said conveyor and adapted to move the free end of said strip material into engagement with an advancing article.

14. Apparatus for applying strip material to a series of continuously advancing articles, comprising: a conveyor for advancing said articles in spaced relation, a support adjacent said conveyor for supporting a supply of continuous strip material, applying means including a pressure roll movable towards and away from articles on said conveyor and adapted to move the free end of said strip material into engagement with an advancing article, and severing means including a knife operable upon movement of said applying means away from an article to sever the applied length thereof.

15. Apparatus for applying strip material to a series of continuously advancing articles, comprising: a conveyor for advancing said articles in spaced relation, a support adjacent said conveyor for supporting a supply of continuous strip material, applying means including a pressure roll movable towards and away from articles on said conveyor and adapted to move the free end of said strip material into engagement with an advancing article, and severing means including a knife operable upon movement of said applying means away from an article to sever the applied length thereof, said severing means also including a pin spaced above the path of advance of said articles, said knife cooperating therewith to cause said pin to impale the free end of said strip material to hold the same above the path of advance of said articles.

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