

Sept. 27, 1955

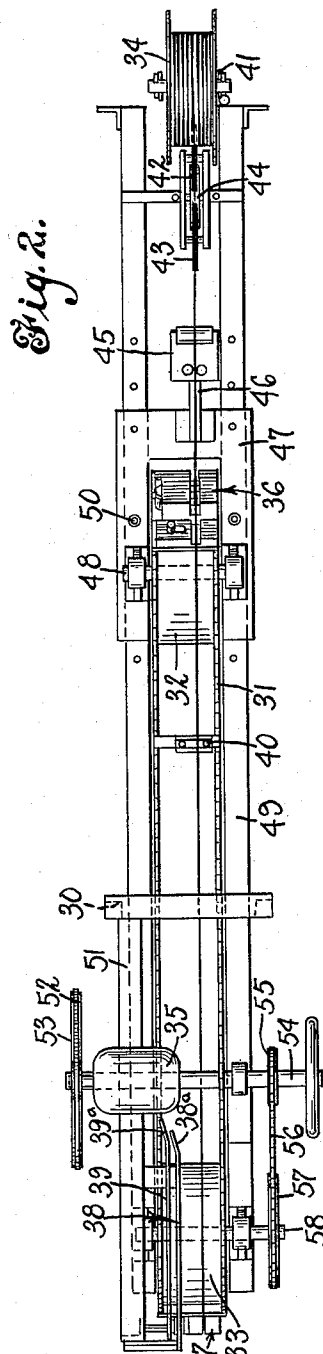
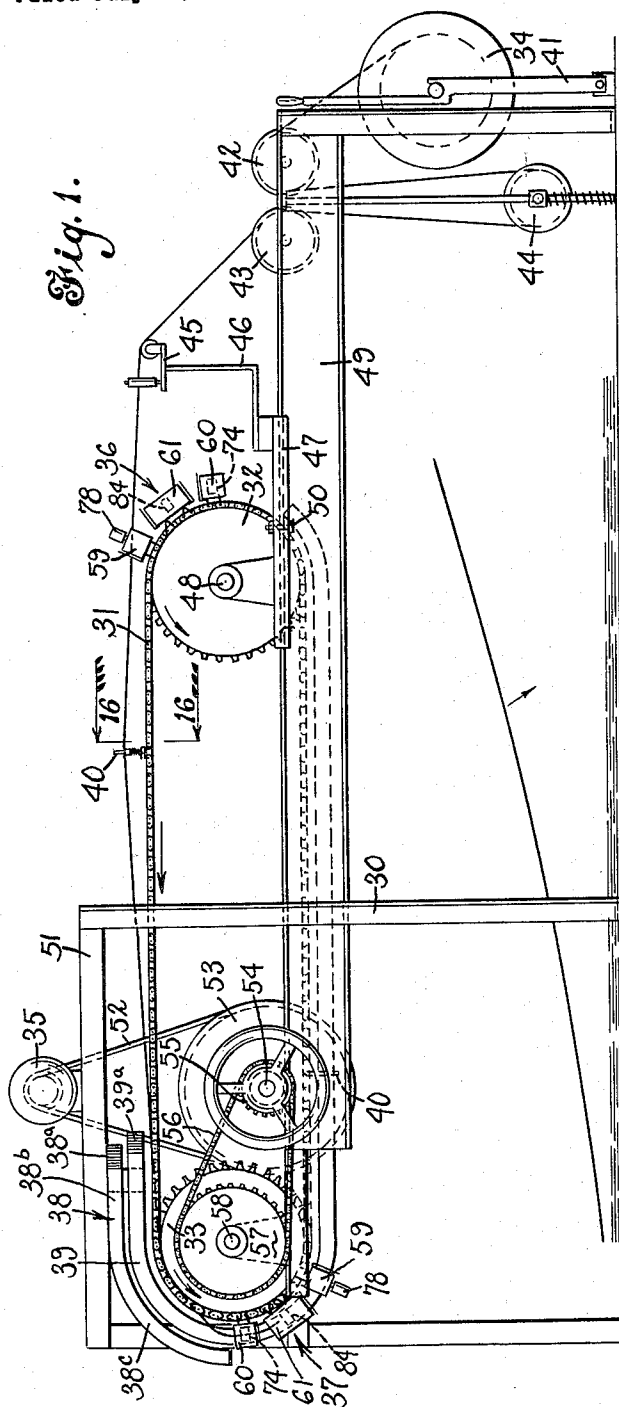
E. COOK

2,718,802

WIRE-CUTTING AND STRIPPING MACHINES

Filed July 22, 1952

5 Sheets-Sheet 1



INVENTOR

Edward Cook

BY

Rockwell & Bartholomew  
ATTORNEYS

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E. COOK

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Fig. 3.

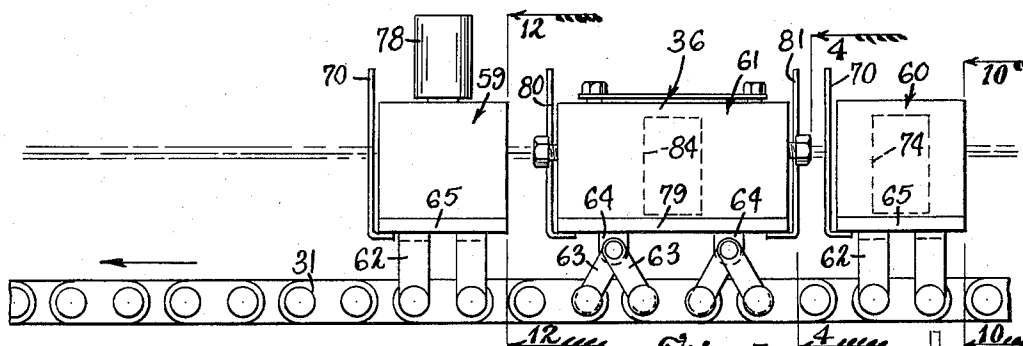


Fig. 4.

