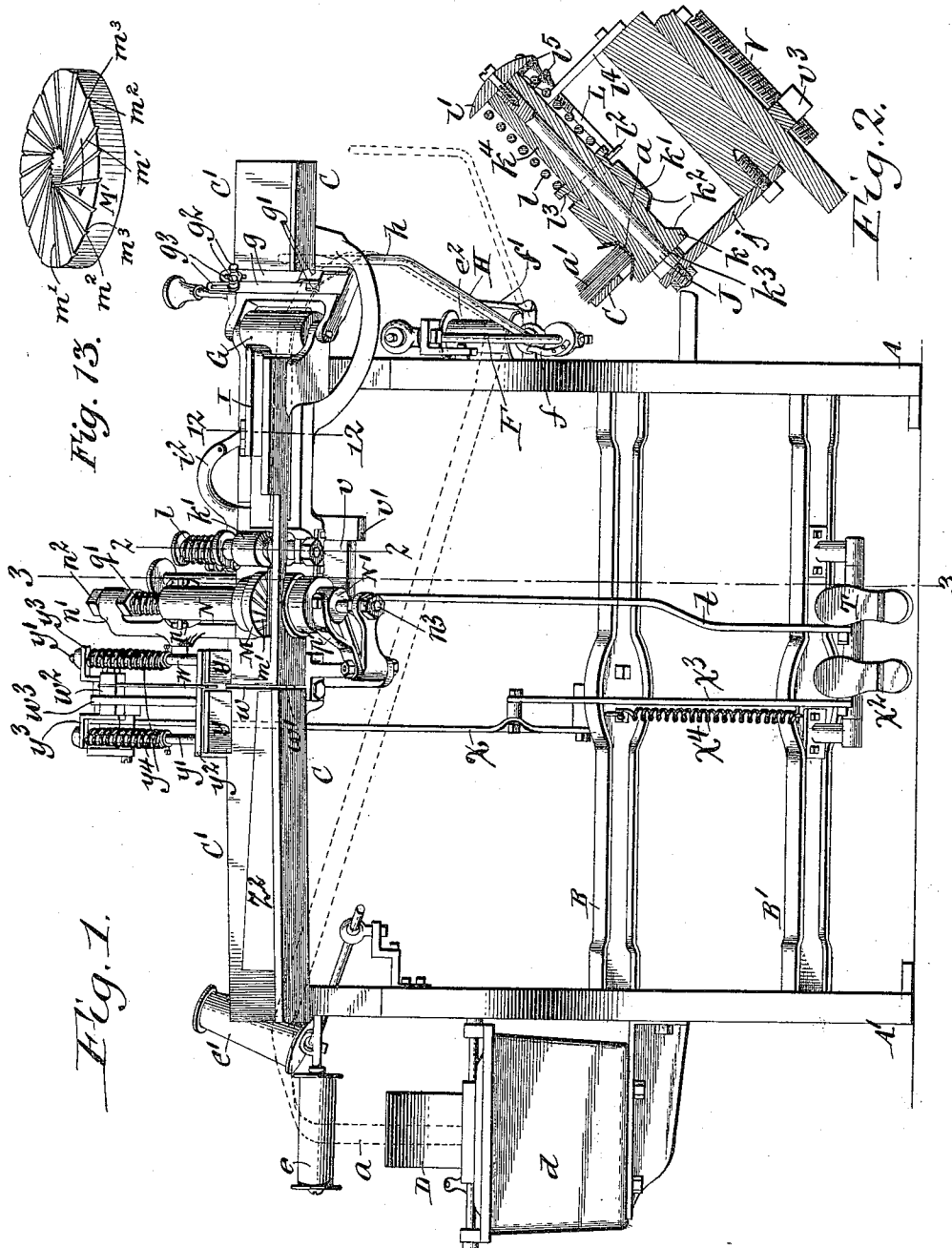


W. L. JACOBIE.
 TABLET BINDING MACHINE.
 APPLICATION FILED DEC. 8, 1909.

1,042,443.

Patented Oct. 29, 1912.

