No. 737,230. PATENTED AUG. 25, 1903.

T. F. HATTON.

BEVELING MACHINE.

APPLICATION FILED JAN. 12, 1903.

NO MODEL.

Fig. 1.

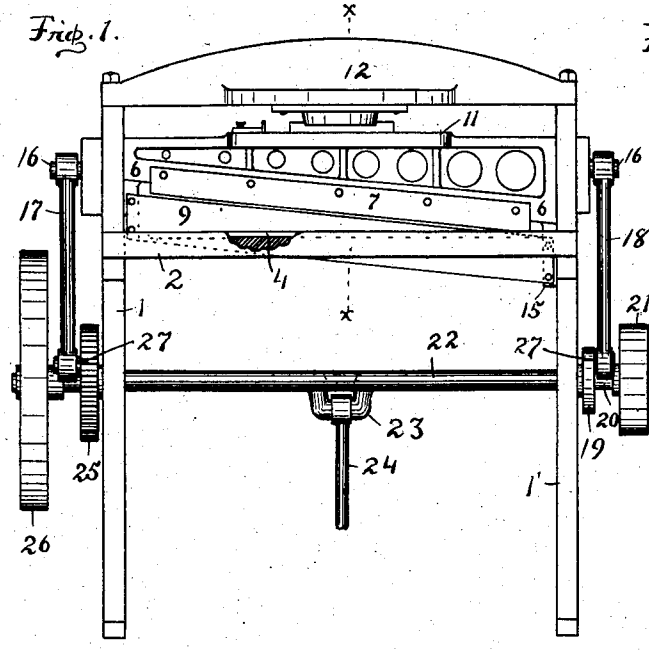


Fig. 2.

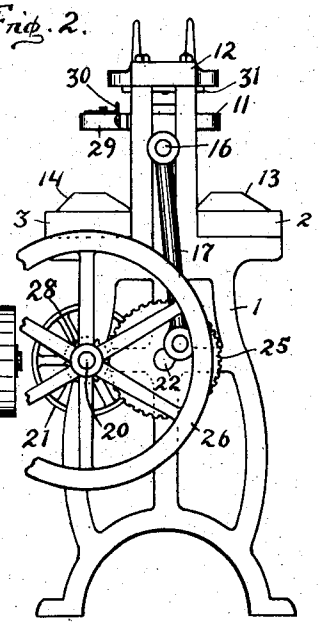


Fig. 3.

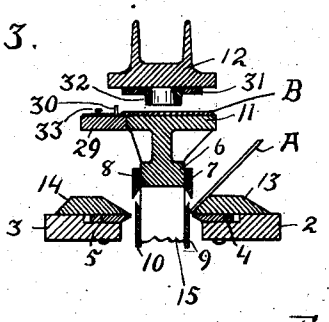


Fig. 4.

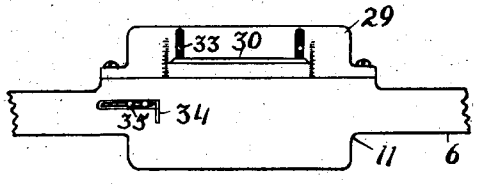
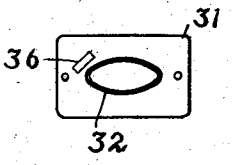


Fig. 5.



WITNESSES:

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 737,230. Patented August 25, 1903.

UNITED STATES PATENT OFFICE.

THOMAS F. HATTON, OF FORT WAYNE, INDIANA.

BEVELING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 737,230, dated August 25, 1903.

Application filed January 12, 1903. Serial No. 138,625. (No model.)

To all whom it may concern:

Be it known that I, THOMAS F. HATTON, a citizen of the United States, residing at Fort Wayne, in the county of Allen and State of Indiana, have invented certain new and useful Improvements in Beveling-Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in machines for beveling cards; and the object of my improvement is to afford means for cutting the edges of card-stock to bevel the same without breaking the portion contiguous thereto and also to afford means to emboss or make impressions upon the cards.

I accomplish my object by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of the machine with the supporting-strips removed. Fig. 2 is an end elevation of the same with the supporting-strips in place. Fig. 3 is a detail showing a cross-section of the machine on the line X X of Fig. 1. Fig. 4 is a detail showing a plan of the top middle portion of the reciprocating head, and Fig. 5 is a plan of the embossing-die.