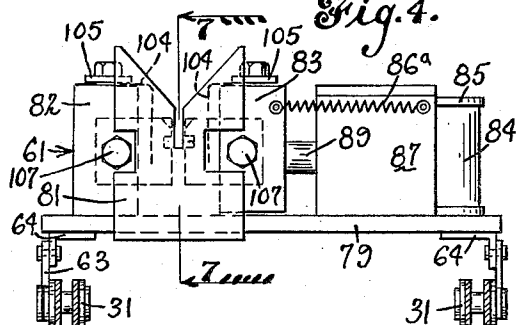


Fig. 5.

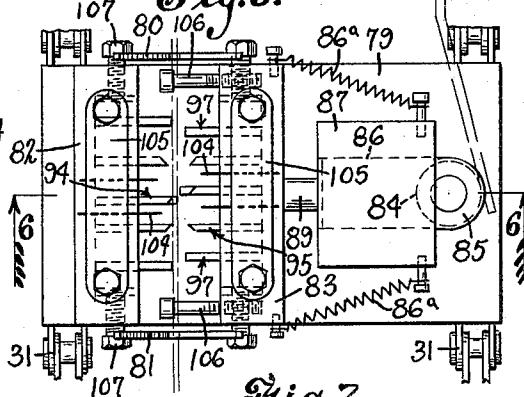


Fig. 6.

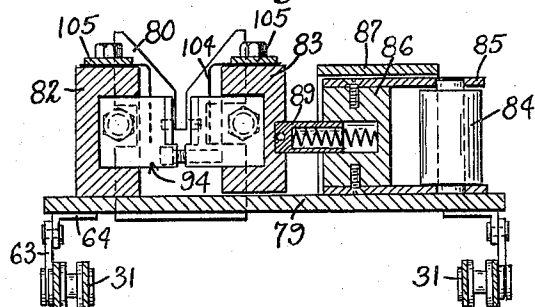


Fig. 7.

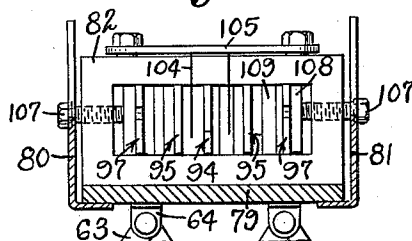


Fig. 8.

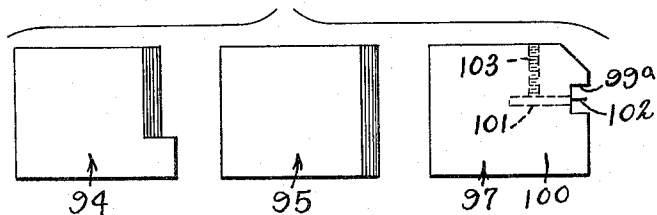
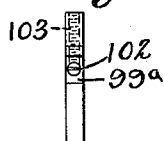


Fig. 9.



INVENTOR

Edward Cook

BY

Rockwell & Bartholomew

ATTORNEYS

Sept. 27, 1955

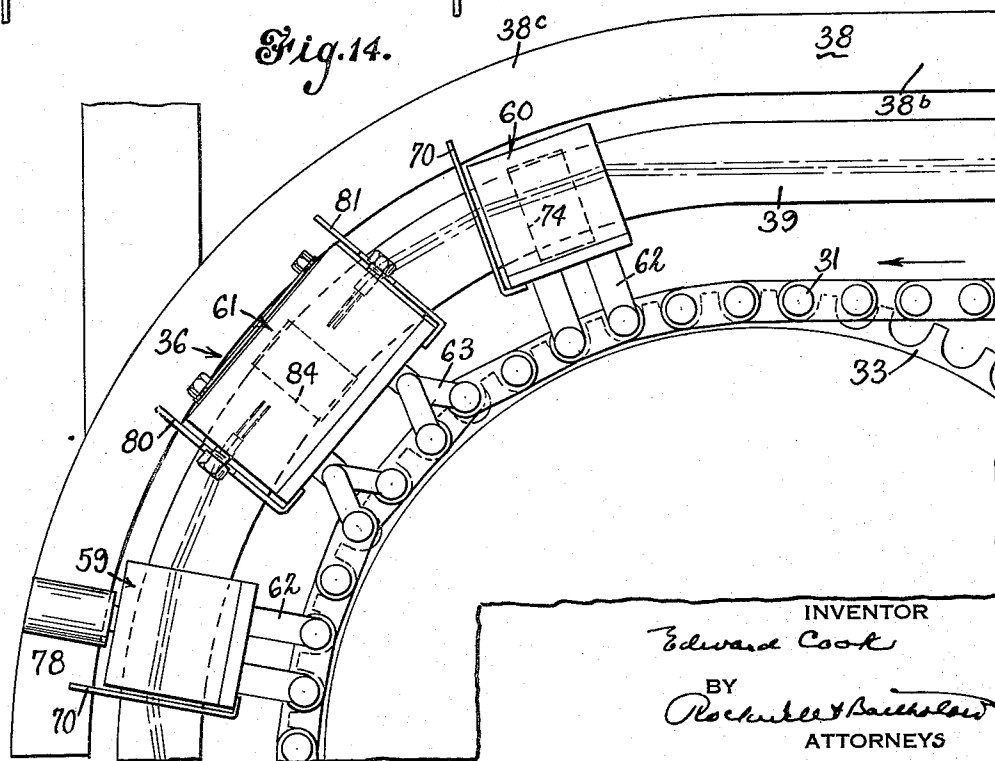
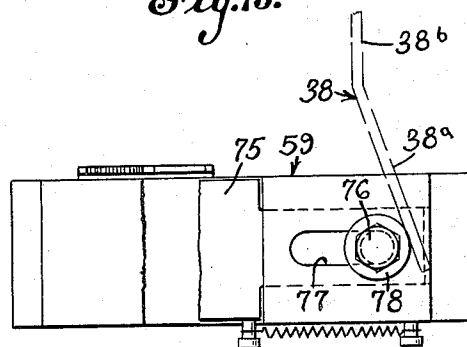
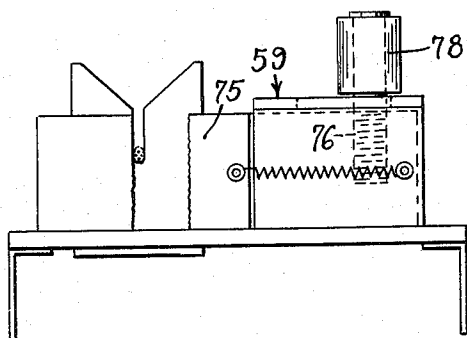
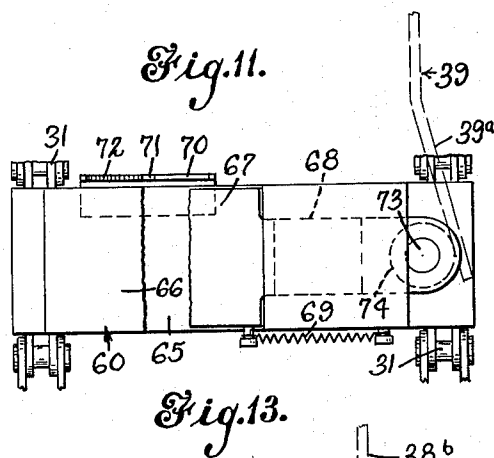
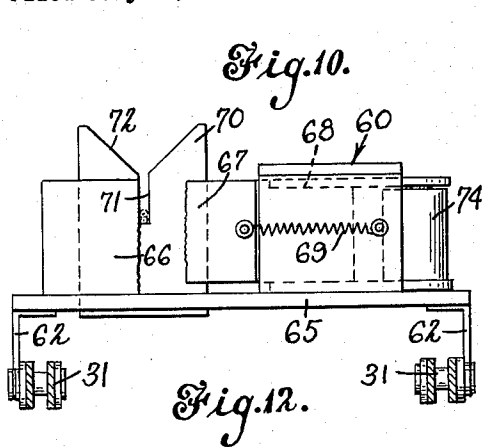
E. COOK