3 SHEETS—SHEET 1.

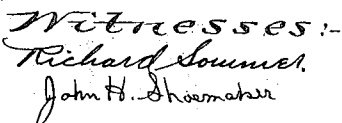


Witnesses:
 Richard Sommer
 John H. Shoemaker

Inventor
 Walter L. Jacobie
 by Geyer & Dopp
 Attorneys.

1,042,443.

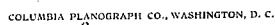
3 SHEETS—SHEET 2.



Walter L. Jacobie
by Geyer & Popp
Inventor
Attorneys

1,042,443.

3 SHEETS—SHEET 3.



UNITED STATES PATENT OFFICE.

WALTER L. JACOBIE, OF GLENS FALLS, NEW YORK, ASSIGNOR TO CHARLES W. JACOBIE,
OF GLENS FALLS, NEW YORK.

TABLET-BINDING MACHINE.

1,042,443.

Specification of Letters Patent.

Patented Oct. 29, 1912.

Application filed December 8, 1909. Serial No. 532,063.

To all whom it may concern:

Be it known that I, WALTER L. JACOBIE, a citizen of the United States, residing at Glens Falls, in the county of Warren and State of New York, have invented new and useful Improvements in Tablet-Binding Machines, of which the following is a specification.

This invention relates to a machine for applying a strip, band, or tape to the edge or pack of sheets for the purpose of binding the same together into the form of a pad, pack, tablet or book.

The object of this invention is to provide a machine for this purpose which is operated manually and permits of expeditiously, economically and efficiently applying strips, bands or tapes to pads or packs of sheets.

In the accompanying drawings consisting of 3 sheets: Figure 1 is a front side elevation of my improved binding machine. Fig. 2 is a vertical transverse section thereof, on an enlarged scale, in line 2—2, Fig. 1. Fig. 3 is a vertical transverse section in line 3—3, Fig. 1. Fig. 4 is a fragmentary rear end elevation thereof. Fig. 5 is a vertical cross section taken in line 5—5, Fig. 6. Fig. 6 is a fragmentary longitudinal section taken in line 6—6, Fig. 5. Fig. 7 is a fragmentary transverse section in line 7—7, Fig. 6. Fig. 8 is a fragmentary rear side elevation of the machine. Fig. 9 is a longitudinal section in line 9—9, Fig. 5. Fig. 10 is a fragmentary longitudinal section in line 10—10, Fig. 9. Fig. 11 is a detached top plan view of the feed table and part of the frame of the machine. Fig. 12 is a fragmentary vertical section in line 12—12, Fig. 1. Fig. 13 is a perspective view of the lower grooved presser roller.

Similar letters of reference indicate corresponding parts throughout the several views.

The main frame of the machine may be variously constructed to support the different working parts of the machine, that shown in the drawings being suitable for the purpose and comprising front and rear uprights or standards A, A¹ arranged transversely at opposite ends of the machine and upper and lower longitudinal bars B, B¹ connected at their front and rear ends with the front and rear standards.

At its upper end the main frame carries

a feed table which comprises a fiat shelf C and a fiat back C¹ extending upwardly from the rear edge of the shelf and at right angles thereto, said shelf and back being preferably so arranged that they diverge upwardly in the form of a trough.

The strip *a* of cloth, fabric or paper which is to be applied to the edge of a pad or pack *a*¹ of sheets or to the back of a book is supplied in any suitable manner but is preferably unwound from a roll as required in a manner well-known in this class of machines. One side of the strip or band is coated with glue or similar adhesive by any suitable means preparatory to applying the same to the edge or back of a pad of sheets. This application of glue to the strip is preferably effected by passing the same over a glue delivery roller D which is rotatably supported above a glue pot or receptacle *d* so that when this roller rotates different parts of its periphery are successively submerged in the glue at the underside of the roller and carried to the top of the same where the glue is picked off by the binding strip moving in contact therewith. After the band has been thus coated with glue on one of its sides the same is passed over a guiding device whereby the glue is permitted to become tacky or partly dried before reaching the position where it is applied to the pad of sheets. The preferred means for this purpose which are shown in the drawings comprise a plurality of guide rollers *e*, *e*¹, *e*² two of which *e*, *e*¹ are arranged at the front end of the machine and one *e*² at the rear end thereof below the receiving parts of the table and in a position parallel and in line with the back thereof, as shown in Figs. 1 and 4. This rear guide roller *e*² is journaled upon an arbor E which is carried by an arm F secured to the adjacent part of the frame. The strip passes from the glue roller upwardly and rearwardly over the front guide roller *e*, thence rearwardly and downwardly behind the intermediate guide roller *e*¹, thence upwardly around the rear guide roller *e*², and thence forwardly around a receiving roller G arranged at the rear or receiving end of the table parallel and in line with the back thereof, and thence forwardly over the face of said back. The binding strip is caused to pass over the upper part of the receiv-

