

[54] **INSULATION CUTTER**

[76] Inventor: **Lloyd P. Pickler**, 634 McKee St.,
Albemarle, N.C. 28001

[22] Filed: **Apr. 24, 1974**

[21] Appl. No.: **463,763**

[52] **U.S. Cl.** **83/408**; 83/433; 83/485;
83/564; 83/578; 83/614

[51] **Int. Cl.**..... **B26d 3/12**; B26d 1/20

[58] **Field of Search** 83/408, 407, 433, 485,
83/564, 578, 614

[56] **References Cited**

UNITED STATES PATENTS

3,296,911 1/1967 McLane..... 83/408

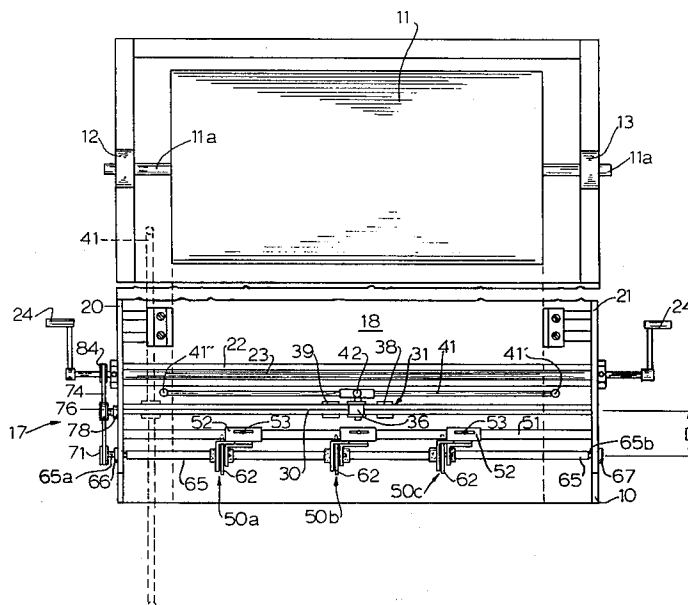
3,605,537 9/1971 Pickler..... 83/408 X
3,762,251 10/1973 Madsen..... 83/408 X

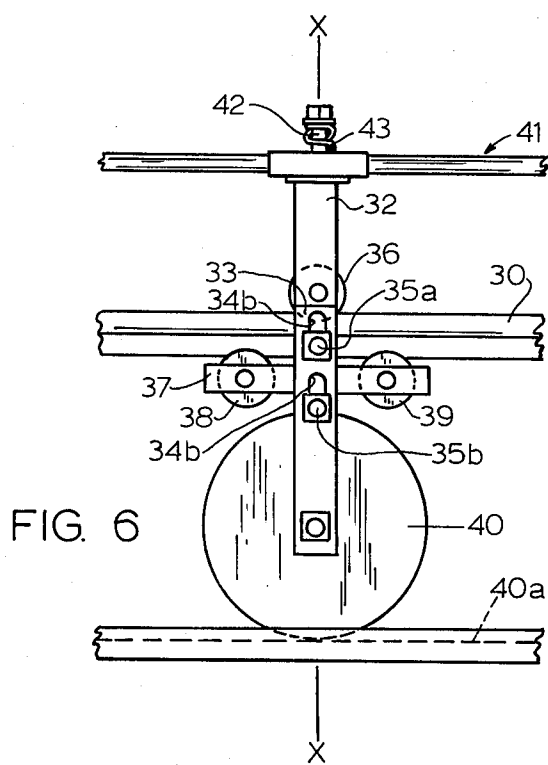
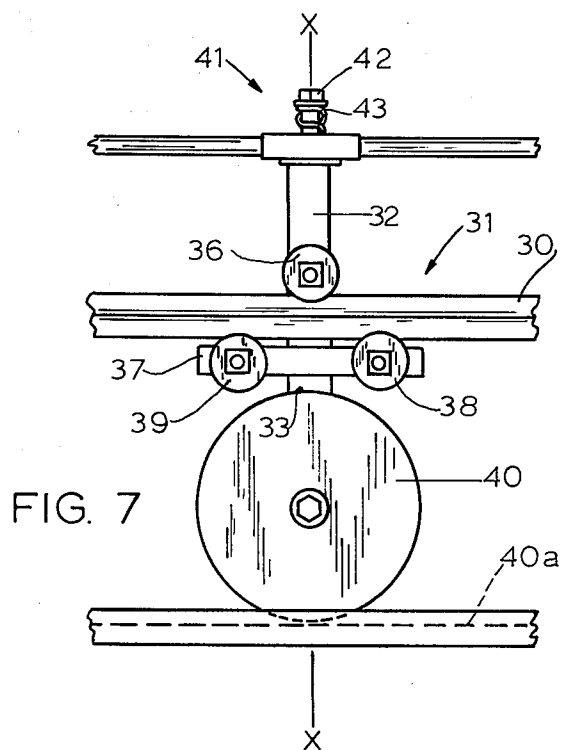
Primary Examiner—Willie G. Abercrombie

