

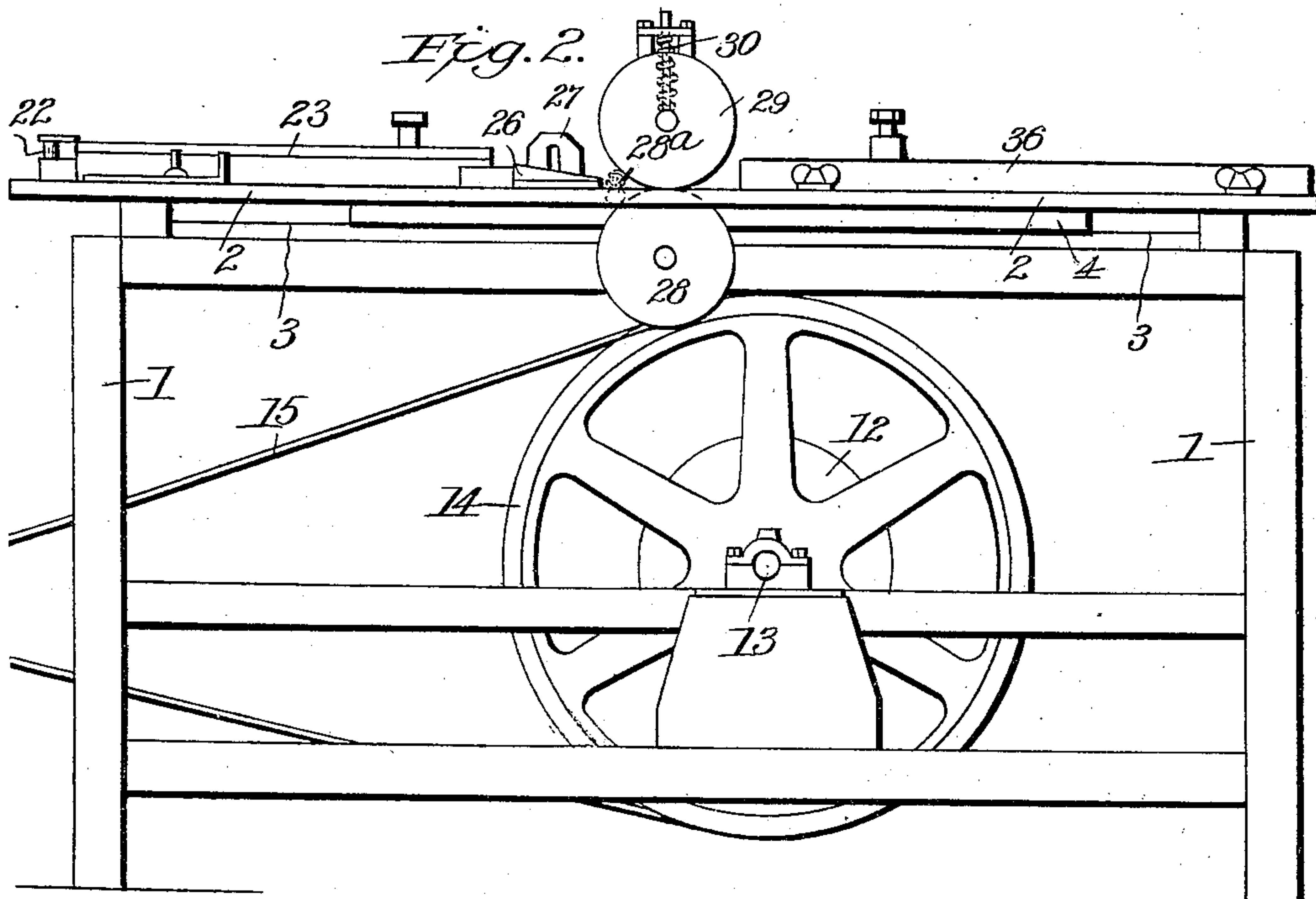