ing roller G and the back of the table by means of a guide device which may be variously constructed but preferably comprises two transversely adjustable guide
 5 plates g, g which are provided respectively with guide hooks g^1, g^1 engaging with the upper and lower edges of the strip and each secured to the adjacent relatively stationary part of the machine by means of a clamping
 10 screw g^2 passing through a longitudinal slot g^3 in the guide plate.

Between the receiving roller G of the table and the rear guide roller e^2 is arranged a take-up device which exerts a constant
 15 rearward pull upon the band between these two rollers and operates to take up the slack in the same. This take-up device preferably consists of an upwardly and rearwardly inclined arm H which is pivoted at its lower
 20 end upon the arbor E of the rear guide roller e^2 and is provided at its upper end with a guide finger or bar h which engages with the outer or uncoated side of the strip. During the operation of feeding the strip
 25 forwardly over the table and applying the same to a pad of sheets for binding them together, the forward pull upon the strip causes the take-up arm and its finger to be swung upwardly and forwardly, as shown
 30 by full lines in Fig. 1, but when the pull upon the strip ceases and the same is free to move backwardly with its front end portion, that portion of the strip between the guide roller e^2 and receiving roller G is deflected rearwardly by the weight of the
 35 take-up arm which moves from the position indicated by full lines in Fig. 1 to the position shown by dotted lines in the same figure, thereby drawing the front end of the strip rearwardly. The forward and backward movement of the take up arm may be limited by any suitable means but preferably by means of front and rear stops f, f^1
 40 secured to the supporting arm F in position to be engaged at the proper time by the front and rear sides of the take up arm H.

As the glue-coated strip passes over the receiving roller G and the face of the back of the table it engages this roller and the
 50 back with its uncoated outer side and during this movement of the strip, tape or band the same passes through a longitudinal slot i formed between the rear edge of the shelf C and the adjacent face of the back C^1 , so that
 55 the lower edge of the band extends below the upper side of the shelf, as shown in Figs. 1 and 12. While the band is in this position on the receiving part of the table a pad or pack of sheets is placed with its rear lateral
 60 edge against the glue coated surface of the strip between the upper and lower edges of the latter, the pad of sheets at this time being guided by the shelf engaging with the under side of the pack and a retaining plate
 65 I arranged lengthwise above the shelf and

engaging with the upper sides of the pads of sheets but separated at its rear edge from the back of the table by an intervening slot
 70 i^1 through which the upper edge of the strip passes lengthwise at this time. This retaining plate I is pivotally supported at its front longitudinal edge on an arm i^2 and the same is turned with its rear longitudinal edge toward the shelf of the table by means of a
 75 spring i^3 interposed between this plate and a lug i^4 on the supporting arm i^2 . In the normal position of the retaining plate the same is inclined relatively to the shelf of the table so as to form therewith a transversely backward narrowing throat for the
 80 reception of the pad of sheets and when this pad is pushed transversely backward into this throat into engagement with the surface of the strip resting against the back of the table the rear edge of the retaining plate is deflected upwardly and the spring i^3 is strained, thereby operating as a yielding
 85 guide for the pad of sheets while the same is being moved forwardly over the receiving part of the table. After the pad has been thus engaged at its rear longitudinal edge with the glued surface of the strip, the operator pushes the pad together with the strip adhering thereto forwardly over the
 90 table and to the mechanism which operates to turn both longitudinal edges of the strip part way toward the opposite flat sides of the pad. The means whereby this preliminary folding or turning of the strip is effected may be variously constructed but the
 95 means which are shown in the drawings are suitable and are constructed as follows:—J represents a stationary arbor or spindle arranged transversely below the path of the strip and parallel with the surface of the table back and preferably supported at its
 100 lower end by means of an arm j on an adjacent stationary part of the machine. Mounted on this arbor are two section k, k^1 of a turning roller the opposing faces of which are beveled, as shown at k^2 Fig. 2, so that these faces taper toward each other. The lower turning roller section k preferably rests with its lower end against a shoulder
 105 k^3 at the lower end of the arbor J and is provided with an upwardly projecting hub k^4 of cylindrical form upon which the upper turning roller section k^1 is mounted so as to be capable of longitudinal movement thereon. A turning roller is thus formed having
 110 a peripheral groove the bottom of which is cylindrical and parallel with the axis of the roller and the sides of which diverge outwardly. As the pad of sheets is moved forwardly together with the strip adhering
 115 to the rear longitudinal edge of the pad, the central part of the strip is pressed by the rear longitudinal edge of the pad against the cylindrical bottom of the groove in the turning roller while the upper and lower
 120 125 130

