(No Model.)

E. B. STIMPSON

PUNCHING AND PINKING MACHINE.

No. 261,781. Patented July 25, 1882.

Fig 1.

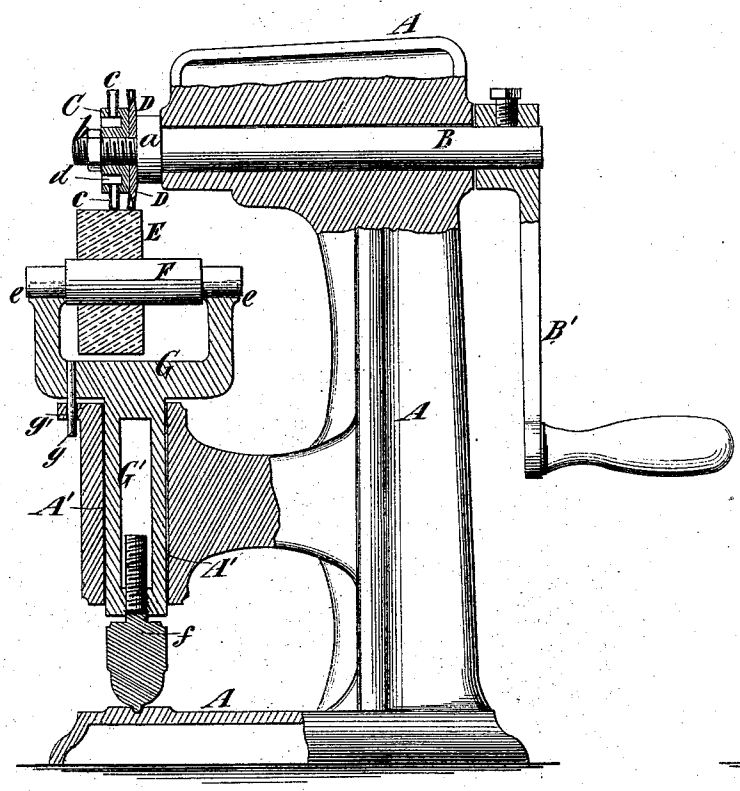


Fig 2.

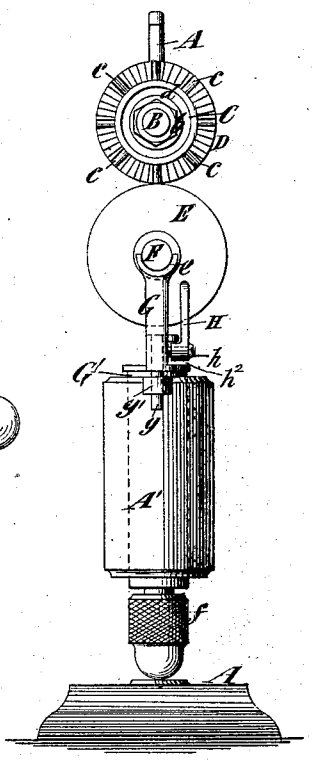


Fig 5.

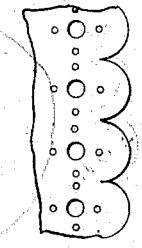


Fig 3.

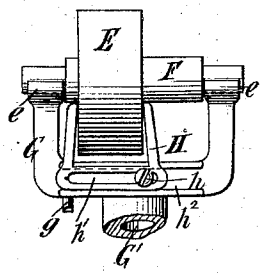
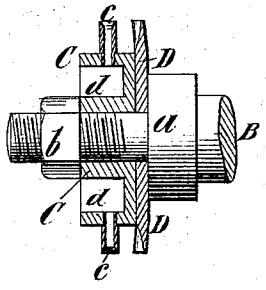


Fig 4.



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N. PETERS. Photo-Lithographer. Washington, D. C.

UNITED STATES PATENT OFFICE.

EDWIN B. STIMPSON, OF BROOKLYN, NEW YORK.

PUNCHING AND PINKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 261,781, dated July 25, 1882.

Application filed May 9, 1882. (No model.)

To all whom it may concern:

Be it known that I, EDWIN B. STIMPSON, of the city of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Machines for Punching and Pinking Leather and other Materials, of which the following is a specification.

The object of my invention is to provide a simple and convenient machine for ornamenting leather or other material for trimming shoes, satchels, pocket-books, furniture, or other articles by punching holes in or pinking the edges of such material, or by both punching and pinking the material, if desired.

