

[54] **PRESSURE SENSITIVE END SHEETS FOR UNCASED BOOKS AND METHOD AND APPARATUS FOR CASING BOOKS**

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[21] Appl. No.: 146,648

Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 79,086, Oct. 8, 1970, which is a continuation-in-part of Ser. Nos. 799,045, Feb. 13, 1969, Pat. No. 3,596,929, and Ser. No. 872,134, Oct. 29, 1969.

[52] U.S. Cl. 281/21, 281/29

[51] Int. Cl. B42d 1/00, B42d 3/00

[58] Field of Search 281/21, 29; 40/125 A

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[57]

ABSTRACT

An uncased book is provided with end leaves preferably having pressure sensitive adhesive initially protected with release paper which is fabricated in various alternate ways to facilitate stripping off the release paper. The case for the book has a strip of pressure sensitive coated material at the spine area. Apparatus used to case the book has a table on which the case is positioned inside up and means for centering the case relative to the table. The uncased book is placed in a clamp pivoted to the table, the clamp being adjustable for thickness of the book. The method consists in pivoting the clamp to bring the spine edge of the uncased book into contact with the pressure sensitive spine area of the case and then to strip away the release paper for the end leaves so that the latter adheres to the insides of the top and bottom covers of the case.

20 Claims, 19 Drawing Figures

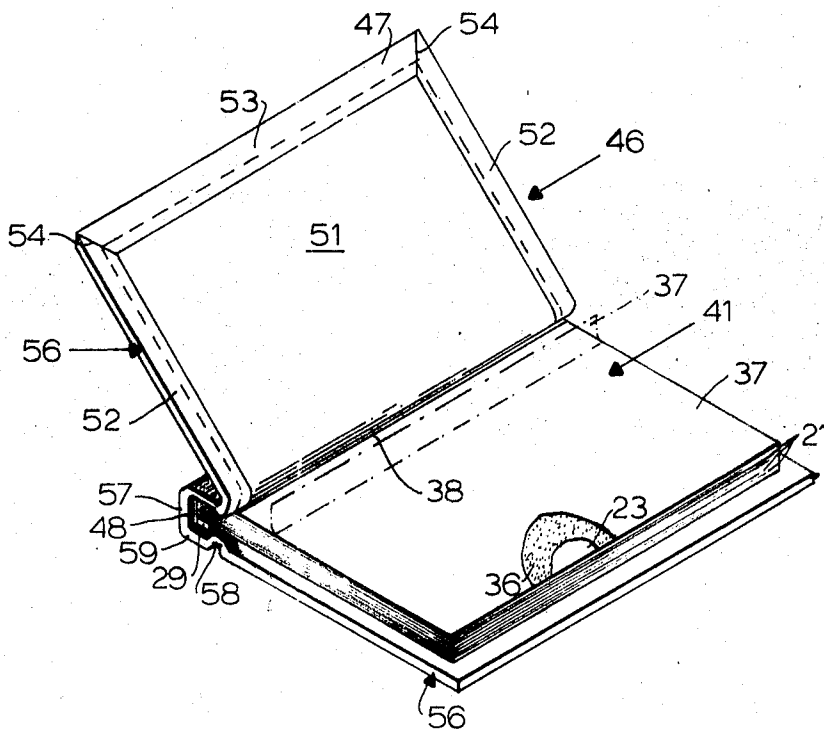


FIG. 1

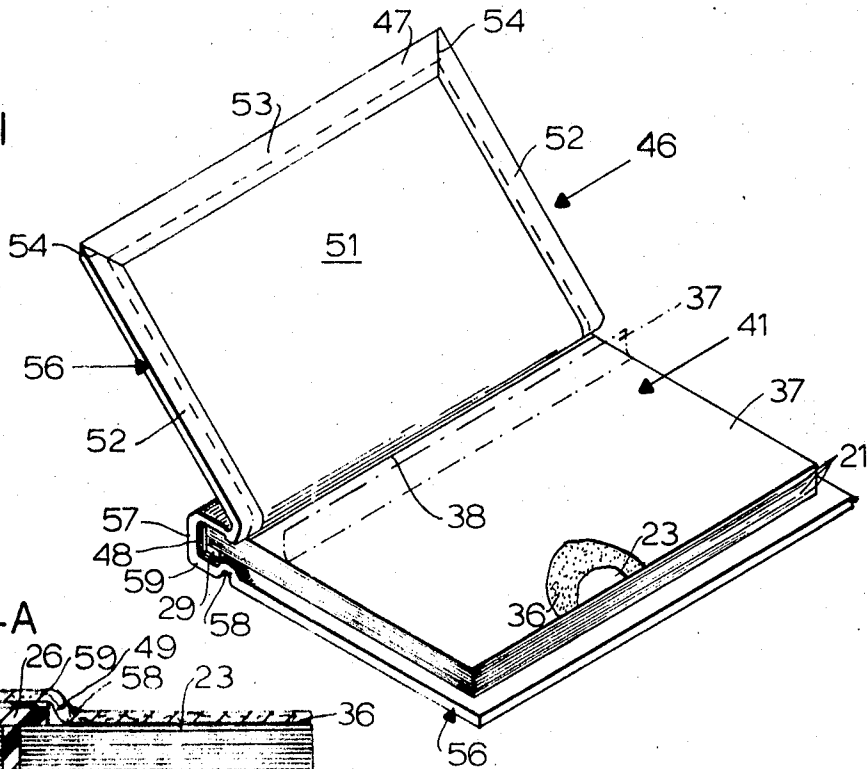


FIG. 1-A

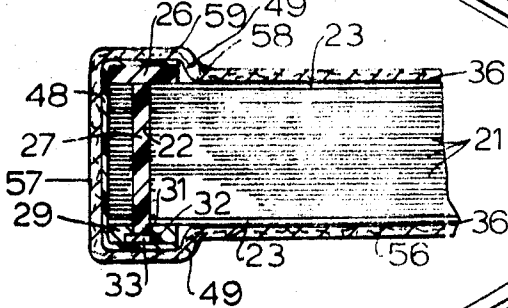
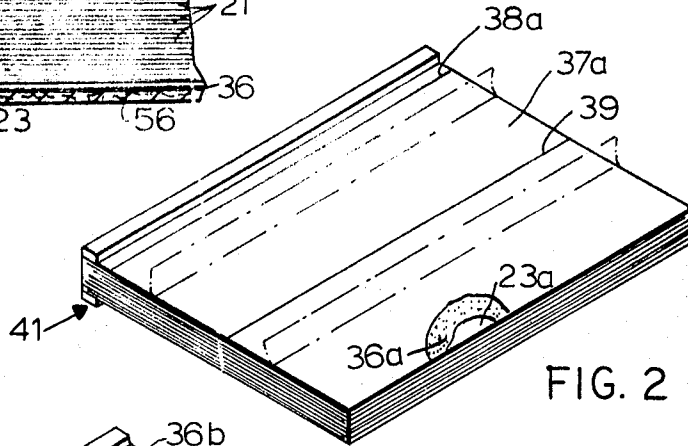