[57] **ABSTRACT**

An insulation cutter receives a supply roll of insulation material, unrolls and cuts the material to single or plural preset widths and then cuts the material to a predetermined length. Special feeder arrangements allow the operator to perform the unrolling of the material and the transverse cut-off from either side of the machine and with minimum work aisle obstruction during periods of inactivity.

3 Claims, 7 Drawing Figures





INSULATION CUTTER

BACKGROUND OF THE INVENTION

1. Field of the Invention

The cutter of this invention relates broadly to machines having cut-off blades which are passed across a thick, fibrous material such as pipe insulation in order to obtain a length of material and also relates to adjustable bench type or table blades which provide a continuous width of material. Modern insulating practice for heating and cooling ducts is based on installing the insulation inside the ducts when the ducts are fabricated which avoids outside wrapping. The invention is particularly useful in sheet metal shops and provides precut insulation pieces for the described ducting.

2. Description of the Prior Art

The prior art is abundant with various types of complex, powered cut-off blades and powered table blades which provide a preset width and length material.

My prior U.S. Pat. No. 3,605,537 cites relevant prior art and the present invention constitutes an improvement upon the subject matter of that patent. While the teachings of U.S. Pat. No. 3,605,537 made a contribution to the industry which prior to that was much needed continuous use has pointed out areas in which improvements could be made. This application offers such an improvement.

SUMMARY OF THE INVENTION

An insulation material cutter according to the invention provides a flat elevated work table substantially longer in length than in width and which has a plurality of laterally adjustable blades which automatically slit to predetermined widths the insulation material as it is forced and pulled through the cutter until it reaches its preset transverse cut-off length. The material is forced by one set of rollers which can be conveniently operated from either side of the machine and is also pulled through by other plural sets of rollers which work in conjunction with the plural slitter blades and are driven by belt drive connection with the first set of rollers. The table also mounts on a rail a movable transverse cut-off blade. The cut-off blade is operated by a substantially long handle that facilitates reaching and operation from either side and when not in use the handle can be quickly rotated away from the work aisles and with the cut-off blade parked at one side. The plural slitting blades as well as the cut-off blade will accommodate various thicknesses of material. The roll of supply material is rotatably mounted adjacent to and in front of the first set of rollers. It is also possible, although not shown, to provide means for mounting several insulation rolls in front of the first set of rollers so that materials of several thicknesses could be used as needed. The upper, idler feed roller is resiliently loaded, i.e. by a spring, and presses down on the entire width of material from the supply roll. The lower, manually driven feed roller has an abrasive surface which engages the entire width of material from below and has operating handles on each end. By turning the lower feed roller from either side of the machine, the material is drawn from the supply roll onto the flat table. With the slitting blades preset to the desired widths, the insulation material being unrolled is forced toward the slitting blades for cutting into preset widths.

In addition to the forcing effort applied by the idler feed roller and the lower feed roller upon the insulation

material, a pulling effort is also applied to the insulation material by the improved apparatus of the present invention which is located adjacent and forward of the mentioned feed rollers. A V-belt and pulley arrangement is designed to drive a pulley secured to an auxiliary shaft which extends beneath the slitter blades. The V-belt extends around a pulley secured to the end of the feed roll shaft upon which the first manually driven lower feed roller is mounted. The V-belt extends beneath an adjustable idler pulley which is used for adjusting the tightness of the V-belt. The V-belt then passes around another pulley mounted on the auxiliary shaft extending beneath the slitter blades. By turning the handle which turns the first feed roller, the improved belt drive means also causes the auxiliary shaft beneath the slitter blades to rotate. Sets of friction collar members having a groove for receiving the slitter blades, are mounted on the auxiliary shaft and provide pulling forces upon the bottom of the material being slit as the auxiliary shaft is rotated. Thus, both a forcing and pulling effort is applied to the insulation material being fed into the insulation cutter. Once the material has reached its preset length, the operator then moves the transverse cut-off blade across the material and the job is done. As with the apparatus of my prior patent, when the machine is idle the cut-off blade may be parked at either side of the machine and the cut-off blade handle rotated parallel to the table. This leaves the operating handle out of the work aisles normally found on either side of the machine and also leaves the cut-off blade out of the way of new material coming through the rollers.