longitudinal edges of the strip engage with the opposing tapering or inclined edges of this groove and are turned thereby part-way toward the opposite flat sides of the pad of sheets, as shown in Fig. 2.

In order to permit the sections of the turning roller to fit closely against the opposite corners at the rear longitudinal edge of the pad of sheets and fold the edges of the strip properly at these points, these roller sections are pressed yieldingly against opposite sides of the pad of sheets at opposite edges of the strip, this being preferably effected by means of a spring l surrounding the upper part of the hub of the lower roller section and bearing at its upper end against a disk or head l^1 at the upper end of the arbor J while its lower end bears against the upper end of the upper roller section. For the purpose of permitting the two roller sections to be adjusted to strips of different widths and pads of different thicknesses and still permit of the yielding action of these roller sections, an adjusting device is provided which preferably comprises an adjusting rod L arranged parallel with the axis of the turning roller and provided at its lower end with a finger l^2 which engages with a peripheral groove l^3 on the upper turning roller section which groove is somewhat wider than the thickness of said finger, a bracket l^4 secured to the adjacent stationary part of the frame and provided with an opening which receives the upper end of the adjusting rod L and screw nuts l^5 applied to the adjusting rod and bearing against the upper side of the bracket l^4 , as shown in Fig. 2. By adjusting the rod L lengthwise the approximate position of the upper turning roller section with reference to the turning roller section may be determined. In this adjusted position the upper turning roller section is yieldingly held by its spring l in its lowermost position in which the upper side of the groove thereof bears against the adjusting finger l^2 leaving a slack space between the opposite side of the finger and the lower side of the groove, thereby permitting of a limited axial movement of the upper turning section relatively to the lower section for adapting the beveled faces of these roller sections to the strip and the pad of sheets upon which they operate.

After the pad of sheets and the strip pass forwardly beyond the preliminary turning device the same are operated upon by a final pressing device which operates to complete the bending of the opposite longitudinal edges of the strip against opposite sides of the pad of sheets and press these parts firmly together so that they remain united. The preferred means for effecting this final pressing and turning of the strip and the pressing of the same against opposite sides

of the pad of sheets which are shown in the drawings are constructed as follows: M M^1 represent two final pressing rollers which are arranged in front of the preliminary turning device and are adapted to engage by their opposing faces on one side of their axes with opposite edges of the strip and complete the folding of the same against opposite sides of the pad of sheets, as shown in Fig. 5, and also exert a wiping action upon said edges from the back longitudinal edge of the pad to the front longitudinal edge thereof and for causing the strip to lie smooth on the pad and adhere firmly thereto. In order to cause the strip and pad to gradually come under the action of these final pressing rollers, the operating faces of the latter are chamfered or beveled adjacent to the periphery thereof, as shown at m in Figs. 5 and 7. As the final pressing rollers sweep over the edges of the strip and fold the same against opposite sides of the pad, they also exert a wiping action which tends to smoothen out any wrinkles which may be in the strip and also draw the same with its central part tightly against the longitudinal rear edge of the pad. In order to enable the final pressing rollers to obtain a firm grip upon the edges of the strip for this purpose, the faces thereof are provided with grooves m^1 which are preferably equally inclined at a considerable angle to the radii drawn to their outer ends and arranged with their inner ends in advance of their outer ends, each having an inclined front side m^2 and an abrupt rear side m^3 , as shown in Figs. 7 and 13, whereby a comparatively sharp gripping edge is produced at the rear side of each groove which enables the final pressing rollers to obtain a firm hold upon the strip and effectively draw the same tightly against the pad which is being bound. Owing to this arrangement of the grooves m^1 on the final presser rollers M , M^1 the sharp rear edges of these grooves take hold of the longitudinal edges of the tape which lap against opposite sides of the tablet and draw the same inwardly on the latter and also cause the central part of the tape to be drawn tightly against the back edge of the tablet as the tablet and tape or strip are moved by the operator between the presser rollers.