FIG. 2

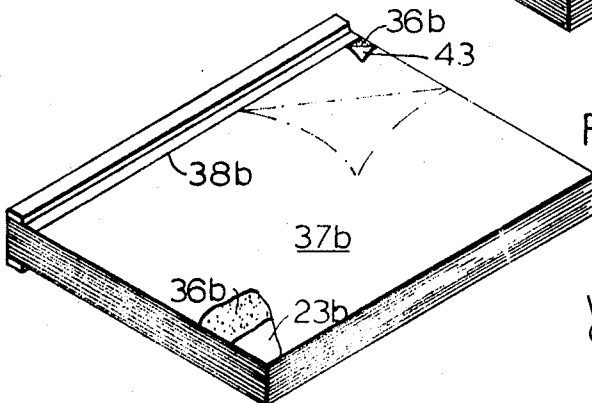


FIG. 3

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FIG. 4

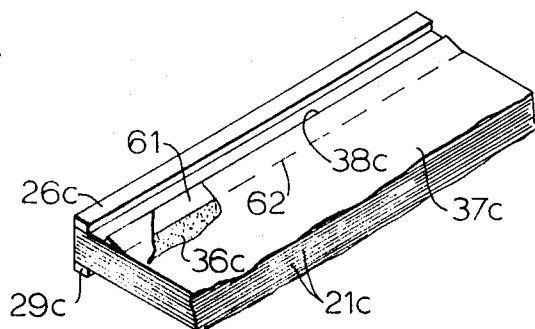


FIG. 4-A

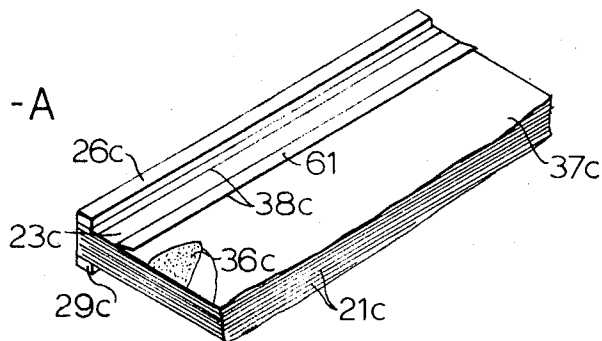
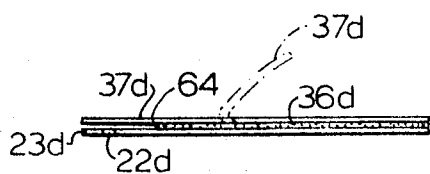


FIG. 5

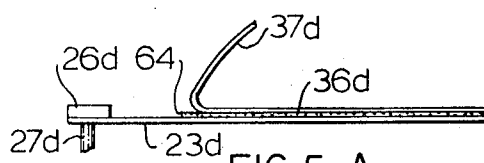


FIG. 5-A

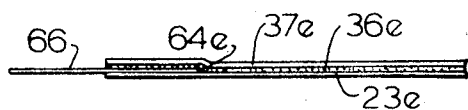


FIG. 6

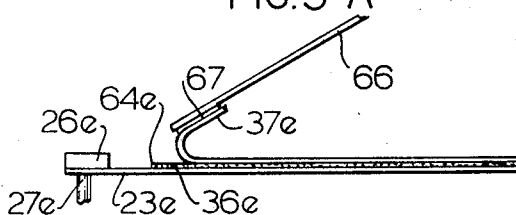


FIG. 6-A

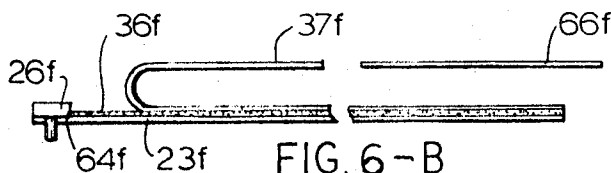


FIG. 6-B

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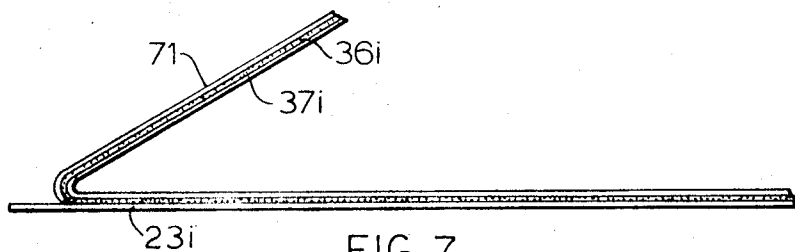