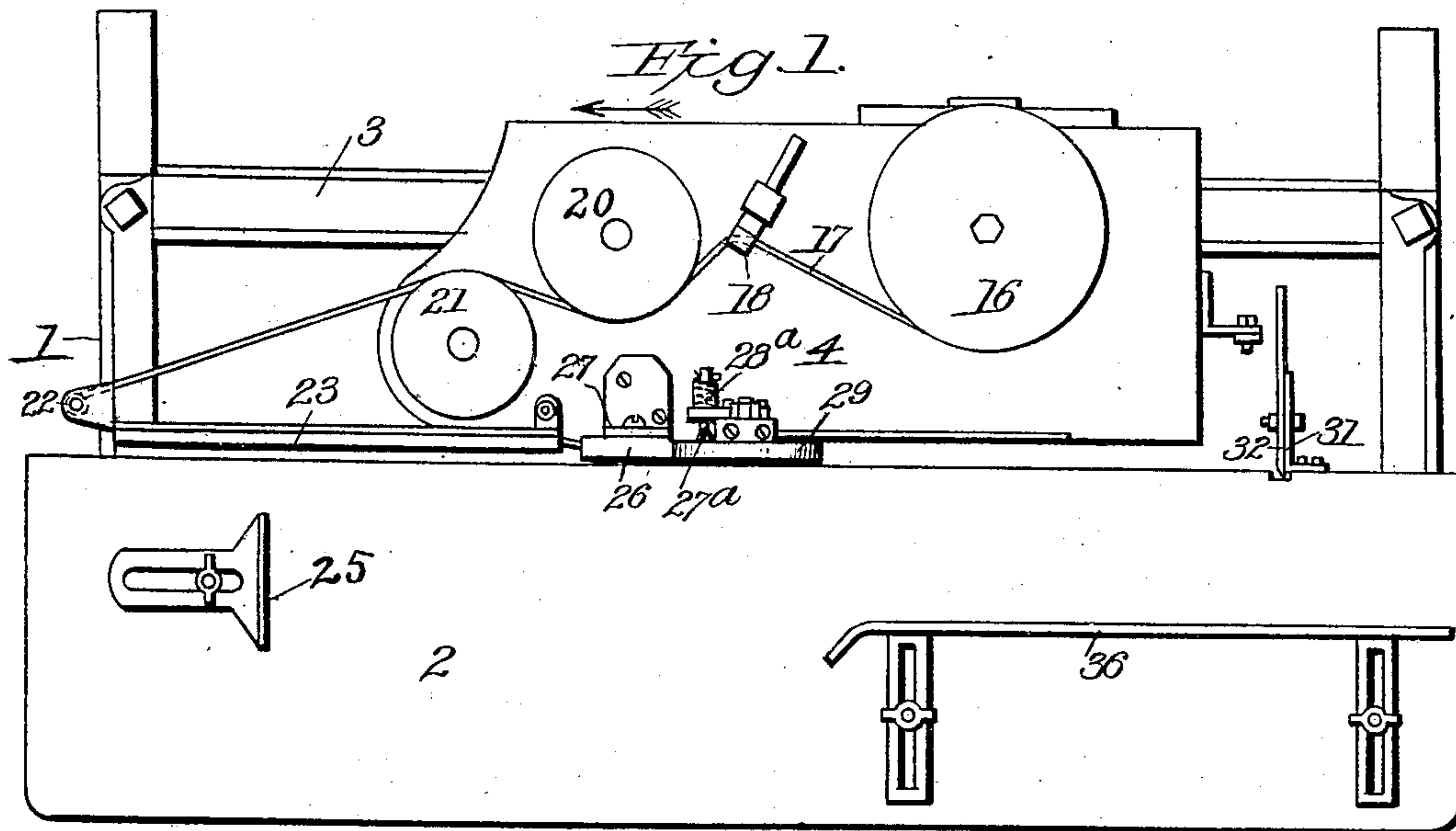
No. 868,451.