The invention consists in a novel combination of parts, hereinafter described and claimed, including a shaft, a crank for operating it, a wheel mounted on the shaft, carrying a number of hollow punches, and provided at the inner ends of the punches with an annular recess, which provides for the ready escape of the bits of leather removed by the punches, and a bed-roll which serves as a support for the material while being punched. The shaft of the bed-roll is journaled in a fork provided upon the upper end of a shank or stem, and said roll is adjustable longitudinally upon its shaft to bring different portions of its periphery opposite the punching-wheel or pinking disk or wheel.

The invention also consists in the combination, with the bed-roll and the supporting-fork and stem or shank, of novel means for preventing the turning of the fork and stem or shank, and for adjusting them up or down to raise or lower the bed-roll.

In the accompanying drawings, Figure 1 represents a partly-sectional side view of my machine. Fig. 2 represents a front view thereof. Fig. 3 represents a side view of the bed-roll and the fork which supports it. Fig. 4 represents a sectional view of a punching-wheel and the pinking-disk, and a side view of a portion of their shaft, upon a larger scale; and Fig. 5 represents a piece of material such as may be produced by my machine.

Similar letters of reference designate corresponding parts in all the figures.

A designates the frame of the machine, and B designates a horizontal shaft journaled in the frame, and adapted to be turned by a hand-crank, B′. Upon the shaft B is a collar or shoulder, *a;* and C D designate a punching-wheel and a pinking disk, knife, or cutter, which are secured on said shaft by a nut, *b*. The pinking disk or knife D is of ordinary form, having a sinuous or irregular edge. The punching-wheel C has a number of hollow punches, *c*, inserted in its periphery and projecting radially from it, and back or opposite the inner ends of these punches is a cavity or recess, *d*, which is shown as of annular form, and which provides for the ready escape of the small pieces or bits of leather or other material which pass through them removed by the punches.

The punches may be round, oval, square, or of any other shape, and they may be arranged in a single row, as here shown, or in a double row or parallel rows, or in clusters, or in any other way to vary the pattern.

In this example of my invention I have shown the wheel C, having a single row of punches, as secured upon the shaft B, with the pinking disk or knife D for use in conjunction therewith; but either of them may be used separately, if desired.

In Fig. 5 I have represented a piece of material ornamented by a pinked edge and clusters of holes punched therein, and to produce such a pattern the punches *c* would have to be arranged accordingly in their wheel C.

In connection with the punching-wheel C or pinking disk or cutter D, or both, I use a bed-roll, E, upon a shaft, F, upon which it may be moved or adjusted longitudinally, and said shaft is mounted in open bearings *e*, in a fork, G, which is provided on the upper end of a stem or shank, G′.

The stem or shank G′ is movable vertically in a guide, A′, formed in the frame A, and the bed-roll may be adjusted up and down, so that the punches or disk will bear upon it with just the desired force by means of a screw, *f*, screwed into the lower end of the stem or shank G′, and having a milled head or hub, which bears upon the frame A. The screw *f* may be easily adjusted by hand as desired.

The fork G and stem or shank G′ are prevented from turning by a guide pin or rod, *g*, fixed in the fork and working in a guide, *g′*, in the frame. This pin might be fast in the frame and work in the fork with equal advantage,

and in either case it affords a very simple means of guiding the fork, which is less expensive than a spline or feather and a groove in the guide A′.

In order to hold the bed-roll E in any desired position lengthwise of its shaft F, I employ a fork, H, which embraces the roll, and is secured to the fork G by a screw or screws, *h*, passing through a slot, *h′*, therein. When the screw is loosened the fork H may be adjusted in a guide, h^2, to retain the roll in any desired position, and then be secured by tightening said screw.

By my invention I provide a very convenient machine, which is well adapted to the use for which it is intended.

I am aware that a circular rotary knife and a bed-roll have been combined in a pinking-machine, and hence I do not claim such a construction, broadly.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the shaft B, the crank B′, the wheel C, carrying hollow punches *c*, and provided at the inner ends of the punches with the annular recess *d*, and the bed-roll E, substantially as herein described.

2. The combination of the roll E, the fork G, the stem or shank G′, the guide A′, the guide-pin *g*, and its guide *g′*, all substantially as described.

3. The combination of the shaft B, carrying a punching-wheel or a pinking disk or cutter, the roll E, shaft F, fork G, stem or shank G′, screw *f*, and guide-pin *g* and its guide *g′*, substantially as described.

EDWIN B. STIMPSON.

Witnesses:
FREDK. HAYNES,
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