In order to prevent the rotary action of the final pressing rollers as they leave the edges of the strip from loosening or displacing the strip, these rollers are so arranged relative to the strip and the pad on which they operate, that when the faces thereof have completed their pressing operation upon the strip and pad, the same clear these parts so as to be out of contact therewith. For this purpose the final pressing rollers have their axes arranged at an angle to each other, so that they diverge obliquely or for-

wardly and rearwardly from the point where the opposing faces of these rolls engage with the edge portions of the strip, as shown in Fig. 7. By this means the final pressing rollers approach more closely to each other at the point where they engage opposite edges of the strip and are separated a greater distance from each other at all other parts of their opposing faces so that the rotary movement of those parts of the final pressing rollers which do not engage with the edges of the strip will not loosen the same. These rollers are turned solely by the friction of the pad and the strip which are moved manually and tangentially past the same by the operator. Normally these final rollers are arranged with their operative portions so close together that the distance between their operative portions is less than the thickness of the pad and the strip applied thereto, whereby these rollers are separated slightly as the pad and the strip are moved forwardly between the same. In order to permit of this action of the final rollers the same are yieldingly held in the position nearest to each other by means which are preferably constructed as follows:

N, N¹ represent two transversely-movable carriages or slides preferably of tubular form which are guided so as to be movable in line with each other and at right angles to the path of the pads and the strip and parallel with the face of the table back. The upper carriage N is preferably guided upon a rod *n* which is adjustably secured to a bracket *n*¹ by passing the upper end of the guide rod *n* through an opening in said bracket and applying screw nuts *n*² to said rod on opposite sides of the bracket. The lower carriage N¹ is similarly guided on a rod *n*³ which is adjustably secured to a stationary supporting bracket *n*⁴ by passing the lower threaded end of the guide rod *n*³ through an opening in the last mentioned bracket and applying screw nuts *n*⁵ to said rod on opposite sides of the bracket. Each of the final rollers is pivoted to the inner end of one of the tubular carriages or slides by means of a pivot screw *o* passing through the final pressing roller and entering a plate *o*¹ secured to the inner end of the companion slide, an annular row of balls *o*² being interposed between the outer face of the final pressing roller and the opposing inner end of the tubular slide, so as to form a rolling bearing or support for the roller which takes up the thrust as the roller bears against the pad and strip. It will be noted that although the slides or carriages move on a plane at right angles to the path of the pad the pivots of the rollers are arranged at an angle to the line of movement of these slides for obtaining the results heretofore described. The carriers or slides of the final rollers are moved toward each other into