FIG. 7

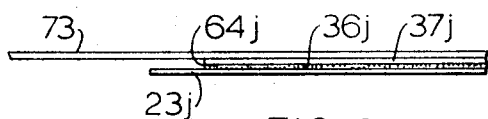


FIG. 8

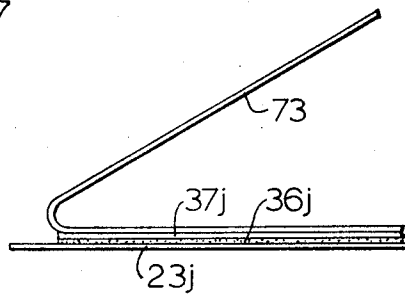


FIG. 8-A

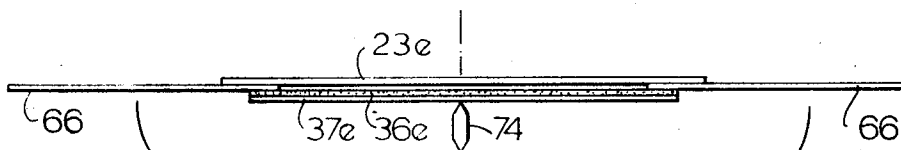


FIG. 9

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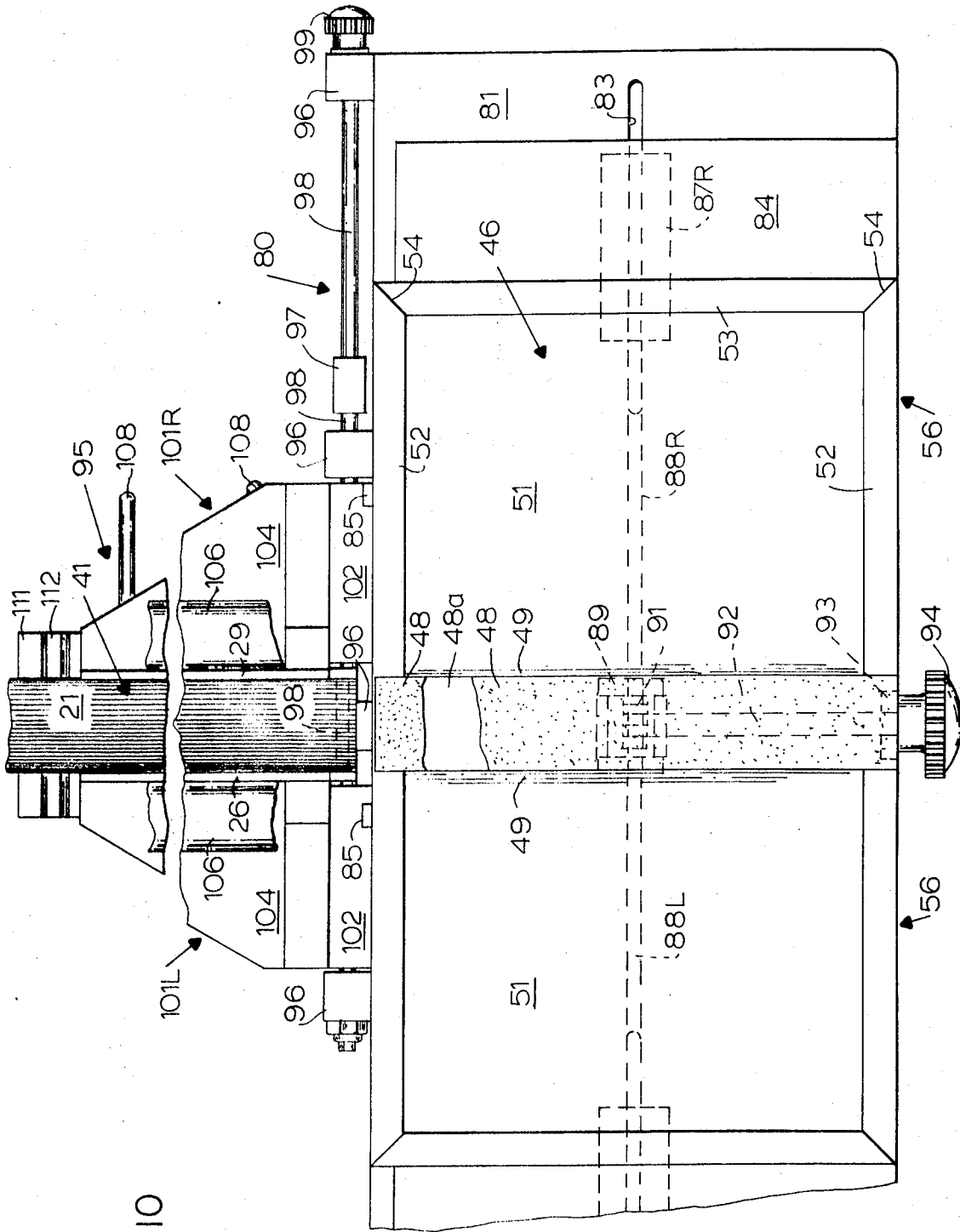


FIG. 10

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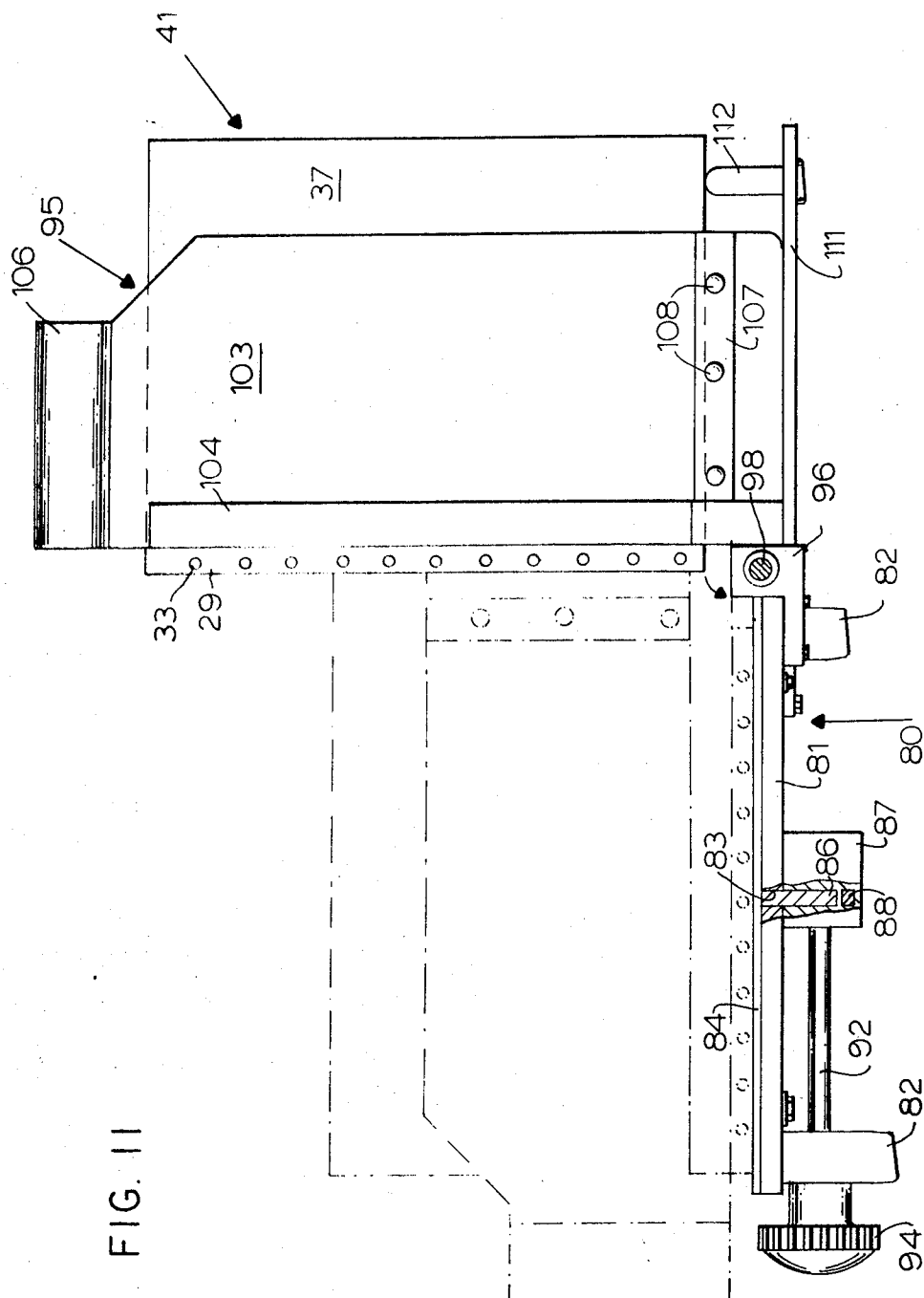