2,718,802

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INVENTOR  
Edward Cook  
BY  
Rockwell & Bachman  
ATTORNEYS

Sept. 27, 1955

E. COOK

2,718,802

WIRE-CUTTING AND STRIPPING MACHINES

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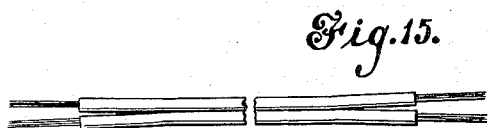
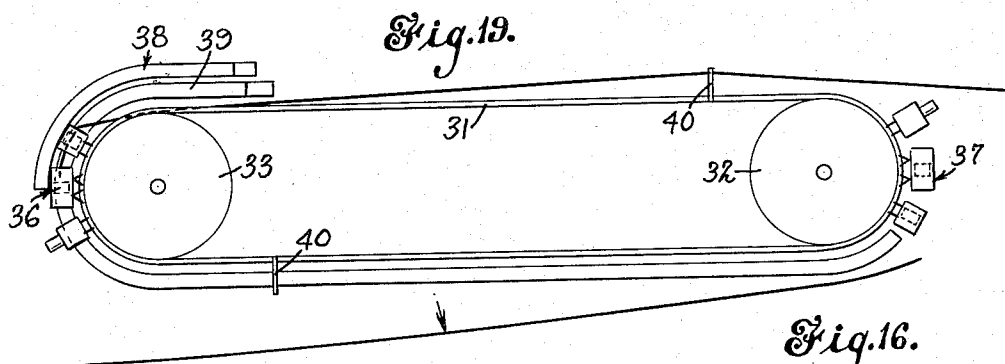
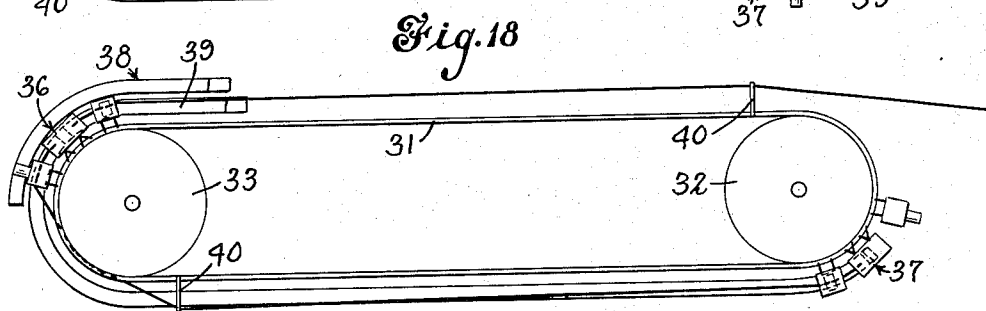
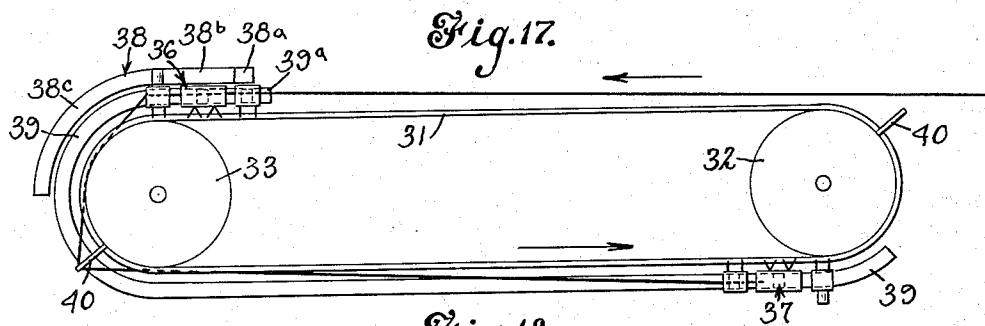
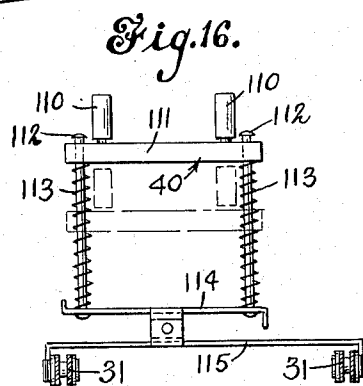
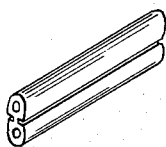