their operative position by means of upper and lower rock shafts P, P¹ which are journaled on the brackets *n*¹, *n*⁴ and are provided with front rock arms *p*, *p*¹ which are connected with the outer ends of the slides and also provided with rear rock arms *p*², *p*³, an intermediate rock arm P² having a finger *p*⁴ engaging with the rear arm *p*³ of the lower rock shaft P¹, and connected by a link *p*⁵ with the rear arm *p*² of the upper rock shaft, a spring *q* operating against the rear arm of the lower rock shaft and a spring *q*¹ interposed between the outer end of the upper slide N and the inner screw nut *n*² and guided upon the adjacent guide rod *n*. If desired, the combined operation of the springs *q* and *q*¹ serve to turn the levers and the parts connected therewith in the direction for moving the slides and the final pressing rollers toward each other, but if desired the spring *q*¹ may be omitted in which case the other spring *q* would perform this function alone but in that case the latter must be made correspondingly stronger. The movement of the final pressing rollers toward each other may be limited in various ways but preferably by means of heads *q*² arranged at the inner ends of the guide rods *n*, *n*³ and adapted to engage with internal shoulders *q*³ at the outer ends of the slides N, N¹. In order to relieve the jar upon the machine when the slides are moved toward each other and strike with their shoulders *q*³ against the heads of the guide rods, buffers or cushions *q*⁴ of leather or similar material are interposed between the shoulders of the slides and the heads of the guide rods *n*, *n*³, as shown in Fig. 6. Upon adjusting the screw nuts *n*², *n*⁵ on the guide rods, the latter may be shifted lengthwise for varying the position at which the final pressing rollers are arrested during their inward or forward movements in accordance with the thickness of pads which are being bound.

When binding or applying the strip only to one edge of a book or pad of sheets, the same, after the pad has passed the final pressing rollers, is presented to a cutter mechanism which severs the strip between the foremost pad and the next following pad. But when the strip is to be secured to more than one edge of the pad the latter is turned outwardly and in a plane parallel with the face of the table shelf whenever the application of the strip to one edge of the pack has been completed and then engaged by the next following edge with the glue coated side of the strip, this turning operation being repeated for each edge of the pad which it is desired to bind or cover with the strip. Upon turning the pad so as to engage successive edges thereof with the strip, the edges of the latter at the corners of the pad fold or double over each other

and in the absence of any provision for applying extra pressure to these doubled corners of the strip, the same would project laterally and produce not only an unfinished appearance of the pad, but would also
 5 render it impossible to pile them evenly. In order to permit of thus smashing down or flattening these doubled corners of the strip, means are provided whereby the final pressing rollers may be separated and then let go
 10 suddenly so that they approach each other quickly under the action of the springs q , q^1 and thereby produce a hammer blow against the corner of the pad and strip which at this time is in position to receive
 15 the blow and thereby flatten the same out and cause the doubled corners of the strip to be finished perfectly. The preferred means for thus operating the final presser rollers which are shown in the drawings are constructed as follows: R represents a trip lever arranged in rear of the table and provided on its upper arm with a spring-pressed latch r which is adapted to engage with a
 20 trip arm s forming part of the upper rock arm p . During the forward movement of the trip lever R the latch r presents its abrupt front side r^1 to the trip arm s whereby the latter is compelled to move with the trip lever until the relative position of the latch and the trip arm is such that the latter slips off from the latch. During the forward movement of the trip arm under the action of the trip lever both of the rock
 30 levers p , p^1 are turned in the direction for separating the slides N, N^1 and straining the springs q , q^1 ; but the instant the trip-arm s slips off from the latch r the resilience of these springs forces the slides and their final pressing rollers quickly toward each other so that they deliver a hammer blow against the pad and the strip arranged between said rollers. During the subsequent return movement of the trip lever independently of the trip arm the latch is permitted to retract and clear the trip arm by engagement of the beveled rear side r^2 of the latch with the abrupt front side of the trip arm. During this retracting movement of the latch its
 45 spring r^3 is compressed or strained so that when the latch has passed in rear of the trip lever and clears the same, the resilience of the spring r^3 again projects the latch so that its abrupt front side engages the rear side of the trip lever during the subsequent forward movement of the trip lever. The rocking movement of the trip lever R in the manner described is produced by means of a treadle T pivoted on the lower part of the
 60 frame and connected by a rod t with the lower arm of the trip lever, as shown in Figs. 1, 3, 5 and 8.