FIG. 11

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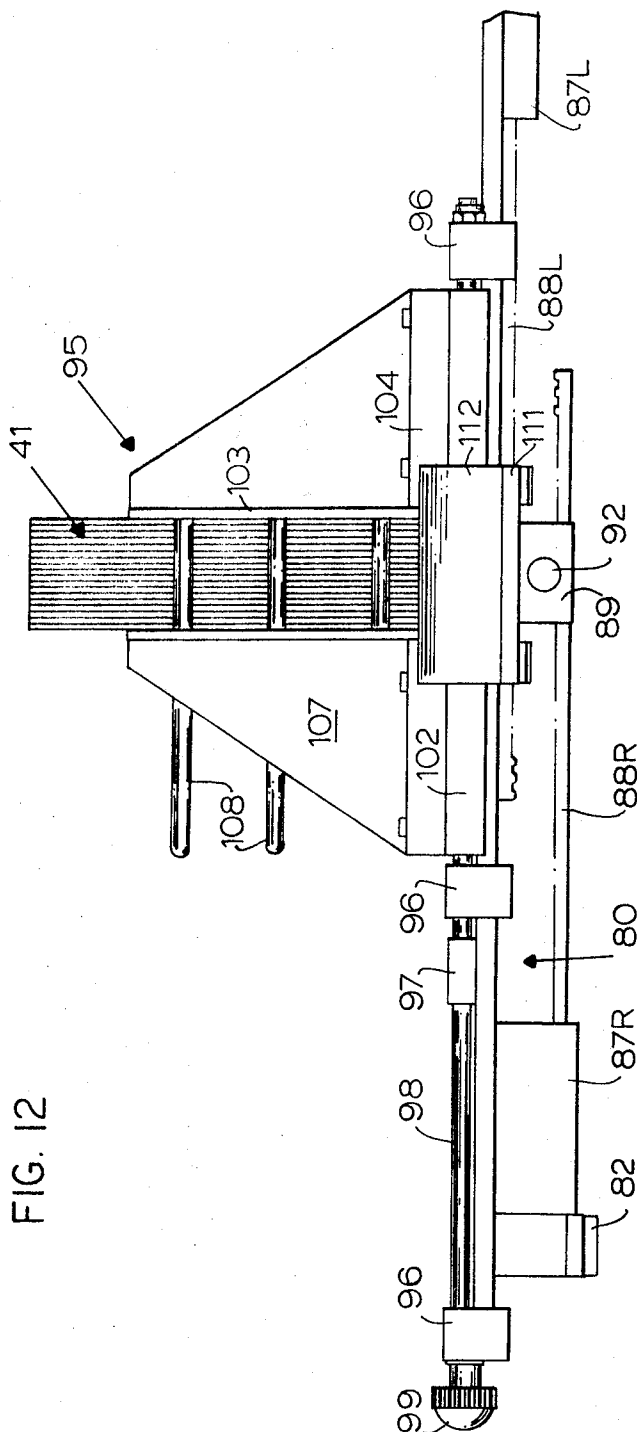


FIG. 12

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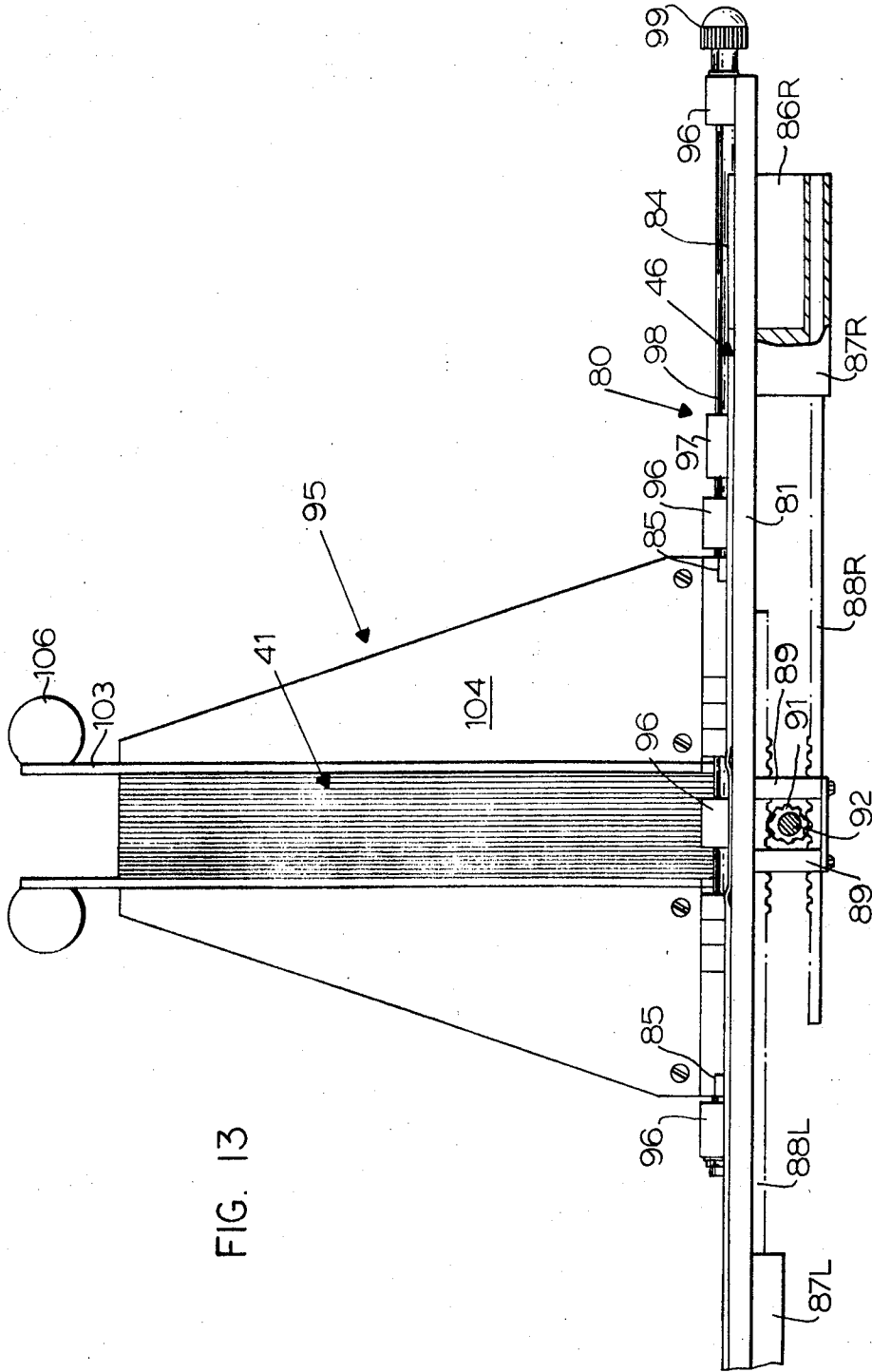


FIG. 13

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PRESSURE SENSITIVE END SHEETS FOR UNCASED BOOKS AND METHOD AND APPARATUS FOR CASING BOOKS

This application is a continuation-in-part of application Ser. No. 79,086, filed Oct. 8, 1970, which 15, in turn, a continuation-in-part of applications, Ser. No. 799,045, filed Feb. 13, 1969 now U.S. Pat. No. 3,596,929 issued Aug. 3, 1971, and Ser. No. 872,134, filed Oct. 29, 1969.

This invention relates to new and improved pressure sensitive end leaf construction for uncased books wherein release paper initially protects the adhesive, and wherein the release paper is fabricated so that it can be stripped off conveniently. Further, the invention relates to a method of casing books (i.e., assembling the uncased book and the case) and to apparatus for assembling the case and cover.