*Fig. 15A.*



INVENTOR

Edward Cook

BY

Roscoe B. Bartholomew  
ATTORNEYS

Sept. 27, 1955

E. COOK

2,718,802

WIRE-CUTTING AND STRIPPING MACHINES

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Fig. 20.

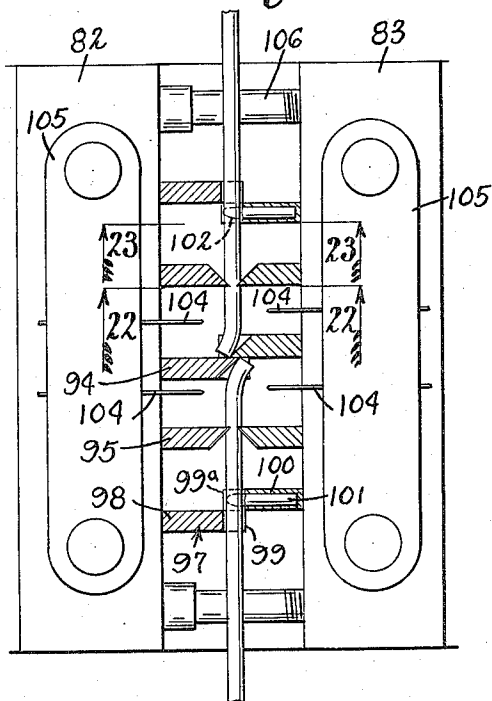


Fig. 21.

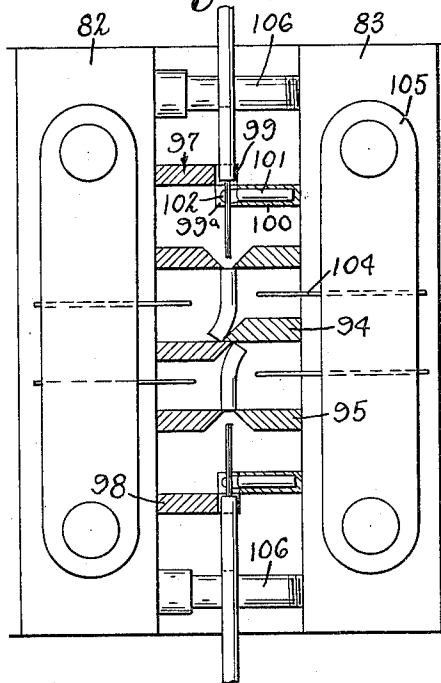


Fig. 22.

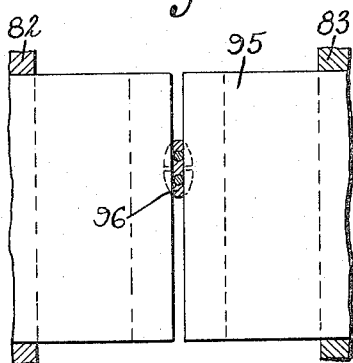
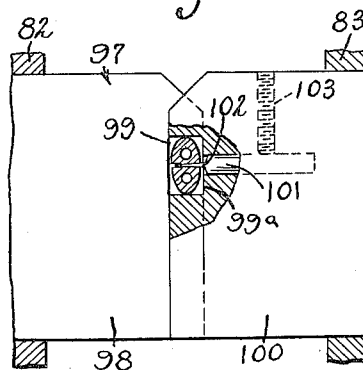


Fig. 23.



INVENTOR

Edward Cook

BY

Rockwell B. Barlow  
ATTORNEYS

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2,718,802

## WIRE-CUTTING AND STRIPPING MACHINES

Edward Cook, New Haven, Conn., assignor to Edward Cook Machine Company, Wallingford, Conn., a copartnership composed of Edward Cook and Lawrence W. Feldman

Application July 22, 1952, Serial No. 300,307

1 Claim. (Cl. 81—9.51)

This invention relates to wire-cutting and stripping machines, and has special reference to machines for severing into lengths and stripping portions of insulated wire having parallel conductors and a plastic insulating covering for the conductors.

More particularly the invention deals with a machine for cutting into lengths and partially stripping an insulated wire of a kind used for connecting various electrical appliances with wall outlets, this wire having a plastic covering for two parallel conductors and the covering being of the rippable type having a longitudinal median slit which enables the duplex structure readily to be separated at least in part into two completely insulated conductors.

An object of the present invention is to provide a machine by which a reel or spool of this wire can be readily cut to desired length, and can also have the insulation stripped off of the ends of each length of wire so that the ends of the wire or cord can readily be attached to connecting plugs and like fittings.

Another object is to provide a machine in which additionally the duplex wire can be split apart or separated to an extent at the end portions of the cord.

Another object of the invention is to provide a machine which can be readily adjusted so that it is adapted to deliver appliance cords of different lengths.

Another object of the invention is to furnish a machine of relatively simple, inexpensive character which operates effectively and rapidly to convert wire wound on a reel or spool into uniformly cut lengths the ends of which have bare wire portions that are readily attachable to electric fixtures.

A further object is to provide a machine of this type which operates at relatively high speed so that in a given period of time it has a large output.