The object of the invention is to provide an improved insulation material cutter which eliminates the tedious, time consuming hand operations in measuring and cutting of pieces of insulation material required for internal duct mounting and which virtually eliminates material waste due to measuring error or a miscue with the cutting knife and which provides every piece of material cut to substantially the exact size. In particular, as compared to the insulation material cutter of my prior patent, this invention provides a substantially improved apparatus for feeding the insulation material during the slitting operation. It reduces bunching and other problems previously encountered.

DESCRIPTION OF THE DRAWINGS

FIG. 1 is a fragmentary plan view of the insulation material cutter of the invention.

FIG. 2 is a side elevation view on a reduced scale of the cutter of FIG. 1.

FIG. 3 is a front elevation view of the cutter of FIG. 2.

FIG. 4 is an enlarged fragmentary view of the hand crank, V-belt and pulley arrangement which feeds the material into the cutter and which also indirectly drives the slitter blades.

FIG. 5 is a fragmentary front elevation view partially in section of one of the slitter blades and the mechanism which indirectly drives the slitter blades.

FIG. 6 is an enlarged fragmentary front elevation view of the cut-off blade.

FIG. 7 is a fragmentary rear elevation view of the cut-off blade of FIG. 6.

DESCRIPTION OF THE INVENTION

Referring particularly to FIGS. 1 through 3 for a general introduction to the insulation material cutter of the

present invention, an elongated table frame 10 receives an insulation material roll 11 adjacent to one end of the work table frame 10. Material roll 11 is mounted rotatably on table frame 10 by a pair of rod receiving brackets 12, 13 which rotatably receive a rod 11a extending through the supply roll 11. While not shown, the apparatus of the invention will easily accommodate an additional rack adapted to fit above the first material roll support as to support an additional roll of insulation material perhaps of a different thickness or grade of material.

Mounted adjacent material supply roll 11 is the insulation cutter drive arrangement 17. Mounted opposite each other on the sides of table frame 10 is a pair of upright metal side members 20, 21. Side members 20, 21 rotatably receive a lower manually driven feed roller 22 which extends across table frame 10 and between members 20, 21. A second upper idler feed roller 23 is also mounted between sides 20, 21. Side members 20, 21 each have mounted within a small rectangular case 25 respective springs 25a which exert a downward force against ends of the roller 23 and which force the face of roller 23 towards the face of roller 22. Each spring 25a is adjustable as to the amount of downward force to be exerted by the screw and nut arrangement 26 shown in FIG. 4. Lower feed roller 22 is covered with an abrasive surface which provides a secure hold or pulling force upon the insulation material when it is fed between and is engaged across its width by rollers 22 and 23. Any suitable abrasive cloth or paper may be secured to roller 22 and provide the desired abrasive action. A pair of hand cranks 24 are mounted on the ends of roller 22 which allows roller 22 to be rotated from either side of the machine and which will in turn pull insulation material from supply roll 11. The material passes between rollers 22, 23 with the help of the previously referred to abrasive surface, and is forced out onto the work surface 18 of work table frame 10, aided by the abrasive or frictional surface.

A cross bar or rail 30 extends the width of table frame 10 between side members 20, 21 and adjacent feed rollers 22, 23. A transverse cut-off blade unit 31 is adjustably mounted on cross bar 30 and includes a pair of rectangular plate members 32, 33. Plate 33 has a pair of vertical slots 34a, 34b for receiving screws 35a, 35b which are mounted so that they pass through plate 32, through slots 34a, 34b respectively and mount tightening nuts as shown in FIG. 6. The slots thus provide a means of vertical adjustment. A roller or rail wheel 36 is rotatably mounted on plate 32 so that it rests on cross bar 30 and will ride thereon. Another rectangular plate 37 is rigidly mounted on plate 33 at a right angle thereto. A pair of rollers or rail wheels 38, 39 are rotatably mounted on opposed ends of plate 37 and are adapted to ride along against the underside of wheel rail or bar 30. Rollers 36, 38 and 39 work together to hold the cut-off blade unit 31 on cross bar 30 and also provides for its lateral movement across the width of table frame 10 on cross bar 30. A cut-off blade 40 is rotatably mounted on the blade mount provided by the lower end of member 33. Blade 40 rides across the width of table frame 10 and is guided by a groove 40a.