PATENTED OCT. 15, 1907.

J. G. KLINK.  
BACKING MACHINE FOR BOOKS, TABLETS, &c.

APPLICATION FILED NOV. 17, 1906.

2 SHEETS—SHEET 1.



Inventor

Witnesses

C. W. Warner.  
George Oltsch

By

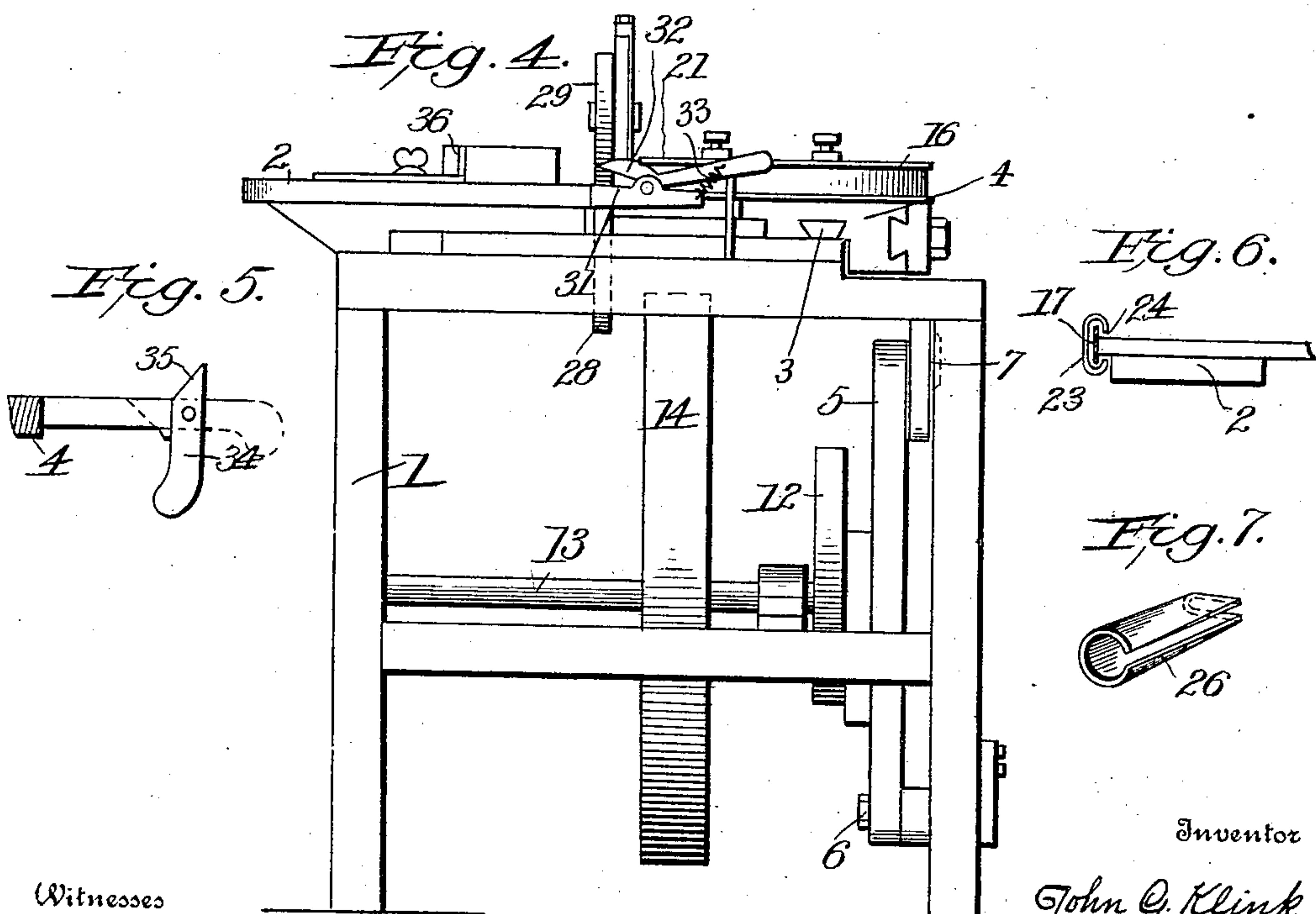
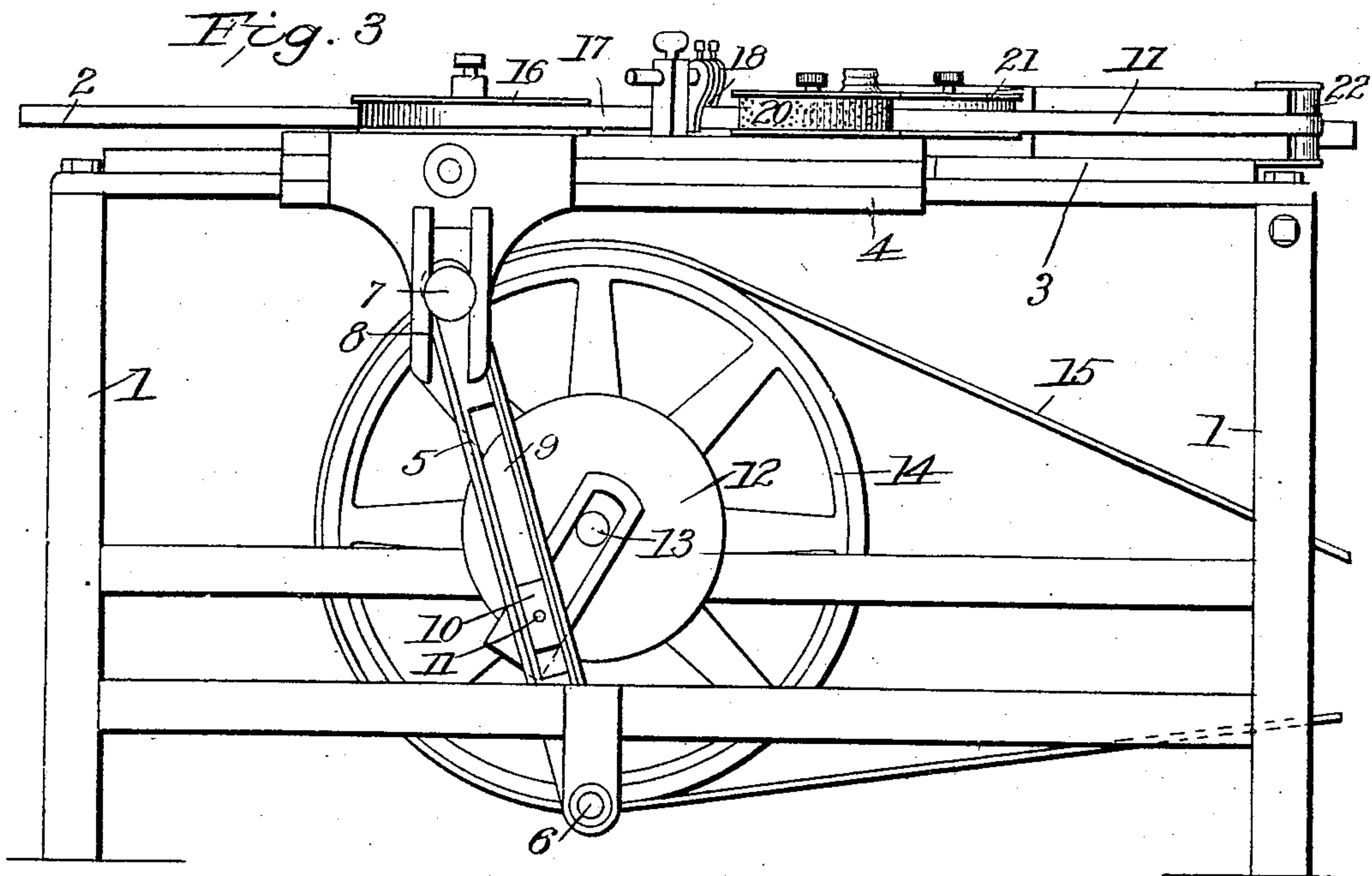
John G. Klink  
Theodore D. Patton  
Attorney