In the accompanying drawings:

Fig. 1 is a side elevation of a wire-cutting and stripping machine embodying my improvements;

Fig. 2 is a top plan view of the machine shown in Fig. 1;

Fig. 3 shows in side elevation and on a larger scale certain of the members carried by the endless chain;

Figs. 4 and 5 show, respectively, in end view and in plan one of the wire-severing and stripping devices;

Fig. 6 is a section on line 6—6 of Fig. 5;

Fig. 7 is a section on line 7—7 of Fig. 4;

Fig. 8 is a view of certain elements of the wire-severing and stripping device;

Fig. 9 is an edge view of the slitter element shown in Fig. 8;

Figs. 10 and 11 show in end view and in plan the gripper device or clamp shown at the right of Fig. 3;

Figs. 12 and 13 show in end view and in plan the gripper device or clamp shown at the left of Fig. 3;

Fig. 14 is an enlarged view of certain parts of the machine at the left of Fig. 1;

Fig. 15 is a detail view showing the cord or wire as it appears when delivered from the machine;

Fig. 15A is a perspective view showing a piece of insulation stripped off by the operation of the machine;

Fig. 16 is a section on line 16—16 of Fig. 1, showing one of the wire guides carried by the conveyor chain;

Figs. 17, 18 and 19 are diagrammatic views showing

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different stages in the operation of the conveyor chain and its associated mechanisms;

Fig. 20 is an enlarged somewhat diagrammatic plan view of the severing and stripping device, showing the position of the parts immediately after the severing of the wire;

Fig. 21 is a view similar to Fig. 20, showing a later stage of the operation;

Fig. 22 is a section on line 22—22 of Fig. 20; and

Fig. 23 is a section on line 23—23 of Fig. 20.

The machine selected for illustration by way of example is one characterized by an elongated framework supported upon the floor having provisions for supporting and driving an endless conveyor, which in this instance is constituted by a chain having parallel elements or sections that travel on sprocket-equipped drums, the arrangement being such that the duplex chain has horizontal upper and lower runs. The upper run of the chain moves away from the receiving end of the machine and the lower run moves toward the receiving end. At the receiving end of the machine there are provisions for supporting a spool on which a considerable length of the wire is wound, and there are provisions for leading the wire up to the receiving end of the conveyor. The conveyor is equipped at two opposite points with a series of devices traveling in an endless path, each group of these devices comprising two grippers or clamps and an interposed severing cutter and stripper. Broadly speaking, the severing cutter and stripper is also a gripper. The grippers have positions in which they are free of the wire that is carried over the conveyor, so as to have no action thereon, and other positions in which they act on the wire, as hereinafter described, to carry out the functions of the machine. The action of these devices is controlled by tracks or cam rails arranged so that they are contiguous to the conveyor path in a position to be contacted so as to cause operation of the chain-carried devices in the desired sequence. The structure and arrangement of the machine are such that the wire being handled is constantly pulled over the upper run of the conveyor from the wire-receiving end of the conveyor, and is operated upon mechanically by the chain-carried devices in such a manner that, when the wire length that has been severed and has had its ends stripped of insulation reaches a position where it extends along the length of the lower chain run, this length of wire is released from the conveyor so that it can drop by gravity onto the floor under the machine frame.

In the drawings, the framework of the machine is shown at 30, the endless chain of the conveyor at 31, the drum at the receiving end of the machine at 32, the drum at the opposite end of the machine at 33, the supply spool at 34, the motor for driving the conveyor chain at 35, the groups of wire-treating devices carried by the chain at 36 and 37, respectively (Fig. 1), and the tracks or rails arranged contiguous to the conveyor path for causing operation of the wire-treating devices, at 38 and 39. There are also indicated at 40 two wire-guiding devices which are carried by the chain and which act sequentially to guide the wire into position over the upper run of the conveyor chain.

Referring now to the details, the elongated framework 30 is provided at the right-hand end (Fig. 1) with a bracket 41 supporting the supply spool 34, and wire coming off of the supply spool passes over a pulley 42 supported on the framework above the supply spool and thence to a pulley 43, there being a depending bight of wire between these pulleys that is acted upon by a suitable tensioning device, indicated at 44. The wire passes upwardly over the pulley 43 to a guide device 45 supported at the upper end of a bracket 46, the lower end of which bracket is fixed to a bed plate 47 that carries the bearings

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of the drum 32, which drum has a shaft 48. The bed plate 47 is supported on a horizontal member 49 of the framework, and can be adjusted longitudinally on the framework and clamped in the desired longitudinal position by means such as bolts 50.

At the left-hand end of the machine (Fig. 1) the framework is provided with an upward extension 51 on top of which the driving motor 35 is placed, and the motor through a belt 52 drives a pulley 53 on a transverse shaft 54, the latter shaft being arranged within the bight of the conveyor and supported upon the main portion of the framework 30. On the shaft 54 is a chain sprocket 55 which, by suitable mechanism, can be clutched to and released from the shaft 54. When the sprocket wheel is clutched to the shaft, it drives through an endless chain 56 a sprocket 57 which is fixed on a shaft 58 in rigid relationship to the drum 33, which is the driving drum of the conveyor chain 31. By this means the driving drum can be driven in a counterclockwise direction with reference to Fig. 1.

As previously mentioned, the chain 31 is a duplex chain having sections that are engaged with sprockets adjacent and fixed to the ends of the driving drum, as appears from Figs. 1 and 2. These chain sections also engage similar sprockets adjacent and fixed to the ends of the driven drum 32.

The wire-treating devices 36 and 37 are fixed to the chain 31 at opposite points, and, as the devices of these two groups are identical, a description of those of one group will suffice. These devices are so attached to the parallel chain sections that the devices project outwardly from the conveyor member to a certain extent and are carried along with it so as to move in straight lines along the straight upper and lower runs of the conveyor and move in arcuate paths in the regions where the conveyor follows the contour of the supporting drums 32 and 33.