The rollers of the preliminary and final pressing devices are arranged in a recess u
 65 formed in the adjacent part of the back of

the table and in order to reliably support the strip on its outer longitudinal side together with the pad to which it is attached while the strip and pad cross the space between the final pressing rollers this space is
 70 bridged by a narrow supporting plate U which is secured lengthwise to the table and arranged transversely between the final pressing rollers and arranged with its front edge flush with the front side of the table
 75 back, so as to form practically a continuation thereof, thereby supporting the strip and the pad at the longitudinal rear side thereof, while the same are passing between the final pressing rollers, as shown in Fig. 7. 80

For convenience in adapting the final pressing rollers for pressing books, packs or pads of different thicknesses the upper bracket n^1 which carries the upper carrier or slide N is mounted on a transversely adjustable slide v which is guided in a way
 85 v^1 on the main frame. The adjustment is preferably effected by means of an adjusting screw V journaled on a bracket v^2 on the slide and working with its thread in a screw threaded opening formed in a bar v^3
 90 on the stationary part of the machine, as shown in Figs. 3, 6 and 8.

The cutting device whereby the strip is severed from the bound pad may be variously constructed. The means for this purpose having been found suitable in practice are preferred and are constructed as follows: W represents a cutter blade which moves transversely of the path of the strip
 100 in front of the final pressing rollers and parallel with the face of the back of the table, this back and the shelf of the table being provided with a coinciding groove w and a slot w^1 through which the cutter blade moves
 105 into and out of its operative position. While the strip is moving forward with the pad the cutter is elevated out of the path thereof and after the pad has passed the cutting line the blade is depressed and severs the strip in rear of the bound pad. The blade
 110 is mounted on a carriage or slide w^2 which is guided on a slotted bracket w^3 on the adjacent stationary part of the machine and is depressed by means of an upright rock lever x pivoted at its lower end on the frame and connected at its upper end by means of a link x^1 with the cutter carriage, and a treadle x^2 pivoted on the lower part of the frame and connected by means of a rod x^3
 120 with the rock lever x , as shown in Figs. 1, 3 and 8. After the cutter has been depressed the same is returned to its elevated position and its depressing mechanism is returned to its normal position by means of a spring x^4
 125 connecting the rod x^3 with the upper longitudinal bar of the frame.

When the pad is to be bound on only one of its edges the operator feeds the pads into engagement with the glue surface of the
 130

strip successively one behind the other and with only sufficient space between adjacent pads to permit of the passage of the cutter blade between the same for severing the strip which connects them.

In order to hold the bound pads in position on the shelf of the table while the operation of cutting the strip between them is being performed, a holding device is provided which preferably comprises two presser jaws y , y arranged on opposite sides of the cutter blade, two supporting rods y^1 , y^1 arranged at opposite sides of the bracket w^3 and the slide w^2 and each carrying one of the presser or holding jaws at its lower end, a bracket y^2 on the upper edge of the table back in which the lower end of each rod y^1 is guided, two shifting arms y^3 secured to opposite sides of the slide or carriage w^2 and each provided with an opening which receives the rear part of one of the supporting rods y^1 , two springs y^4 each surrounding one of the supporting rods and bearing at its lower end against a shoulder or collar y^5 on one of the supporting rods while its upper end bears against the upper side of one of the arms y^3 , and a collar, stop or shoulder y^6 arranged at the upper end of each supporting rod, and adapted to bear against the upper side of its companion arm y^3 , as shown in Figs. 3, 5 and 8. Upon depressing the cutter the holding jaws descend with the same until they engage with the upper sides of the bound pad or packs on opposite sides of the cutter, this engagement of these jaws with the bound packs occurring in advance of the engagement of the blade with the strip, thereby holding the pads reliably in place preparatory to the severing operation. After the bound pads are thus held by the jaws the cutter blade continues its descent independently of the jaws and severs the strip between the packs during which independent movement of the blade the springs y^4 are compressed by the downward movement of the shifting arms y^3 which move with the blade. During the upward movement of the cutter the holding jaws remain in engagement with the disconnected pads until the blade has fully withdrawn from the same and the shifting arms y^3 engage the collars y^6 at the upper ends of the supporting rods y^1 after which the holding jaws move with the blade to the end of its upward stroke.

That part z of the table back in rear of the path of the cutter blade and that part z^1 in front of the same are arranged at an angle to each other, so that these parts of the table diverge toward the rear side of the machine. This causes the space between two adjacent strip connected pads or packs on opposite sides of the cutting line when pressed against the adjacent table back sections to become wider and flare toward the

front side of the machine, thus permitting the blade to enter more easily between the packs and expediting the binding operation.