At the upper end of member 32 is mounted a relatively long double handle 41 having handle grips 41', 41''. Handle 41 is rotatable by means of a screw arrangement 42 passing through handle 41. A spring 43

is mounted on screw 42 and exerts a force downward against handle 41. Handle 41 is held in position by means of spring 43 but handle 41 can be rotated about screw 42 so that it is out of the way of the table frame 10 when the cutting operations are shut down, as shown in dashed lines in FIG. 1. It will also be noticed in FIGS. 1 and 3 that the span of handle 41, i.e. the distance between handle grips 41', 41'' roughly equals the width of insulation roll 11 which facilitates reaching across the table. However, as indicated by the dashed line position of handle 41 in FIG. 1, handle 41 can be quickly rotated out of the work aisles with cutoff blade 40 left in position on either side of the machine which frees the center of the machine for movement of new material in a later operation. As indicated by the reference line X—X in FIG. 6 and from FIG. 1, it will be noted that the axis of rotation of handle 41 is slightly laterally offset from the plane of blade 40 but generally bisects blade 40 which facilitates the handle operation described.

The description has thus far dealt with parts of the invention apparatus described in U.S. Pat. No. 3,605,537 3,605,537 and which are common to and cooperate with the apparatus of the present invention. The improvements contributed by the present invention are next described.

The plural slitting blade arrangements 50a, 50b and 50c are slidably mounted on a cross bar or mounting rod 51 which also extends across table 10 adjacent cross bar 30 and adjacent rollers 22, 23. While three such slitting blade arrangements are shown the number of slitters could be more or less depending on the width of material, width of machine and number of specific widths of material desired for a particular job. While shown spaced apart for clarity in FIG. 1, the slitting blade arrangements 50a, 50b, 50c and cutoff blade unit 31 are in practice mounted as close as is practical to the rollers 22, 23 to avoid buckling of material. Slitting blade arrangements 50a, 50b, 50c are identical in construction therefore only slitter blade arrangement 50a will be described in detail herein.

Referring to slitter blade arrangement 50a in FIG. 5, a rectangular sleeve 52 is shown mounted on a cross bar 51. Sleeve 52 mounts a thumb screw 53 which can be tightened against bar 51 for adjustable lateral movement. A plate member 55 is rigidly secured to sleeve 52. A second plate member 56 is made integral with plate 55. Plate member 55 extends downward at right angles to the side of sleeve 52. Screws 55a, 55b can be tightened against plate 55 for adjustable vertical positioning. Plate 56 has a hole at its lower end through which passes a bolt 61. Bolt 61 provides a blade mount and receives a slitting blade 62 which is held by bolt 61 and a nut 63. While not shown, it should be understood that cross bar 51 has marked off thereon inch marks for ease in setting the slitting blade arrangements 50a, 50b, 50c for the desired width of insulation material to be cut. A U-shaped blade and presser foot mount 64 rotatably mounts blade 62 and on the sides of blade 62 mounts a pair of material or presser foot members 64a. The material during slitting passes over the driven abrasive surfaced collar members 68 and preferably substantially clear of presser foot members 64a. However, the presser foot members 64a provide a sliding contact and limit upward travel whenever the material tends to buckle during slitting.

A pair of rotatable stub shafts **65a**, **65b** are mounted on table frame **10** in a pair of shaft receiving bearing brackets **66**, **67**. The auxiliary shaft or tube member **65** of square cross section is integrally secured at its ends to stub shafts **65a**, **65b**. A plural number of abrasive surfaced and grooved collar members **68** having mating loose fitting square holes are loosely and slidably mounted on shaft **65**. Thus, as the auxiliary shaft **65** turns each of the collar members **68** are driven and rotate with auxiliary shaft **65**. The respective grooves **69** of the collar members receive the respective blades **62**. In one embodiment, the grooves **69** have been made 0.3125 inches deep and 0.032 inches wide and the respective blades **62** reside about 0.250 inches into the respective grooves.