Taking the group 36 as typical of the wire-treating devices, this group is shown in Fig. 3 in a location where it is on the upper run of the chain. It comprises an advance gripper or clamp 59, a rearward gripper or clamp 60, and interposed between these members a wire-severing and insulation-stripping device 61. All of these members are extended across the chain sections and attached to the two sections so that the members are spaced upwardly somewhat from the chain. Member 59 is attached to each chain section by depending legs 62 the lower ends of which engage adjacent pivots of the chain links, and member 60 is similarly supported. Member 61, being of somewhat greater length than the grippers, is in this instance supported from four chain-link pivots, there being connected to each chain section two pairs of inclined legs 63, each pair of legs being connected to a lug 64 fastened to the bottom of member 61. By these provisions the members 59, 60 and 61 are supported in upwardly spaced and substantially parallel relationship to the conveyor chain.

The gripper 59 is shown in detail in Figs. 12 and 13, and the gripper 60 in Figs. 10 and 11. The member 60 comprises a base plate 65 to which the legs 62 are attached, and at one side of the base plate there is provided a stationary gripping jaw 66. Cooperating with this jaw is a slidable gripping jaw 67 that is movable lengthwise of the base plate 65, i. e., transversely of the supporting chain. The sliding jaw 67 has a shank portion 68 guided between upstanding portions provided on the base plate, and a spring 69 connected at one end to the jaw 67, and at the other end to the guiding structure for the jaw, normally holds the jaw 67 in such position that the jaw structure is open. The length of the wire being handled is in a position between the two jaws and is maintained in that position by a guide member 70 disposed adjacent the forward face of the gripper 60 and having its lower end rigidly connected to the base plate of the gripper. The guide member 70 has a narrow wire-guiding slot 71 closely adjacent the fixed jaw 66, and the wire is guided into the slot

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71 by means of a V-shaped mouth portion 72 of the guide. At the outer end of the movable jaw 67 the shank of the jaw is provided with a pin 73 surrounded by a roller 74 which is adapted to be contacted by the fixed track or rail member 39 for the purpose of closing the jaws upon the wire.

The jaws 66 and 67 are shown as provided with roughened opposing surfaces so that when the jaws grip the wire there can be no relative movement of wire and gripper.

In most particulars the gripper 59 is like the gripper 60, but in this case the sliding jaw 75 has a rigid stem or pin 76 projecting upwardly from the shank of the jaw through a slot 77 in the guiding structure, the stem 76 serving to support a cylindrical roller 78 extending upwardly from the top portion of the gripper and adapted to engage the upper track member or rail 38 (Fig. 1) for the purpose of moving the gripping members to the gripping position.

Referring now to the wire-severing and insulation-stripping device 61, it will be noted that this device comprises a base plate 79 provided with front and rear wire-guiding members 80 and 81 that are supported from the base plate and are similar to the wire-guiding device 70 previously described, each having a narrow wire-guiding slot or notch communicating with an upper V-shaped mouth or entrance portion. As shown in Figs. 5 and 6, for example, these guides 80 and 81 are at one side of the center of the base plate and the narrow slots of the guides are positioned adjacent a fixed jaw 82 supported on the base plate equipped with severing and stripping instrumentalities, as hereinafter described. Cooperating with this fixed jaw 82, which is near one end of the base plate, is a jaw 83 which is similar to jaw 82 but is arranged to slide lengthwise of the base plate. The jaw 83 is adapted to be shifted by a stem-supported roller 84, generally similar to the roller 74, the roller 84 being vertically disposed in a fork portion 85 provided upon a block 86. The block 86 is guided in a suitable guideway 87 provided on the base plate, and suitable springs 86<sup>a</sup> are interposed between the jaw 83 and the guide 87, for the purpose of holding the roller 84 normally in the position shown in Fig. 5, in which it protrudes from the guide 87. In the form shown there is interposed between the jaw 83 and the block 86 a cushioning device which comprises a plunger 89 fixed at one end to the jaw 83 and entering a cylindrical socket in the block 86, a coil spring being interposed between the bottom of the socket and one end of the plunger 89. The arrangement is such that, by contact of the roller 84 with an end portion of the track 39, the instrumentalities carried by the jaw 83 will be moved yieldingly into cooperation with those carried by the fixed jaw 82 for the purpose of operating upon the wire in the manner hereinafter described.

Referring now to the operations performed upon the insulated wire by the co-acting jaws 82, 83 of the member 61 and to the instrumentalities for effecting these operations, it may be said that in the structure shown in the drawings the member 61 cooperates with the members 59 and 60 not only to sever the wire for cutting it to the required length and to strip off portions of insulation adjacent the severing point, but to slit the wire insulation through a certain distance adjacent the severing point so that through that distance the duplex wire will be separated or branched to facilitate connection of the wire ends to the end fixtures. This is accomplished in the case shown by providing adjacent the center (longitudinally) of the jaws 82, 83 cooperating severing cutters that are adapted to be approached toward each other and withdrawn. Spaced forwardly and rearwardly with respect to the severing cutters in the wire-feeding direction are cutting blades carried by the respective jaws, adapted to be approached toward each other for partially cutting away the insulation. Spaced forwardly and rearwardly of these last members are insulation-slitting members that are

adapted to be approached toward each other for the purpose of forcing completely through the insulation a cutter blade that is engaged in the longitudinal slit initially provided in wire of this type.

It may be well to state at this point that the operations of severing the wire, stripping the insulation, and separating the ends of the conductors are performed in part by clamping a portion of the wire between the jaws 82 and 83 of the member 61, and in part by relative movements of the members 59, 61 and 60 as these members move in an arcuate course on the revolving drum 33. In moving in this arcuate path, the relationship of these members toward each other is changed in a manner to complete the stripping and splitting or division of the wire, as will be hereinafter described.