A principal object and advantage of the present invention is to greatly reduce the number of operations required to bind an uncased book and to case said book. The labor required is very materially reduced; the use of existing binery equipment is almost entirely eliminated; and the amount of additional equipment required is minimal and inexpensive. More particularly, conventional book binding requires a large number of sewing, glueing, beading and rounding steps, each of which normally requires specialized equipment and, further, the casing in of the uncased book required glueing and fabricating steps. All of the foregoing steps are either eliminated or greatly simplified by practice of the present invention.

Conventional bindery practice requires utilization of large areas of bindery floor space, since the various parts which are ultimately assembled in the cased book are ordinarily spread out and must be left in spread condition while glue dries and while other portions are being completed and assembled. Hence, not only is the amount of labor and machinery greatly reduced by practice of the present invention, but even the floor space required in a bindery is reduced because of the fact that it is not necessary to spread out the book parts as has heretofore been the practice.

A further feature of the invention is the reduction in the amount of skilled labor required. The operator of the equipment used to practice the present invention does not require extensive training in order to practice the method of the invention.

One of the particular features of the invention is the fact that pressure sensitive adhesive is applied to the end leaves of the book. In accordance with conventional manufacturing practices, the pressure sensitive adhesive is first applied to release paper which has previously been coated so that when the adhesive is brought into contact with the end leaf, the adhesive sticks to the end leaf and does not stick well to the release paper. Accordingly, when the release paper is stripped off, the pressure sensitive adhesive remains with the end leaf and is exposed. Features of the invention are the provision of various alternate means for fabricating the release paper so that it may be stripped or peeled off the end leaves in a convenient and efficient manner.

Another feature of the invention is the assembling of the uncased book to its case. After the spine edge of the uncased book is caused to adhere to pressure sensitive material which is positioned on the spine area of the case, the release paper for the pressure sensitive mate-

rial of the end leaf is removed, and the end leaves are then caused to adhere to the inside of the covers of the case.

Another feature of the invention is the fact that the release paper may be stripped with the uncased book attached to the spine of the case and the release paper stripped from the end leaves while the book is closed.

Another feature of the invention is the fact that likelihood of improper location of the end leaves relative to the case is for practical purposes eliminated.

Another principal feature and advantage of the invention is the provision of a rapid and convenient means for locating the case and the book relative to each other.

Still another feature of the invention is the provision for rapid and convenient means for attachment of the book to the spine of the case.

A still further feature of the invention is the provision of a rapid and convenient means for attachment of the end leaves to the case.

An object of the invention is to provide an end leaf construction and an apparatus and method for assembly of the uncased book and the case with the use of equipment which resembles in appearance, size and ease of operation standard office equipment. Further, the operation of the equipment requires relatively unskilled labor.

Other features of the invention are the substantial reduction in the initial cost of equipment required to assemble the uncased book and case, a substantial reduction in floor space required as compared with commercial binderies, and the reduction in maintenance costs of the equipment.

Other objects of the present invention will become apparent upon reading the following specification and referring to the accompanying drawings in which similar characters of reference represent corresponding parts in each of the several views. In the drawings:

FIG. 1 is a perspective view of a book and case therefor in accordance with the present invention with the release paper still in position, the cover being open.

FIG. 1A is a fragmentary, sectional view through the structure of FIG. 1 with the cover closed.

FIG. 2 is a perspective view of an uncased book with modified release paper construction.

FIG. 3 is a view similar to FIG. 2 of a further modification.

FIGS. 4 and 4A are fragmentary, perspective views of further modified constructions.

FIG. 5 is a schematic end elevational view of a further modified release paper and end leaf construction.

FIG. 5A is a view similar to FIG. 5 showing the release paper partially stripped away.

FIG. 6 is a view similar to FIG. 5 of another modification.

FIG. 6A is a view similar to FIG. 5A of the modification of FIG. 6.

FIG. 6B is a view similar to FIG. 6A showing a further modification in that a tab or sheet to pull the release paper is formed integral with the release paper.

FIG. 7 is a view similar to FIG. 5 of an additional modification.

FIG. 8 is a view similar to FIG. 5 of still another modification.

FIG. 8A is a view similar to FIG. 5A of the modification of FIG. 8.

FIG. 9 is a schematic view showing a means for fabricating the structure of FIG. 6.

FIG. 10 is a top plan view, partially broken away in section, of apparatus for assembling an uncased book and case.

FIG. 11 is a side elevational view from the right of FIG. 10.

FIG. 12 is a rear elevational view of the structure of FIG. 10.

FIG. 13 is a front elevational view of the structure of FIG. 10, partially broken away to reveal interior construction.

Reference is made to application Ser. No. 799,045 wherein an uncased book 41 which may be used with the present invention is illustrated and described. It will be understood that the uncased book may be considerably modified from that shown in said application in that the book may be fabricated by sewing, gluing, stapling or other means. However, the book shown in said application Ser. No. 799,045 is a preferred construction. Such a book 41 is formed of a plurality of sheets 21 formed with apertures 22 adjacent the spine margins thereof. The uncased book is held together by means of a first plastic strip 26 having integral projecting thermoplastic studs 27 spaced to fit through the holes 22 and a second plastic strip 29 formed with similarly spaced holes 31 preferably having external counterbores 32 in which rivet heads 33 are formed on the severed ends of studs 27 by passing a hot knife through said studs spaced beyond said second strip and then moving the hot knife toward the second strip to form rivet-like heads on said studs. Apparatus and method for thus fabricating a book are claimed in co-pending applications of the present applicants. End leaves 23 are provided which fit on the top and bottom of the stack of sheets 21, the spine marginal edges of the end leaves 23 being apertured and receiving the same studs 27 which secure the sheets 21 to the strips 26, 29.

One of the features of the present application is the use of pressure sensitive adhesive 36 on at least a portion of each end leaf 23. Initially, such adhesive 36 is protected from contact with other objects by release paper 37. Release paper 37, as conventionally manufactured, is ordinary Kraft paper which is coated with polyethylene on both sides so that the paper does not absorb solvents or moisture and the polyethylene coating is stable. At least the side of the release paper to which the adhesive is applied is coated with a silicone material to facilitate stripping.

Adhesive 36 is usually an acrylic, cross-linked acrylic, nitrile rubber or other polymer which is initially dissolved in a solvent as commercially available. A coating between 4 and 6 mils thick is applied to the silicone coated surface of the release paper 37 and then the solvent is driven off by drying in an oven so that the adhesive layer 36 is about 1 mil or less in thickness. Such release paper 37 coated with adhesive 36 is then laminated to the end leaf 23 and rolled so that the adhesive 36 sticks to the end leaf 23. The fabrication of the end leaf 23, adhesive 36 and release paper 37 is an adaptation of general commercial practice in the pressure sensitive adhesive art. In accordance with the present invention, in the form of the invention shown in FIG. 1, a slit 38 is formed in the release paper 37 immediately outside each strip 26 or 29. By pulling the release paper 37 away from the adhesive 36 commencing at the slit 38, the release paper is removed, exposing

the adhesive 36. When the top cover 56 of the case 46 is closed, adhesive 36 causes the end leaf 23 to adhere to the inside cover, as subsequently explained, and thus the case and cover are assembled.