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

Referring to the drawings, 1 and 1′ are standards for supporting the machine.

2 and 3 are parallel cross-pieces secured at their respective ends to the standards. A horizontal head 6 ranges with its ends movably mounted in the standards and is adapted to reciprocate vertically. The lower side of the head is inclined from one end toward the other. A shaft 22 is mounted in the standards, and a gear-wheel 25 is fixed upon one end thereof, and a crank-wheel 19 upon the other. Crank-pins 27 are fixed, respectively, upon said gear-wheel, and crank-wheel and connecting-rods 17 and 18 are mounted upon the crank-pins and are coupled with the ends of the head 6 by means of projecting studs 16. Thus when the shaft 22 is rotated the head 6 is vertically reciprocated. A driving-shaft 20 is also mounted in the standards, and a fly-wheel 26 is mounted upon one end thereof, and belt-pulleys 21 upon the other. A pinion 28 is fixed upon the driving-shaft and engages with the gear-wheel 25 to drive the same. A crank 23 is formed in the middle of the shaft 20, and a pitman 24 is connected thereto for use in driving the same by any suitable attachment for applying foot-power. Upon the sides of the lower inclined portion of the head are secured the knives 7 and 8 with their beveled sides inward, and gages 9 and 10 are secured to suitable extensions 15, which depend from the head 6. The said gages range parallel with the knives and have upper bevel edges which face inward. The outer surfaces of the said gages range in a vertical plane inward from the cutting edges of the respective knives. Shearing-blades 4 and 5 are embedded in the cross-pieces 2 and 3, respectively, and their shearing forward edges range in planes coincident with the vertical planes of the cutting edges of the knives 7 and 8. Supporting-strips 13 and 14 are respectively fixed upon the cross-pieces 2 and 3 and extend over the blades 4 and 5. The sides of said strips are beveled, and the inner edges of the same range coincident with the shearing edges of the blades 4 and 5.

A beam 12 is secured upon the tops of the standards 1 and 1′ above the head 6, and upon the lower side thereof is secured a die 32 and also a type-die 36, which are held in place by the block 31.

Upon the top of the head 6 is formed a platen 11, and a removable extension 29 is fixed to the side thereof. A gage 30 is mounted upon the extension and is held adjustably in position by screws 33. Another gage 34 is adjustably mounted upon the platen 11 and is held in place by screws 35.

In operating my machine the head is driven continuously by any suitable source of power, and when the knives are uppermost a card A is placed upon the beveled surface of the supporting-strip 13 with its edge against the gage 9, and as the knife descends a bevel strip is cut from the edge of the card and passes from the machine between the knife and gage, leaving a corresponding bevel

edge upon the card. The other edges of the card are likewise treated. Of course the operation is similar on the other side of the machine when a card is placed upon the strip 14. By the use of these supporting-strips the lower edges of the cards are prevented from becoming torn, broken, or mashed.

The cards may be embossed or impressed by placing them successively upon the platen, as shown at B. When the head ascends, the card B is brought into contact with the dies 32 and 36.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a beveling-machine, a vertically-reciprocating head; a knife secured to the head and ranging upon an incline from one end toward the other; a gage secured to the head beneath said knife and ranging parallel therewith; a shearing-blade arranged horizontally and with its shearing edge in a plane coincident with the vertical plane of said knife; a supporting-strip having a beveled side and arranged with its edge coincident with the shearing edge of said blade; and means to drive the head.

2. In a beveling-machine, the combination of supporting-standards; a vertically-reciprocating head; knives secured upon the head and ranging upon an incline from one end toward the other; gages secured to the head and ranging parallel with and beneath the knives; shearing-blades arranged horizontally with their shearing edges coincident with the vertical planes of said knives; supporting-strips having beveled sides arranged with their edges coincident with the shearing edges of said blades; a beam fixed upon the standards above the head; a die attached to the beam; a platen upon the head beneath the die; gages arranged in connection with the platen; and means to drive the head.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS F. HATTON.

Witnesses:
W. G. BURNS,
DELMER C. FITCH.