

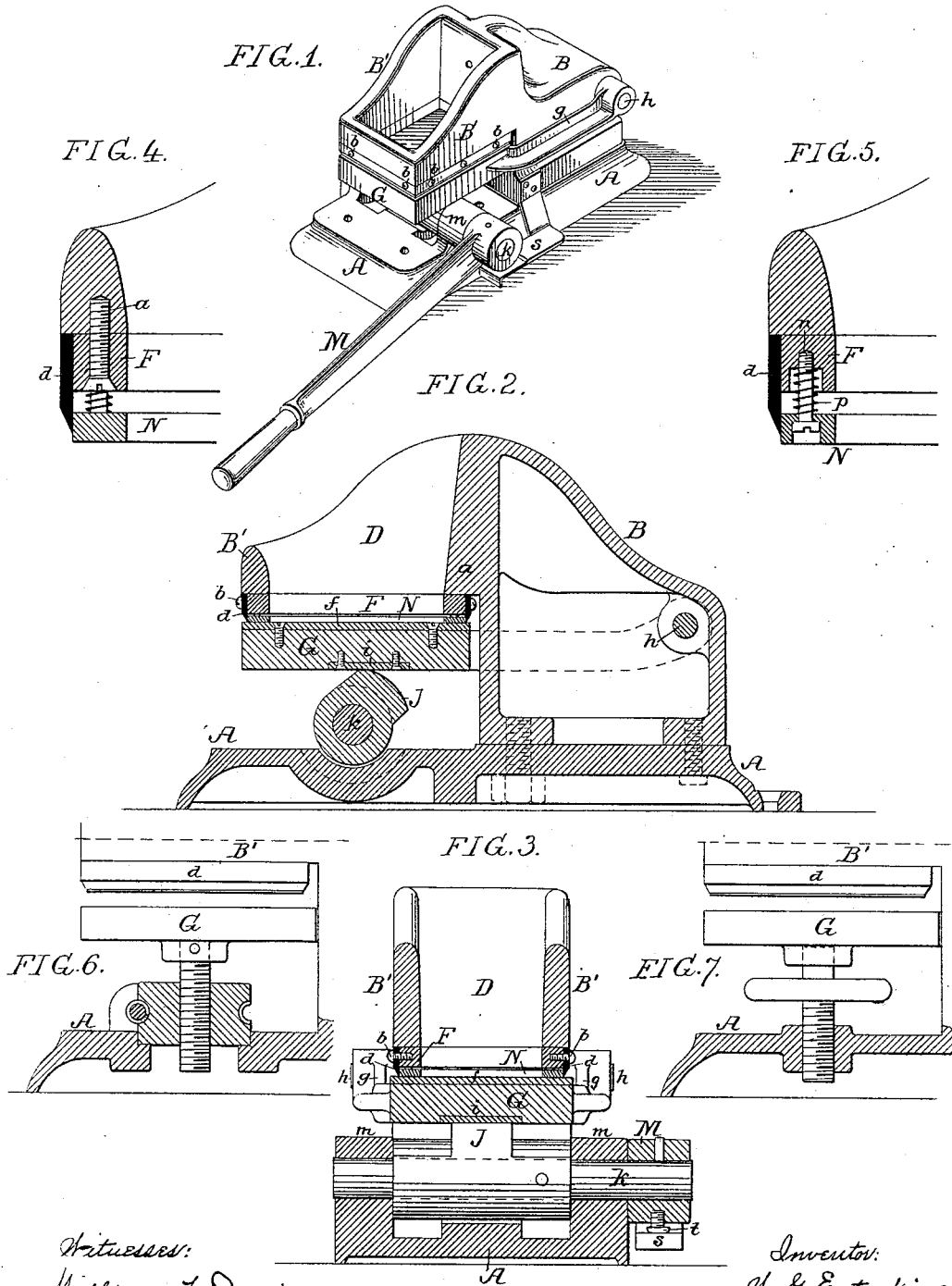
(No Model.)

W. G. ENTREKIN.

CUTTING PRESS.

No. 386,459.

Patented July 24, 1888.



Witnesses:
William F. Davis
Henry Bossert.

Inventor:
W. G. Entekin
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UNITED STATES PATENT OFFICE.

WILLIAM G. ENTREKIN, OF PHILADELPHIA, PENNSYLVANIA.

CUTTING-PRESS.

SPECIFICATION forming part of Letters Patent No. 386,459, dated July 24, 1888.