As is described in detail in application Ser. No. 79,086, case 46 is likewise subject to variation, but a preferred form employs cover material 47 of vinyl, leather or other suitable substance and to the center of the case 46 extending vertically in the completed book is a resilient spine strip 48 which is pressure sensitive on both surfaces and is preferably originally covered by release paper 48a (see FIG. 12) which is stripped off at the commencement of the assembling operation. Immediately to the outside of the strip 48 is a hinge forming area 49 which is the thinnest part of the case. Immediately outside of each hinged forming area 49 are boards 51 of cardboard or similar material. The top and bottom margins of the cover material 47 are folded inward in top and bottom turnins 52 at the top and bottom edges of the book, only partially covering the boards 51. Similarly, on each outer edge an edge turnin 53 of the material 47 is formed and the corners 54 are preferably mitered, all as in accordance with conventional case manufacturing operations. Thus, front and back covers 56 and an intermediate central spine cover 57 are provided. In the ultimate fabrication of the book, hinge creases 58 are formed immediately inward of covers 56 and beads 59 formed immediately inward of the hinge creases 58. The details of the foregoing construction and the advantages thereof are set forth in application Ser. No. 79,086.

In assembling the uncased book 41 to the case 46, as is further set forth in the description of FIGS. 12-15, the spine edge of the uncased book 41 is caused to adhere to the pressure sensitive resilient spine strip 48. The completion of this operation is shown in FIG. 1. As shown in FIG. 1, the top cover 56 (and the bottom cover as well) is unfinished in that the board 51 is shown merely covered by the turned in top and bottom portions 52 and edge turn in 53. The ultimate position of the end leaf 23 which conceals the board 51 is shown in dot-and-dash lines in the inside of top cover 56.

Slit 38 is formed extending from top to bottom of the release paper 37 immediately inside the hinged area 58. As a further step in the completion of the book, the end paper 37 is peeled back from the adhesive 36 of the end leaf 23, the beginning of this operation being shown in the dot-and-dash line portion of the uncased book 41 of FIG. 1. The release paper 37 is completely removed and the top cover 56 is then closed causing the adhesive 36 to adhere to the inside of the board 51 and the portions of the turned-in portions 52, 52 and 53 within the dot-and-dash lines. The end leaf 23 then permanently adheres to the cover 56.

In the modification of FIG. 2, a second slit 39 is formed in release paper 37a about one-half the width of the end leaf 23a. Thus the release paper 37a is removed in two stages: first by peeling back from slit 38a and then by peeling back from the slit 39. In the modification of FIG. 3, which closely resembles that of FIG. 1, at least one corner 43 of the release paper 37b is folded back. Such corner 43 may be gripped to facilitate stripping off the release paper 37b. The exposed corner of the adhesive 36b at the upper left-hand corner of the uncased book shown in FIG. 3 is not of sufficient area so that if it sticks to another object any damage occurs.

In the modification of FIG. 4, a narrow ribbon 61 of paper is placed on the underside of the adhesive-coated release paper 37c prior to laminating to end leaf 23c. After lamination, slit 38c is located to coincide with the spine side of ribbon 61. The ribbon 61 prevents adherence of the adhesive-coated release paper 37c to end leaf 23c in an area outward of line 62 which extends from top to bottom of sheet 37c. In the use of the modification of FIG. 4, it is relatively simple for the operator to peel back the release paper 37c because there is a narrow area adjacent slit 38c where the release paper 37c is loose. The form of the invention shown in FIG. 4A, as a further modification, the release paper 37c is folded back so that the surface of ribbon 61 is outermost, making it even easier to peel off the end paper 37c.

In the preceding modifications, the adhesive 36 has been applied over the entire area of the release paper 37 and accordingly, is applied over the entire area of the end leaf 23 with the exception of the narrow area occupied by ribbon 61 in FIGS. 4 and 4A. Directing attention to FIG. 5, however, the adhesive 36d is applied only partially over the width of the release paper 37d but terminated in the line 64 spaced inward from the left-hand margin of the paper 23d. Accordingly, as shown in FIG. 5A, when the release paper 37d is peeled back, the edge 64 of the adhesive 36d is spaced to the right of the left-hand margin of the end leaf 23d a predetermined distance. The space between the edge 64 and the left-hand edge of the sheet 23d provides room for the plastic strip 26d. The distance between line 64 and the left-hand edge is substantially the same as between line 38 in the modification of FIG. 1 at the left-hand edge of the uncased book.

In the modification of FIG. 6, to facilitate stripping of the release paper 37e, a sheet 66 of extended width is applied between the adhesive 36e and the left-hand edge of end leaf 23e. The right-hand edge of sheet 66 extends about to line 64e which corresponds to line 64 of the modification of FIG. 5. The sheet 66 is then folded clockwise (FIG. 6A) to overlie the release paper 37e so that the area where the strip 26e is to be applied is clear and accessible during the makeup of the uncased book. After the uncased book is inserted in the case, it is desirable that the sheet 66 protrude outside the outer edge of the book so that it may be gripped with the covers closed and pulled to expose the adhesive 36e and to make it possible for the end leaf 23e to be bonded to the inside of the cover without the necessity of opening the book. Adhesive film 36e breaks at line 64e when tab 66 is pulled to the right, and release paper 37e is stripped from adhesive 36e on end leaf 23e by the adhesive 67 bonding sheets 66 to release paper 37e.

In the modification of FIG. 6, the sheet 66 is shown to be as long as the length of the book, but it will be understood that instead of a sheet 66 a tab of restricted dimensions but long enough to extend beyond the right-hand margin of leaf 23e may be substituted.

In the modification of FIG. 6B, the tab or sheet 66f is formed integral with release paper 37f rather than as a separate element. The adhesive 37f extends only partially to the left-hand edge of end leaf 23f so as to cause termination of the adhesive 36f at line 64f or some line spaced to the right thereof any desired distance. The sheet or tab 66f is pulled after the uncased book has

been installed inside the case to expose the adhesive 36f in essentially the same manner as in FIG. 6.

The modification of FIG. 7 employs a second sheet 71 similar to sheet 66 of FIG. 6. The modification of FIG. 7 differs from FIG. 6, however, in that the release paper 37i is of greatly extended width, approximately twice the width of the end leaf 23i, and adhesive 36i is applied over substantially the entire surface of release paper 37i. The right-hand edge of the second sheet 71 extends inward of the left-hand margin of the end leaf 23i approximately the same distance as does the sheet 66 of FIG. 6. Again, it will be understood that instead of the sheet 71 extending the whole length of the sheet 23i it may be of limited width and only sufficient to provide a grip for the fingers. In addition, the sheet or tab 71 may extend considerably to the right of the right-hand edge of end leaf 23i. The adhesive-laminated combination of sheet 71 and release paper 37i forms a strong, reinforced pull tab.