As a preliminary to a description of the detail features of the severing, insulation-stripping, and slitting devices, reference will be made to the somewhat diagrammatic views, Figs. 20 to 23, inclusive. In these views, Fig. 20 shows the result of clamping the jaws 82 and 83 upon the wire, and Fig. 21 shows the operation at a later stage when, in passing over drum 33, gripper 59 has increased its distance from the member 61, and member 61 has increased its distance from member 60. Referring to Fig. 20, the cooperating centrally arranged severing cutters of the jaws are indicated at 94, and it will be seen that, as these cutters have their forward edges pass each other to a slight degree, the wire is severed, although the severed ends are not substantially displaced from each other owing to the fact that other elements hold the wire ends in position. The insulation-cutting members 95 are in the form of blades having beveled edges, and, as shown in Fig. 20, the approaching movement of the jaws causes the two blade edges, which are in line with each other, to sever a considerable part of the insulating body, although leaving some small portions unsevered, as shown at 96 in Fig. 22. The third pair of cooperating members carried by the jaws, namely, the slitting members, are indicated at 97, this pair comprising a member 98 having an operating recess 99 in one edge, and a cooperating member 100 which is offset with respect to member 98, and equipped with a fixed shank 101 having a protruding blade 102 which engages the slit initially provided in the wire. This blade on the approaching movement of the two jaws, will be pressed farther into the insulation body to separate it into two parts. The knife-equipped shank 101, as shown in Fig. 23, is clamped in position by a screw bolt 103, indicated in dotted lines.

In the spaces at either side of the severing blades 94, depending pins 104 are provided upon the jaws, said pins being extended downwardly in the spaces between the jaws. These pins 104 have laterally extending upper portions that are removably held in place between straps 105 and the upper faces of the respective jaw members. In Figs. 20 and 21 these straps are indicated in a diagrammatic or conventional manner. The depending pins or fingers 104 may conveniently be made of wire bent to the required shape. The function of these pins or fingers is to prevent pieces of insulation, stripped off from the wire as shown in Fig. 21, becoming lodged in the spaces at opposite sides of the severing cutters, and to facilitate the discharge of the insulation pieces from the machine by gravity.

Referring particularly to Fig. 20, it will be seen that the approaching movement of the jaws 82, 83 relatively to each other is limited in a suitable manner as by providing stop screws 106 having threaded shanks that screw into member 83, and having heads that can contact the opposing face of the member 82.

Referring to Fig. 8, this shows one of the two identical severing cutters 94 and one of the two identical insulation-cutting blades 95. It also shows the slitting member 100 equipped with the slitting knife 101, 102. This member 100 is also shown in Fig. 9. The member 100 has an edge recess or notch 99<sup>a</sup> corresponding to the recess 99 of the member 98.

Referring particularly to Figs. 5, 6 and 7, it is to be observed that each jaw member 82, 83 has threaded into it at each end a longitudinal screw 107, the function of which is to clamp in place the set of members carried by the respective jaw for operating upon the wire, as above described, these members being in the character of blades that project from the jaws toward the wire that is positioned by the wire-guiding members 80 and 81. These blade-like members are received in channels with which the jaws 82, 83 are provided, as shown in Fig. 6, and the members are adjustable lengthwise of the jaws. This is accomplished in the case shown by providing suitable shims in association with the blade members, such as indicated, for example, at 108 and 109 in Fig. 7. By this construction it is possible to arrange the blade members at any desired spacing lengthwise of the corresponding jaw.

Referring now to the fixed track members 38 and 39, which are in the nature of camming rails to actuate the wire-gripping members, it will be noted that these rails are arranged alongside and outwardly of the path of the chain 31. The rail 38 is a relatively short one arranged partly above the drum 33, as shown in Fig. 1, and having an inclined tip portion 38<sup>a</sup> at the end of a straight portion 38<sup>b</sup> which merges into a curved portion 38<sup>c</sup> that follows the contour of drum 33 and leads downwardly substantially to the level of the drum shaft, at which level it terminates.

The rail 39 is a considerably longer rail, and it is nearer to the conveyor path. It has a portion corresponding in shape to the rail 38, and in addition it has a portion extended down below the drum 33 and continued horizontally and terminating in this particular case about at the middle of the lower right-hand quadrant of drum 32. Another difference of rail 39 over rail 38 is that in the straight portion above the drum 33 the terminal 39<sup>a</sup> is extended somewhat farther toward the right (Figs. 1 and 2) than the terminal 38<sup>a</sup> of the other rail.

Referring to Fig. 1, it will be observed that the wire-guiding device 45 is at a level such that it will deliver the wire to a gripping device reaching a position near the summit of the drum 32, and under such conditions the positioning of the wire with respect to the gripper is aided by one of the wire guides 40 carried by the chain. The structure of such a guide may be as shown in Fig. 16, where the wire guide comprises rollers 110 that confine the wire in a fairly wide lateral space, these rollers standing upwardly on a cross bar 111 which serves to hold the wire in upwardly spaced relationship to the upper run of the conveyor. The cross bar 111 is mounted on rods 112 having headed upper ends that act as limiting stops, and the cross bar is yieldingly urged toward its uppermost position by suitable means such as springs 113 coiled about the rods and interposed between the cross bar and a lateral member 114. The member 114 in this particular form is rigidly supported in a suitable manner from a cross member 115 that extends across the conveyor and is suitably attached thereto, for example, by being fastened to the pivots of certain of the chain links. This wire guide 40 provides a cushioned mounting for a portion of the wire at a level above the upper run of the chain, and it not only acts to position the wire with respect to the drum 32 but also with respect to the drum 33. It will be noted from Figs. 1 and 2 that in the position there shown the upper wire guide 40 serves as a support for a portion of wire that is led downwardly to and around the body of the drum 33.

As above stated, the wire guides 40 are in opposite relationship with respect to the bight of the conveyor, and after one of the guides has performed the functions described above in connection with Figs. 1 and 2, it will perform the function illustrated in Figs. 17 and 18, which is to hold taut and in contact with the surface of drum 33 the wire portion in advance of the gripping

members, which are caused to grip the wire and move a portion thereof around the drum 33.