Application filed May 18, 1885. Serial No. 165,809. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM G. ENTREKIN, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Cutting-Presses, of which the following is a specification.

My invention consists of a machine for cutting pieces of a desired size or shape from sheets of paper, leather, cloth, wood, or other material, the objects of my invention being to permit the inspection of the piece which is being cut, to adapt the machine for cutting pieces of different shapes and sizes, and to insure the retention of the sheet or sheets in proper position while being cut.

In the accompanying drawings, Figure 1 is a perspective view of a cutting-press constructed in accordance with my invention; Fig. 2, a longitudinal section of the same on a larger scale; Fig. 3, a transverse section, partly in elevation; Figs. 4 and 5, enlarged sections, on a still larger scale, of parts of the machine; and Figs. 6 and 7 views illustrating modifications.

A is the base of the machine, to which is bolted or otherwise rigidly secured a hollow frame, B, having in front a projecting or overhanging portion, B', through which is an opening, D. To the overhanging portion B' of the frame, around the lower edge of the opening D, is secured by vertical bolts *a*, Fig. 4, a frame, F, and to the latter are secured by screws *b* the blades *d* of the cutting-knife.

The supporting-bed G, for the sheets of paper or other material to be cut, has a detachable plate, *f*, against which the knife acts, and said bed is provided with opposite rearwardly-projecting arms *g*, which are hung to the projecting ends of a shaft, *h*, secured to the frame B.

To the under side of the bed G is secured a plate, *i*, upon which acts a cam, J, carried by a shaft, *k*, adapted to bearings *m* on the front portion of the base A, one end of this shaft projecting beyond its bearing for the reception of an operating arm or lever, M, as shown in Fig. 1. When the outer end of this lever is depressed, the cam J acts upon the bed G and lifts the same, so as to bring into forcible contact with the cutting-knife the sheet or sheets of paper or other material supported upon the

bed, the opening D in the overhanging portion B' of the frame B permitting the inspection of that portion of the material which is within the limits of the cutting-knife, so that when necessary it can be properly centered in respect to the said knife.

When it is desired to change the size or shape of the pieces to be cut, the frame F can be removed and another knife-carrying frame of different size or shape substituted therefor, the plate *f* of the bed G being also changed to accord therewith.

In order to confine the material closely to the supporting-bed while said material is being cut, I place inside the cutting-knife a frame, N, which conforms to the outline of the knife, is supported by bolts *n*, carried by the frame F, and is acted upon by springs *p*, as shown in Fig. 5. When in its normal position, this frame N projects below the lower edge of the cutting-knife, so that before the latter acts upon the material on the supporting-bed the frame N comes into contact with said material and confines the same at a point close to the knife, wrinkling or buckling of the material being thereby effectually prevented, the frame N yielding as the bed G rises, so as not to interfere with the cutting action of the knife.

A spring-plate, *s*, at one side of the base A, serves, by engagement with a projection, *t*, on the hub of the lever M, to retain said lever in its elevated position, the tension of the spring being readily overcome, however, on applying pressure to the outer end of the lever.

Although I prefer the use of a pivoted supporting-bed and a cam and lever for operating the same, these are not absolutely necessary to the proper carrying out of my invention. For instance, the bed may have a screw-stem adapted to a nut, secured to or forming part of which is a worm-wheel gearing into a worm or operating shaft adapted to bearings on the base, as shown in Fig. 6, or a screw-stem adapted to a threaded opening in the base may bear upon the bed, as shown in Fig. 7, said stem being provided with a suitable operating-handle.

I claim as my invention—

1. The combination of the frame comprising the projecting base and rear standard having an overhanging portion with opening through

the same, a knife secured to the under side of said overhanging portion around the opening in the same, a supporting-bed movable beneath said overhanging portion, and an operating
5 device for said bed having its bearing on the base, all substantially as specified.

2. The combination of the frame comprising the projecting base, rear standard, and elevated and overhanging front portion with
10 knife on the under side, the supporting-bed located beneath said overhanging front portion of the frame and carried by arms pivoted to said rear standard, and an operating device
15 for the bed having its bearing on the base below said bed, all substantially as specified.

3. The combination of the frame comprising the projecting base, rear standard, and elevated and overhanging front frame, the knife, the supporting-bed having arms pivoted to the frame, and a shaft adapted to bearings on the
20 base and having an operating-handle and a cam for acting on the supporting-bed, all substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two sub-
25 scribing witnesses.

W. G. ENTREKIN.

Witnesses:

WILLIAM F. DAVIS,
HARRY SMITH.