In the modification of FIG. 8, a sheet or tab 73 of polyethylene or other suitable material is heat bonded or otherwise adhered to the release strip 37j. In this modification, preferably a line 64j indicates the left-hand edge of the application of the adhesive 37j. As shown in FIG. 8A, by pulling the sheet or tab 73 to the right, the release paper 37j may be peeled from the adhesive 36j after the uncased book has been installed in the case.

FIG. 9 illustrates a preferred means for fabricating the modification of FIG. 6. The stock from which the end leaves 23e is fabricated is double the width of the ultimate end leaf 23e. In other words, the end leaves and associated elements are formed double and are cut by the cutter 74 along the center line. This arrangement facilitates rapid production of the end leaf combination. By way of further explanation, a web which is twice the width of the release paper 37e of the final product is coated with adhesive 36e. On either edge a web of paper 66 is applied, the inner edge of each web 66 slightly overlapping the outer edge of the web 37e. Thereupon, a double web 23e of end leaf material is applied and the material 23e is adhered to the adhesive 36e by means of pressure rollers or other suitable means. Thereupon, the web 66 folded in the direction of the arrows of FIG. 9 and the cutter 74 cuts the twin web apart to produce the modification of FIG. 6. Similar techniques may be used to produce the other modifications.

The uncased books of FIGS. 2, 3, 4 and 4A, as well as the laminated end sheets of FIGS. 5, 5A, 6, 6A, 6B, 7, 8 and 8A are in many respects similar to the modification of FIG. 1 and the same reference numerals followed by the subscripts a, b, c, d, e, f, i and j, are used to designate corresponding parts in the several views.

The apparatus 80 illustrated in FIGS. 10-13 may be used to assemble the uncased book 41 to the case 46. End leaves 23 of the type illustrated and described in FIGS. 1-9 may be applied to the uncased book 41 prior to its being positioned in the apparatus 80.

The case 46 is placed on table 81 which is shown in the accompanying drawings being horizontal but is actually preferably downwardly rearwardly inclined as is best shown in FIG. 11. The angle which the table 81 assumes is governed by the length of the feet 82 which are positioned below the four corners of the table. Stops 85 are the rear edge of table 81 locate case 46 in a rearward sense. On either side of table 81 is a trans-

verse slot 83. Wings 84 are located on either side of the apparatus sliding over the surface of table 81 and each having a downward extension 86 which fits through slot 83. The extension 86 slides laterally in a block 87 fixed to the bottom of table 81 and its lower end is fixed to a rack 88. There is one rack 88R on the right hand side of the machine at a lower elevation than the corresponding rack 88L of the left hand side. The inner ends of the racks 88L slide through a central block 89 on the underside of the middle of the table 81 and mounted for rotation in block 89 is a pinion 91 connected to forwardly extending shaft 92 which is mounted in a bearing support 93 along the bottom of the front edge of the table 81 with a centering knob 94 on the exterior of the apparatus. By turning knob 94 the pinion 91 is likewise turned and this causes racks 88L and R to move in and out equi-distant amounts in opposite directions and thereby move the wings 84 inwardly and outwardly relative to the center of the table 81 for the purpose of accurately centering the case 46 received between the inner edges of the wings 84 relative to the center line of the table.

Pivoted to the rear edge of table 81 is a clamp 95 which receives the uncased book and is used to press the spine edge of the book against the spine strip 48 of the case 46 as hereinafter appears. Bearing blocks 96 are located on the rear edge of table 81 and receive shaft 98 which extends from the right hand edge of table 81 to a position to the left of the center thereof. Shaft 98 consists of three sections. At the right hand edge is an unthreaded section which is connected by coupling 97 to a right hand threaded section which lies immediately to the left of coupling 97 as viewed in FIG. 10 and extends up to the center of the machine while the shaft 98 to the left of the center of the machine is left hand threaded. Thickness adjusting knob 99 is fixed to shaft 98 on the right hand side of the machine. But turning knob 99, the shafts 98 turn in bearing supports 96. The left and right clamp members 101L, 101R are moved by shaft 98, each having a nut 102 in threaded engagement with shaft 98. Thus, when knob 99 is turned, the nuts 102 move toward or away from each other, bringing the clamp members 101L, 101R toward and away from each other to adjust for the thickness of the uncased book 41 which is held therebetween.

Each member 101 has a plate 103 which oscillates around the center of shaft 98 in a vertical plane. Extending laterally from adjacent the front edge of each plate 103 is an annularly shaped bracket 104 and a handle 106 is attached to each plate forward of angle bracket 104. By squeezing the handles 106 together the uncased book 41 which is between the clamp members 101 may be more tightly gripped. At right angles to angle brackets 104 are gussets 107 positioned adjacent in bottom edges of plates 103. Three transverse rods 108 extend through gussets 107, the ends of rods 108 being fixed to one of the gussets and sliding within holes in the other gusset. The rods 108 insure that the members 101 pivot together rather than independently. Extending rearward of table 81 is a rearward extension 111 on which the lower edges of plates 103 rest in the retracted position of the clamp 95 and extending up from the extension 111 of the rear of the machine is a leveling boss 112 on which the rear bottom edge of the uncased book 41 rests at the time of initial installation. The upper edge of boss 112 is level with the tops of

rods 108 so that the uncased book is properly located at the beginning of the assembly operation resting on the tops of rods 108 and boss 112.

In the use of apparatus 80, at the outset, clamp 95 is pivoted to up position (solid lines in FIG. 11) and the uncased book 41 is placed in the clamp 95. For this purpose, knob 99 is turned so that the clamp members 101L, 101R are moved about a distance slightly greater than the thickness of the book 41. The book 41, with end leaves 23 and release paper 37 incorporated therein as previously explained, are positioned between plates 103 with the strips 26, 29 forward of the front edges of plates 103 and with the bottom edge of the uncased book resting upon rods 108 and leveling boss 112. The knob 99 is then turned to bring the clamp members 101L, 101R together and to clamp the uncased book into position therebetween. By observation of the distance between members 101L, 101R, or by the use of a gauge (not shown), the width of the spine of the book is estimated and a case 46 having a proper spine dimension is selected. Such case 46 is placed on the table 81 and moved rearward to engage stops 85. Knob 94 is turned so that the wings 84 center case 46 relative to the center of the machine. Release paper 48a, which covers the pressure sensitive spine strip, is removed exposing the adhesive on the spine strip.

After the case 46 and uncased book 41 have been installed as above described, the operator grips the handles 106 and pivots the clamp 95 in a counter-clockwise direction as viewed in FIG. 11 from the solid line position to the dotted line position. This forces the spine edges of the uncased book 41 against the pressure sensitive strip 48 and the two parts then stick together. By releasing the grip on the handles 106, the clamp 95 can be pivoted back to its initial position, leaving the uncased book 41 in position on the case 46. Thereupon, when the end leaves of FIG. 6-9, for example, have been previously installed, the front and rear covers 56 may be closed, the sheet 66 pulled, exposing to the inside of the covers the pressure-sensitive adhesive 36e which then sticks to the boards 51 and to the edges of the turnins 52, 53 completing assembly of the book.