From the foregoing it can be seen that collar members **68** are positioned on auxiliary shaft **65** by the respective position of the corresponding blade **62**. Changes in slitting width thus requires a mechanical adjustment only in the respective blade mounting positions since the respective collar members **68** can simply be slid on auxiliary shaft **65** to any new position. In any such position, however, the material is gripped on both sides of the respective blades **62** by the pair of abrasive surfaces on each of the collar members **68** as the respective blades **62** rotate and slit the material. Of particular practical importance is the fact that relatively dull blades can be used which reduces the need for resharpening. Each respective blade **62** has been used in the form of what is called a "cotton blade" as sold by Ohio Knife Company of Cincinnati, Ohio, for cutting cotton. Other type slitting blades may be used. However, whatever type slitting blade is used within normal slitting trade practices it will be found that the described presser foot-collar arrangement adds materially to the blade life and in fact enables essentially dull blades to be used for slitting. Thus, one of the main problems of the prior apparatus, blade resharpening and replacement has been substantially reduced.

For driving, the outer end of stub shaft member **65a** rigidly receives a V-belt pulley **71**. Pulley **71** is held on shaft **65a** by a suitable cap **72**. A pin **72a** is formed integral with cap **72** and is received by an elongated arcuate opening **72b** formed within pulley **71**. The length of opening **72b** is made long enough so that shaft **65** can be rotated in a forward direction a sufficient amount to allow a cut-off length of material having a trailing unslit length "D" (FIG. 1) to be pulled forward from the cut-off blade **40** through the slitter blades **62** to complete slitting without requiring forward rotation of pulley **71**. That is, the selected length of material is cut off and then the remaining unslit length D at the trailing end is caused to be slit by manually pulling it through the slitter blades **62**. In a typical operation, the operator just prior to using the cut-off blade **40** will have measured the material length desired by measuring longitudinally forward from the position of the cut-off blade. Then, the operator will cut-off and then will move the final unslit material in a forward longitudinal direction by the distance D and during this operation pin **72a** moves in slot **72b** without causing pulley **71** to rotate. Slitting is resumed on the next desired material lengths by rotating handle **24** which brings pin **72a** in its forward engaging position in slot **72b** which drives pulley **71**. In one embodiment auxiliary shaft **65** and cut-off blade **40** have a longitudinal separation of approximately 3

inches and there is approximately 1/2 revolution of lost motion provided between pin **72a** and pulley **71**.

A V-belt **74** passes around pulley **71** and feeds back toward supply material roll **11**. Intermediate adjustable idler pulley **76** mounts in bracket **78** within frame wall **20**. Idler pulley **76** and bracket **78** may be vertically adjusted by loosening bolt **80** in slot **82** and allowing bracket **78** to be raised or lowered as required to obtain the desired tension on belt **74**. Drive pulley **84** is integrally secured to the shaft portion of lower manually driven roller **22** which extends across table-frame **10** and between members **20**, **21**. As roller **22** is rotated by turning hand crank **24**, pulley **84** also rotates and drives V-belt **74**.

In addition to increasing blade life and reducing the previously encountered buckling problems, the plural slitting blade arrangements allow the width of material cut to be easily changed. In each position of each slitting arrangement, the material is effectively grasped above by each slitting blade **62** and below by corresponding pairs of abrasive surfaces on each of the collar members **68**. With a plurality of such slitting blades in operation the material is effectively engaged across its entire width and forced toward the slitter blades by the first pair of feed rollers **22**, **23** and is pushed toward the slitting blades **62**. In operation, once the slitting blades **62** have been set to their desired widths for slitting, the operator starts the supply roll material **11** through the machine by manually feeding it between rollers **22**, **23** and by turning the hand crank **24**. As the material reaches the respective slitting blade arrangements **50a**, **50b**, **50c** blades **62** are rotated by the forward push of the material and as the material is slitted, the respective work piece and waste slit lengths pass on either side of the respective blades **62**. During this operation, the abrasive collar members **68** pull on the material at plural rolling points of contact adjacent the blades and cause it to move past the blades **62**. The material is simultaneously held against the respective members **68** by the blades **62**. Driving is achieved through the previously described pulley and V-belt arrangement. The material then feeds past and on either side of slitting blades **62**, which are of course preferably maintained sharp though as previously mentioned the improved apparatus of the invention has been found to actually slit even with a relatively dull blade. The material is slit into the desired width or widths and is fed past the various slitting blades **62** until the desired length of the material has been cut. Here, it should be observed that the slitter blade arrangements **50a**, **50b**, **50c** can be set for any desired width cut or they can be moved out to one side and only one of the slitter blade arrangements used to make a so-called trim cut. As previously stated, cut-off blade **40** cuts the desired length and the final unslit length D is cut by manually pulling this length D through blades **62** during which shaft **65** is allowed to turn but without requiring drive pulley **71** to turn. An operator quickly gains experience and with the invention is able to produce a relatively high volume of pieces. Once cutting has been completed, handle **41** is rotated out of the way as previously explained and blade **40** is left on one side or the other of the machine ready to resume cutting and is allowed to remain there until a further cut-off step is needed.