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2 SHEETS—SHEET 2.



Witnesses  
*C. W. Walker.*  
*George Oltsch*

By

Inventor  
*John G. Klink*  
*Theodore Dutton*  
Attorney



# UNITED STATES PATENT OFFICE.

JOHN G. KLINK, OF SOUTH BEND, INDIANA.

## BACKING-MACHINE FOR BOOKS, TABLETS, &c.

No. 868,451.

Specification of Letters Patent.

Patented Oct. 15, 1907.

Application filed November 17, 1906. Serial No. 343,886.

*To all whom it may concern:*

Be it known that JOHN G. KLINK, a citizen of the United States, residing at South Bend, in the county of St. Joseph and State of Indiana, has invented certain new and useful Improvements in Backing-Machines for Books, Tablets, and the Like, of which the following is a specification.

This invention relates to backing machines for books, tablets and the like.

10 It has for an object to provide for this purpose an improved machine that will expeditiously handle the books or tablets, that is simple in operation and that will be inexpensive to manufacture.

15 Other and further objects will appear in the following description and will be more particularly pointed out in the appended claims.

20 In the drawings:—Figure 1 is a top plan view of my machine. Fig. 2 is a front elevation. Fig. 3 is a rear elevation. Fig. 4 is an end view. Fig. 5 is a detail view of the severing mechanism. Fig. 6 is a detail sectional view of the tape guide, showing a tablet in position therein; and Fig. 7 is a detail view of the former.

25 Referring more particularly to the drawings 1 indicates a frame provided with a stationary work table 2 at the rear of which is located a track 3 on which travels a reciprocating carriage 4.

30 The carriage reciprocating mechanism comprises a lever 5 pivoted at 6 to the lower part of the frame 1 and having a pin 7 working in a depending slotted guide 8 on the carriage. Lever 5 is provided with a longitudinal slot 9 in which works a block 10 journaled on crank pin 11. Crank pin 11 is adjustable radially to and from the axis of a disk 12, whereby the throw of the lever 5 may be varied and consequently the length of the reciprocation changed. Disk 12 is carried by a shaft 13 journaled on frame 1 and carrying a drive wheel 14 which may be driven in any suitable manner such for instance as belt 15.

40 The carriage carries a binding tape spindle 16 on which is arranged adhesive binding tape 17, which passes from its spool to and between the members of a guide 18 and thence partially around the moistening wheel 20 journaled on the carriage and formed with a hollow body and with a perforated periphery about which is wrapped heavy cloth which, becoming saturated, moistens the binding tape. From the moistening wheel 20 the binding tape passes over guide pulley 21 to and about a small roller 22 near one end of the carriage and thence through a tape guide 23 approximately C shape in cross section. This tape guide 23 is arranged on the carriage adjacent the rear edge of the stationary table 2 so that the back of a book on said table may be slid through the slot 24 in the side of the 55 guide into contact with the adhesive face of the tape.

The lower wall of the slot 24 must of course, lie approximately in the same plane as the top surface of the stationary table 2. A book on being fitted in the slot 24 while the carriage is in the position shown in Fig. 1 has the tape fitted to its back edge and when the carriage moves in the direction of the arrow Fig. 1, the book, being held against traveling with the carriage by the adjustable stop 25, has those portions of the tape, above and below it folded upon the top and the bottom thereof by the tapering former 26, which is removably secured to a slotted post 27 so that the said former may be replaced by another of a different size when a book of different size is being backed. After the tape is folded on both side faces of the book or tablet, a brush 27<sup>a</sup> on the carriage is forced against the tape on the back edge of the book by means of a spring 28<sup>a</sup>, and wheels 28 and 29, also on the carriage, travel on the tape on the edges of opposite faces of the book. The wheel 28 has its uppermost part in the plane of the upper surface of the table 2, while the wheel 29 is arranged vertically above the wheel 28 and is pressed toward the said wheel by a spring 30. After the book passes between the wheels 28 and 29 the carriage begins to move in the opposite direction and as there is nothing to prevent the book moving in the same direction the wheels 28 and 29 instead of rolling on the book act as means to carry the same with the carriage so as to permit the back of another book to be inserted in the tape guide slot 24.