It is thought that from the preceding description it is clear how the length of wire is carried over the drum 32 and over the upper run of the conveyor, as described in connection with Fig. 1. The diagrams, Figs. 17 and 19, inclusive, show succeeding stages of the operation. Fig. 17 shows the condition when the gripping devices shown at the right of Fig. 1 have just become engaged with the wire by contact of their rollers with the camming rails. At a stage immediately preceding that of Fig. 17, the gripper 59 is moved to gripping position by the contact of its roller with the camming rail 38, and immediately after this the gripping devices 61 and 60 are moved to gripping position successively through contact of their rollers with the rail 39, and the gripping action is timed so that for each gripper it occurs at the proper moment. When the position of Fig. 17 is reached, the left-hand guide 40 holds a portion of the wire taut against the surface of the drum 33, as previously described. At this time the advance end of the wire is held by the gripper 60 of the other group.

In the position of the left-hand group of grippers in Fig. 17, all three are grippingly engaged with the wire so that the wire can be pulled around a portion of the circumference of the drum 33. As soon as the three grippers are engaged with the wire, as shown at the left of Fig. 17, the wire is severed by the cutters 94, as previously described. As long as the three grippers have the relative positions shown in Fig. 17, there is no relative movement between adjacent grippers, but when the group of grippers reaches the drum, in other words, begins to move on an arc, operations occur which change the condition of the wire to that shown in Fig. 21. As the first step, the gripper 59 starts on a descending curve so as to vary its distance from the middle gripper 61, and this results in the severed portion or length of the wire being pulled forwardly and downwardly, as shown in Fig. 21, to strip off by the lower insulation cutters 95 the partly severed insulation on this part in a piece, such as disclosed in Fig. 15A, and in spreading apart or separating by means of the lower insulation slitters (Fig. 21) the end portion of the wire length in the manner shown in Fig. 15. The middle gripper 61 then begins to follow the descending curve while the gripper 60 is relatively level, so as to increase the distance between 61 and 60, and as a result of this the operations shown at the upper part of Fig. 21 occur, that is, the upper cutters 95 are pulled so as to strip off a piece of insulation, and the upper slitters are pulled so as to separate the wire ends as in the previous case. Therefore, it is understood that, when the three grippers reach the position shown at the left of Fig. 18, the severing of the wire has taken place and also the stripping of insulation from both ends and the separation or slitting of the two end portions. In the operations on the wire beyond the point of severance, the adjacent wire guide 40 holds the wire taut across a portion of the drum periphery, as shown in Fig. 18. In the position of Fig. 18 the advancing end of the severed wire length is still held by the gripper 60 of the other group.

In the position shown in Fig. 19, which is the discharging position for the severed wire length, the gripper 59 has passed its cam rail 38, and as in this position both the middle gripper and the gripper 59 are clear of the wire, its left-hand end (Fig. 19) begins its drop toward the floor. Substantially simultaneously the right-hand end of the wire length (Fig. 19) is released and begins its drop, owing to the fact that the gripper 60 of the right-hand group has passed the end of the camming rail 39.

While in the case shown the other blade members of the middle gripper are disposed symmetrically on opposite sides of the severing blades 94, it is understood that the grouping may be changed if desired, for example, if it is desired to strip off more insulation from one end of the wire length than from the other end. This is permitted

by the manner in which the blade members are adjustably supported in the jaws of the middle gripper.

It will also be understood that as the drum 32 is adjustable lengthwise with respect to its underlying bed, the machine can readily be changed so as to produce wire lengths which are longer or shorter, as desired. If the lengths are to be longer, there must be addition of links to the conveyor chain, and if shorter, certain links are taken out. It is preferred, as shown, to have the longitudinal adjustment apply to the drum which is adjacent the feeding-in end, i. e., the driven drum rather than the driving drum, as this makes for a simpler construction. It is also preferred, as in the machine shown, to have the driving drum remote from the feeding-in end of the machine.

It will be apparent from the foregoing description that the invention provides an effective machine by which a reel or spool of insulated wire of the kind referred to can be readily cut to desired lengths, and have the ends of the wire stripped of insulation. In this machine, also, the duplex wire can be split apart or separated to an extent at the end portions of the wire length at approximately the same time that the wire is severed and partially stripped of insulation. The machine is of simple character and yet permits of various adjustments to adapt it to deliver different wire lengths and to adapt it to wires of different sizes. Moreover, the machine operates quite rapidly to convert the original wire on a reel or spool into uniformly cut lengths, the ends of which have bare wire portions that are readily attachable to electric fittings or connectors. Upon release of the grippers at the respective ends of a wire length that is located at the under portion of the conveyor chain or like endless conveyor, the treated wire length discharges by gravity onto the floor or other discharge place beneath the machine frame, and this is obviously a further advantageous feature. It is also relatively easy to set up the machine for operation and to maintain it in a condition in which it produces a satisfactory product.

While the machine illustrated is described as being used for the treatment of insulated wire of the kind known in the trade as "type POT parallel wire" it is to be understood that the machine can be used for operation on various other kinds of wire that require cutting or stripping or slitting or all three operations.

The illustrated machine is by way of example only and various modifications and changes in the details may be made without departing from the principles of the invention or the scope of the claim.

What I claim is:

In a machine such as described, the combination of a frame, a pair of rotary drums mounted in said frame and having horizontal axes, a pair of endless conveyor chains engaged with sprockets at the sides of and fixed to said drums, said chains having substantially horizontal upper and lower runs, means for driving the chains, groups of wire-gripping devices carried by said chains at opposite points of the chain loop, each group including a severing cutter and an insulation cutter, means for conducting a length of wire over the upper run of the chain conveyor at the receiving end of said run, said wire-gripping devices being normally in open or released position, and cam rail means located along the conveyor path to be impinged by said gripping devices to effect closing of said devices and pulling of the wire along the upper run of the conveyor and severing and partial stripping of insulation in a location where the gripping devices move over one of said drums.

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