In any lateral position of the slitter blade arrangements **50a**, **50b**, **50c** and the corresponding collar members **68**, the advantages of pulling the material at plural

points adjacent the slitting blades are preserved. The advantages of the rotatable handle 41 as taught by my prior patent are also preserved with the present invention in any of such slitting blade positions.

I claim:

1. A cutting apparatus for cutting thick, fibrous insulation type material fed from a substantially long continuous supply roll into pieces of predetermined and variable widths and length comprising:

- a. a work table having a supporting frame and a table surface;
- b. a roll support extending across the end of said table opposite said table surface and rotatably mounting a continuous supply roll of said material;
- c. a pair of upper and lower opposed rollers mounted adjacent and forward of said roll support and proximate said table surface and extending across said table, the upper of said rollers being an idler roller and being adjustably spring loaded towards said lower roller, the lower of said rollers having handle operator means and a frictional surface for gripping the width of said material, said rollers being adapted to withdraw a predetermined length of said material from said roll and force such length onto said table surface;
- d. a plurality of slitting blade arrangements adjustably mounted on a rod extending across and above said table surface and being adjacent and forward of said rollers, each said slitting blade arrangement including:
 1. bracket means adjustably secured to said mounting rod and providing below said rod a vertically and laterally adjustable slitting blade mount;
 2. a thin slitting disc blade rotatably positioned on said slitting blade mount at a selected lateral position and height above said table corresponding to a preset width and material thickness and adapted to slit said thickness to such preset width as said material is pushed by said rollers against the cutting edge of said slitting blade, the longitudinal spacing between said rollers and slitting blade being minimal to minimize buckling of said material as it approaches said blade; and
 3. presser foot means providing a pair of surfaces for slidably engaging the top of the material immediately adjacent the sides of said blade at some predetermined upward limiting position at the point of slitting;
- e. an auxiliary material pulling arrangement including an auxiliary shaft extending across said table surface immediately beneath said slitting blade arrangements, and rotatably supported by said frame, said shaft having a plurality of frictional surfaced collar members, one for each said slitting blade arrangement, adjustably mounted thereon and arranged for being driven by said auxiliary shaft at locations corresponding to the selected lateral positions of said slitting blade arrangements, each said collar member having a groove for receiving a respective said slitting blade therein such that the bottom surface of said material during slitting is engaged on either side of said blade by a respective collar member peripheral surface and its upper surface by a said slitting blade edge;
- f. belt and pulley drive means connecting said lower roller and said auxiliary shaft member such that rotation of said lower roller by said handle means in turn causes said shaft member and said collar mem-

bers to rotate, to allow said supply material as it passes said slitting arrangements to simultaneously contact said collar members and to be pulled through said slitting blades to supplement the pushing effort of said rollers during slitting of the material, and subsequent to slitting said collar members being effective to push said material forward of said auxiliary shaft;