A cutting means is positioned on the stationary table 2 and comprises a stationary cutting member 31 and a pivoted cutting member 32. Stationary cutting member is arranged at the rear of the table 2 with its cutting edge in the plane of the upper surface of the table and transverse of the line of feed of the books or tablets. The pivoted cutting member 32 is held above the stationary member by a spring 33 so that the back edge of the book may pass between said members when the pivoted blade is not being operated. The cutting mechanism is controlled by the reciprocating carriage, which for this purpose carries a pivoted and weighted dog 34. Dog 34 moves past the cutting mechanism without operating the latter when the carriage moves to feed the books along table 2, but upon the first part of the movement of the carriage in the other direction or its movement in the direction to feed the tape and press it upon a book, the beveled face 35 of the dog engages the pivoted cutting member 32 and moves said member to cut the tape between two books. It is apparent, that the cutting mechanism should be adjustable so that books of different lengths may be cut and that the feed of the books should be regulated by means of adjustable crank pin 11 that the joint between two books will always be located beneath the movable cutting member 32 when the cutting mechanism is operated.

To guide the books on the table there is provided an



adjustable guide 36 which extends to one end of the table where the books are caught by a rack or other suitable device.

Having thus described my invention what I claim and desire to secure by Letters Patent is:—

1. In a backing machine, the combination of a stationary table for supporting the books, and a reciprocating carriage provided with tape applying means.
2. In a backing machine, the combination of a stationary table for supporting the books, a reciprocating carriage, and means carried by the carriage for applying tape to the books and for feeding the books on the table.
3. In a backing machine, the combination of a stationary table for supporting the books, a reciprocating carriage provided with tape applying means, and a cutting mechanism controlled by the carriage.
4. In a backing machine, the combination of a stationary table for supporting the books, a reciprocating carriage provided with tape applying means, and means for varying the lengths of the reciprocations of the carriage.
5. In a backing machine, the combination of a stationary member and a reciprocating member, one of said members carrying the tape applying means, and the other being adapted to support the books.
6. In a backing machine, a reciprocating carriage carrying means for applying backing tape to books, and means for feeding the books relatively to said carriage.
7. In a backing machine, the combination of a reciprocating carriage, means for varying the length of the reciprocations of said carriage, means for applying the tape to books, carried by said carriage, and means for moving the books relatively to said carriage.
8. In a backing machine, the combination of a reciprocating carriage, means for applying the tape to books, carried by said carriage, and means for moving the books relatively to said carriage.
9. The combination with the stationary table, of a reciprocating carriage, tape applying means on the carriage, and means on the carriage for moving the books on the table.
10. The combination with the stationary table, of a reciprocating carriage, tape applying means on the carriage, means on the carriage for moving the books on the table, and tape cutting mechanism on the table operated by the carriage.

11. The combination with the book supporting means, of a reciprocating carriage, a tape spindle supported thereon, means for causing the feeding of the tape when the carriage is moved in one direction, and for causing the movement of the book when the carriage is moved in the other direction.

12. The combination with a book supporting means, of a reciprocating carriage having a slotted tape guide, means preventing the movement of the book when the carriage is moved in one direction, and means moving the book when the carriage is moved in the other direction.

13. The combination of a stationary book table, having a stop thereon, and a reciprocating carriage provided with tape applying means, and carrying a pair of rollers arranged to press the tape on a book held by the stop when the carriage moves in one direction and to move the same book away from the stop when the carriage moves in the other direction.

14. The combination of a tape spindle, a movable supporting means therefor, means for moistening the tape, and means for holding a book against movement with the tape spindle supporting means to cause a feeding of the tape on the supporting means when a moistened portion of the tape has been applied to a book.

15. The combination of a tape-spindle, a movable supporting means therefor, means for moistening the tape, means for holding a book against movement with the tape spindle supporting means to cause a feeding of the tape on the supporting means when a moistened portion of the tape has been applied to a book, and means for moving the book after the tape has been fed.

16. The combination with a book supporting means, of a reciprocating carriage provided with tape applying means, a cutting means supported independently of the carriage, and a weighted and pivoted dog constructed to move past the cutting means without operating said cutting means when the carriage moves in one direction and to operate the cutting mechanism when the carriage moves in the other direction.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN G. KLINK.

Witnesses:

GEORGE OLTSCH,  
G. M. COLE.