Where end leaves such as shown in FIG. 1 have been employed, the assembly of the end leaves to the inside of the cover is accomplished by serially attaching the covers. This is done by pulling off release paper 37 of each end leaf 23 and then closing the cover and pressing it tightly against adhesive 36. The same procedure is followed with FIGS. 2-5.

What is claimed is:

1. A method of forming a cased book comprising providing a plurality of sheets, front and back end leaves on the outside of said uncased book, each said end leaf having pressure-sensitive material on its outer surface extending to the top, bottom and outside margins of said end leaves, and release paper covering all of said pressure-sensitive material binding said sheets and end leaves together along their spine margins with binding means to form an uncased book with said end leaves securely bound to said sheets prior to assembly of said uncased book to a case; providing a case for said uncased book having front and back covers, a flexible spine and covering means for the outsides of both said front and back covers and of said spine, said case prior to adherence to said uncased book being adapted to encase a range of thicknesses of uncased books by reason of the flexibility of said spine; positioning said uncased

book relative to said case with the spine of said uncased book centered relative to said spine, drawing said covers down to extend outward beyond the outer edges of said end leaves, removing said release paper to expose said pressure-sensitive material, applying pressure to said pressure-sensitive material to cause said end leaves to adhere to the insides of said front and back covers all the way to the outer edges of said end leaves with the insides of the outer edges of said covers extending outwardly beyond the outer edges of said end leaves and being devoid of exposed adhesive beyond the outer edges of said end leaves, the spine edge of said uncased book being centered relative to said flexible spine.

2. A method according to claim 1 in which said case has a spine strip of resilient material extending longitudinally down the middle of said flexible spine covering and has second pressure-sensitive material on its exposed surface, and in which said step of positioning said uncased book relative to said case comprises applying pressure to cause the spine edge of said uncased book to adhere to said second pressure-sensitive material on said spine covering.

3. The method of claim 1 in which each said release paper is slit longitudinally adjacent its inner edge, said step of stripping comprising pulling said release paper from said slit outwardly while its related front or back cover is open and then closing said related cover.

4. The method of claim 1 in which each said release paper is provided with an elongated tab extending transversely, said release paper and said tab folded longitudinally adjacent the inner edge of the related end leaf and said tab extending out beyond the outer edge of said end leaf, said step of stripping comprising first closing the related front or back cover and then pulling said tab outwardly of the spine of the book to draw the release paper away from the underlying pressure-sensitive material.

5. A method of forming a cased book comprising providing an uncased book having a plurality of sheets, front and back end leaves on the outside of said uncased book, each said end leaf having pressure-sensitive material on its outer surface extending to the top, bottom and outside margins of said end leaves, and narrow plastic strips overlying the spine edges of each said end leaf, said strips having cooperating means for binding said end leaves and sheets together so that said end leaves are securely bound to said sheets prior to assembly of said uncased book to a case; providing a case for said uncased book having front and back covers, a flexible spine and covering means for the outsides of both said front and back covers and of said spine, said case prior to adherence to said uncased book being adapted to encase a range of thicknesses of uncased books by reason of the flexibility of said spine; positioning said uncased book relative to said case with the spine of said uncased book centered relative to said spine, applying pressure to said pressure-sensitive material to cause said end leaves to adhere to the insides of said front and back covers, said pressure-sensitive material extending to the outer edges of said end leaves, the outer edges of said covers extending outwardly beyond the outer edges of said end leaves, said insides of said covers being devoid of exposed adhesive beyond the outer edges of said end leaves, the spine edge of said uncased book being centered relative to said flexible spine, adhering the outer edges of said

spine cover to said strips to form beads along the front and back spine edges of said cover.

6. A method according to claim 5 in which said case has a spine strip of resilient material extending longitudinally down the middle of said flexible spine covering and has pressure-sensitive material on its exposed surface, and in which said step of positioning said uncased book relative to said case comprises applying pressure to cause the spine edge of said uncased book to adhere to said pressure sensitive material on said spine covering.

7. A method according to claim 5 in which said step of forming said uncased book comprises, forming along the inner margin of each of a plurality of said sheets and said end leaves a plurality of longitudinally spaced apertures, inserting through said apertures studs attached to a first of said strips, inserting said studs through holes in the second of said strips, compressing said strips together and said sheets there-between, severing the ends of said studs projecting beyond said second strip, and deforming the ends of said studs to secure said studs and said second strip together with said sheets and end leaves bound between said strips and said studs extend through said apertures.

8. A method according to claim 7 in which said severing step comprises passing a hot knife through said studs spaced beyond said second strip and said deforming step comprises moving said hot knife toward said second strip to form rivet-like heads on said studs.

9. An uncased book for use in fabricating a cased book comprising a plurality of sheets, a front and a back end leaf, binding means for binding the spine edges of said end leaves and said sheets together located adjacent the spine edge of said book, said end leaf having substantially the entire outside surface thereof covered with pressure-sensitive material extending to the top, bottom and outside margins of said end leaf, and release paper for each said end leaf covering the entire area of said pressure-sensitive material and being separable from said pressure-sensitive material from a line parallel to and adjacent the outside margin of said binding means to expose an area of pressure-sensitive material from said line outwardly to said top, bottom and outside margins of said end leaf.

10. An uncased book according to claim 9 in which said sheets and end leaf are formed with spaced apertures along a marginal edge in which said binding means comprises a first strip having projecting studs spaced longitudinally of said first strip the same distance as said apertures on one side of said uncased book, a second strip formed with holes corresponding to said studs on the opposite side of said book, said studs extending through said apertures and holes and formed with heads on the outside of said second strip.

11. A book according to claim 9 in which said release paper is formed with a longitudinal slit along said line.

12. A book according to claim 11 which further comprises a ribbon extending longitudinally outward of said slit adhering to a portion of the area of said pressure-sensitive material.

13. A book according to claim 12 which further comprises a tab having one edge adhering to said pressure-sensitive material adjacent the inner edge of said end leaf and folded over to overlies said release paper and extend beyond the outer edge of said book.

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14. A book according to claim 13 in which said tab is coextensive in length with the length of said release paper.

15. A book according to claim 13 in which said tab is integral with said release paper.

16. A book according to claim 15 in which said tab is covered on one side with a second area of pressure-sensitive adhesive and which further comprises a protective covering adhering to said second area of pressure-sensitive adhesive.

17. A book according to claim 9 in which said pressure-sensitive material terminates at said line, said release paper folded over to overlie the spine edge of said

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pressure-sensitive material.

18. A book according to claim 17 in which said release paper is folded along said longitudinal line.

19. A book according to claim 18 in which said release paper is of extended width and has a tab, said tab folded over to extend beyond the outer edge of said book.

20. A book according to claim 17 which further comprises a tab of thermal-adhesive material adhering to the outside of said release paper and being of extended width to extend beyond the outer edge of said book.

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