- g. cut-off blade means positioned between said rollers and slitting blade means including a support rail extending across said table adjacent said rollers, a wheel bracket arrangement providing a set of wheels adapted to ride said rail and a bracket supported by said wheels providing a vertically adjustable cut-off blade mount, and a cut-off disc blade rotatably mounted on said cut-off blade mount, said cut-off blade means being adapted when adjusted to a vertical position corresponding to said material thickness and pushed across said table to cut said material to a preset length corresponding to the length of said material drawn onto the said table past said rail; and
 - h. a horizontal handle bar mounted for rotation about a vertical axis above and on said wheel bracket arrangement and having upright hand grip means at the ends thereof, said handle bar being adapted to move said cut-off blade across said material from either side of said table and when not in use said handle being adapted to being rotated and releasably held in a horizontal plane to a position substantially perpendicular to said rail while said cut-off blade remains positioned at one side of said table thereby leaving aisle space on both sides of said table free of the obstruction of said handle and the central area of said table free of the obstruction of said cut-off blade.
2. A cutting apparatus as claimed in claim 1 wherein said belt and pulley drive means includes a lost motion drive connection between said roller member drive and said auxiliary shaft drive such that said auxiliary shaft is enabled to be rotated some predetermined angular amount without causing rotation of said roller member to allow the trailing unslit end of the material between the cut-off and slitting blades to be moved longitudinally through the slitting blades without requiring rotation of said roller member.
3. A cutting apparatus for cutting thick, fibrous insulation type material fed from a substantially long continuous supply roll into pieces of predetermined and variable widths and length comprising:
- a. a work table having a supporting frame and a table surface;
 - b. a roll support extending across the end of said table opposite said table surface and rotatably mounting a continuous supply roll of said material;
 - c. a pair of upper and lower opposed rollers mounted adjacent and forward of said roll support and proximate said table surface and extending across said table, the upper of said rollers being an idler roller and being adjustably spring loaded towards said lower roller, the lower of said rollers having handle operator means and a frictional surface for gripping the width of said material, said rollers being adapted to withdraw a predetermined length of said material from said roll and force such length onto said table surface;
 - d. a selected number of slitting blade arrangements

adjustably mounted on a rod extending across and above said table surface and being adjacent and forward of said rollers, each said slitting blade arrangement including:

- (1) bracket means adjustably secured to said mounting rod and providing below said rod a vertically and laterally adjustable slitting blade mount;
 - (2) a thin slitting disc blade rotatably positioned on said slitting blade mount at a selected lateral position and height above said table corresponding to a preset width and material thickness and adapted to slit said thickness to said preset width as said material is pushed by said rollers against the cutting edge of said slitting blade, the longitudinal spacing between said rollers and slitting blade being minimal to minimize buckling of said material as it approaches said blade; and
 - (3) presser foot means providing a pair of surfaces for slidably engaging the top of the material immediately adjacent the sides of said blade at some predetermined upward limiting position at the point of slitting;
- e. an auxiliary material pulling arrangement including an auxiliary shaft extending across said table surface immediately beneath said slitting blade arrangements, and rotatably supported by said frame, said shaft having a plurality of frictional surfaced collar members, one for each said slitting blade arrangement, adjustably mounted thereon and arranged for being driven by said auxiliary shaft at locations corresponding to the selected lateral positions of said slitting blade arrangements, each said collar member having a groove for receiving a respective said slitting blade therein such that the bottom surface of said material during slitting is engaged on either side of said blade by a respective collar member peripheral surface and its upper surface by a said slitting blade edge;

- f. belt and pulley drive means connecting said lower roller and said auxiliary shaft member such that rotation of said lower roller by said handle means in turn causes said shaft member and said collar members to rotate, to allow said supply material as it passes said slitting arrangements to simultaneously contact said collar members and to be pulled through said slitting blades to supplement the pushing effort of said rollers during slitting of the material, and subsequent to slitting said collar members being effective to push said material forward of said auxiliary shaft, said belt and pulley drive means including a lost motion drive connection between said roller member drive and said auxiliary shaft drive such that said auxiliary shaft is enabled to be rotated some predetermined angular amount without causing rotation of said roller member to allow the trailing unslit end of the material between the cut-off and slitting blades to be moved longitudinally through the slitting blades without requiring rotation of said roller member;
- g. cut-off blade means positioned between said rollers and slitting blade means including a support rail extending across said table adjacent said rollers, a wheel bracket arrangement providing a set of wheels adapted to ride said rail and a bracket supported by said wheels providing a vertically adjustable cut-off blade mount, and a cut-off disc blade rotatably mounted on said cut-off blade mount, said cut-off blade means being adapted when adjusted to a vertical position corresponding to said material thickness and pushed across said table to cut said material to a preset length corresponding to the length of said material drawn onto the said table past said rail; and
- h. handle means mounted on said wheel bracket arrangement and adapted to move said cut-off blade across said material.

* * * * *