In case of binding very long pads or packs of sheets it is not permissible to arrange the front section of the table back at an angle to the rear section inasmuch as the front end of such a long pack would be tilted backwardly before its rear end has passed the cutting position, thereby pulling the rear end of the pad away from the band. To avoid this when binding long pads the front section of the table back is provided with a filling block z^2 having a face which is in line with the face of the rear section of the table back, as shown in Fig. 11. By this means a long pad passes in a straight line from the rear table section to the front table section without permitting a change in direction of movement of the pad. The filling block z^2 is detachably secured to the table by means of a screw z^3 or otherwise, so that the same can be removed when not required.

I claim as my invention:

1. A tablet binding machine comprising a pressing roller having a flat side which is grooved to produce edges on the roller for engaging with a binding strip on the edge of a tablet, means for holding a tablet in engagement with said roller and means for guiding the tablet to said roller.

2. A tablet binding machine comprising a pressing roller having a flat face which is provided with grooves equally inclined at a considerable angle to the radii drawn to their outer ends and forming edges for engaging with a binding strip on the edge of a tablet, means for holding a tablet in engagement with said roller, and means for guiding a tablet to said roller.

3. A tablet binding machine comprising a pair of rotatable pressing rollers having flat sides which are arranged in opposition and which are adapted to engage with opposite sides of a binding strip on the edge of a tablet the axes of said rollers being arranged at less than a right angle relatively to the path of said strip and tablet and the rollers engaging only on one side of their axes with said strip and tablet.

4. A machine of the character described comprising a pair of rotatable pressing rollers having flat sides which are arranged in opposition and which are adapted to engage with opposite sides of a binding strip on a pad of sheets and yielding means whereby the operator may move said rollers away from the strip and pad and which automatically move the same toward the strip and pad.

5. A machine of the character described comprising a pair of rotatable pressing rollers having flat sides which are arranged in opposition and which are adapted to engage with opposite sides of a binding strip on a

pad of sheets and yielding means whereby the operator may move said rollers away from the strip and pad and which automatically move the same toward the strip and pad
5 comprising supports movable transversely relatively to the line of movement of said strip and pad and carrying said rollers, springs operating to move said supports in the direction for engaging the rollers with
10 said strip and pad, rock levers engaging with said supports, means for causing said levers to move in unison in opposite directions, a trip lever having a latch engaging with one of said rock levers, and a treadle
15 connected with said trip lever.

6. A machine of the character described comprising a pair of rotatable pressing rollers having flat sides which are arranged in opposition and which are adapted to engage with opposite sides of a binding strip
20 on a pad of sheets, and yielding means whereby the operator may move said rollers away from the strip and pad and which automatically move the same toward the strip and pad, said means comprising tubular supports movable transversely to the line of
25 movement of said strip and pad, guide rods which are secured to fixed parts and upon which said supports slide, springs operating to move said supports in the direction for
30 engaging the rollers with said strip and pad, rock levers engaging with said supports, means for causing said levers to move in unison in opposite directions, a trip lever

having a latch engaging with one of said 35 rock levers, and a treadle connected with said trip lever.

7. A machine of the character described comprising a table having a shelf and a sectional back, means for moving a pad of 40 sheets and a strip past said shelf and back for turning and pressing the edges of said strip against opposite sides of said pad, and a cutter for severing the strip between adjacent pads, the sections of said back on opposite sides of the cutting line being inclined 45 relatively to each other.

8. A machine of the character described comprising a table having a shelf and a sectional back, means for moving a pad of 50 sheets and a strip past said shelf and back, means for turning and pressing the edges of said strip against opposite sides of said pad, a cutter for severing the strip between adjacent pads, the sections of said back on opposite sides of the cutting line being inclined 55 relatively to each other and a filling removably mounted on the back section in front of the cutting position and having a face in line with the face of the back section in rear 60 of said cutting position.

Witness my hand this 7th day of December, 1909.

WALTER L. JACOBIE.

Witnesses:

THEO. L. POPP,
ANNA HEIGIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."