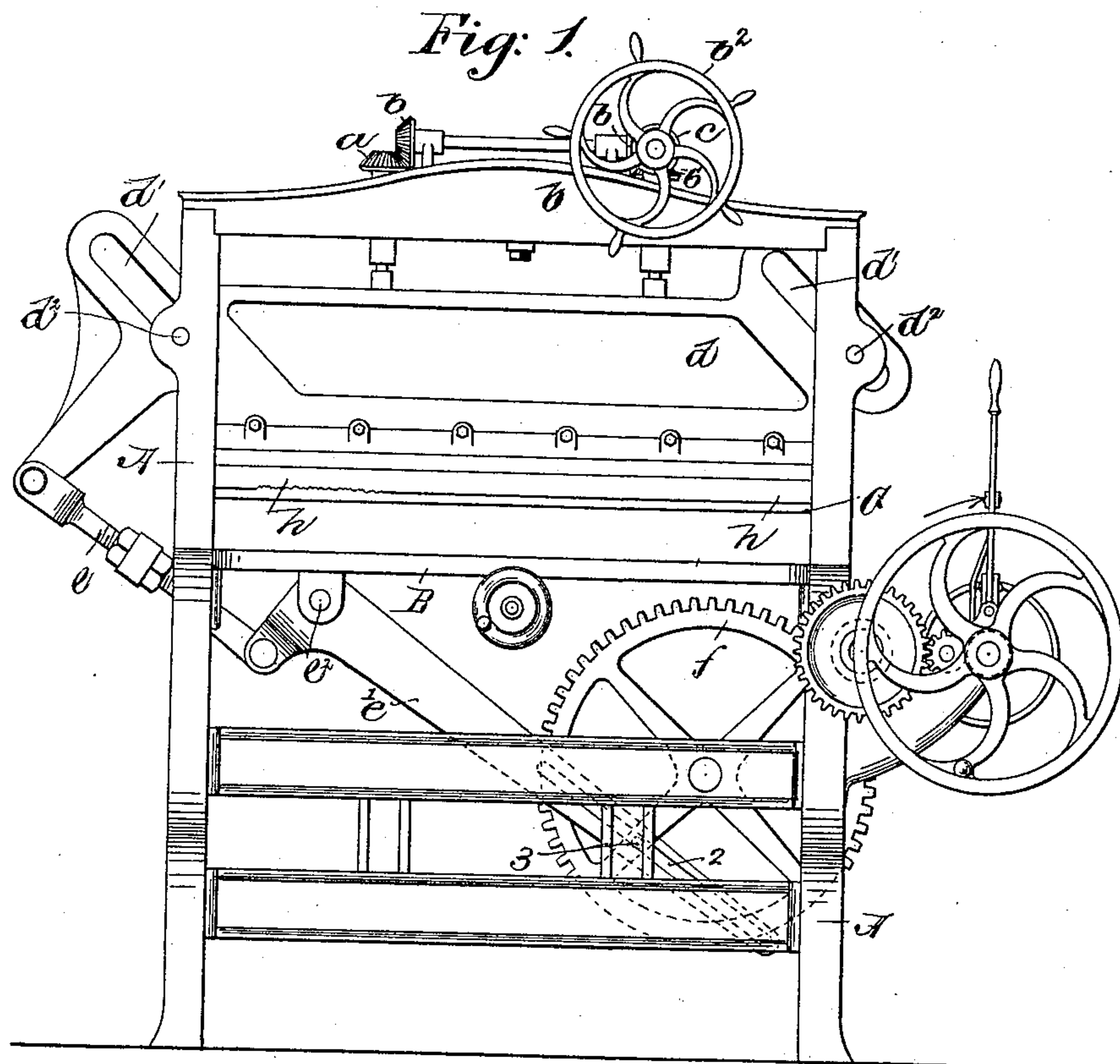


(No Model.)

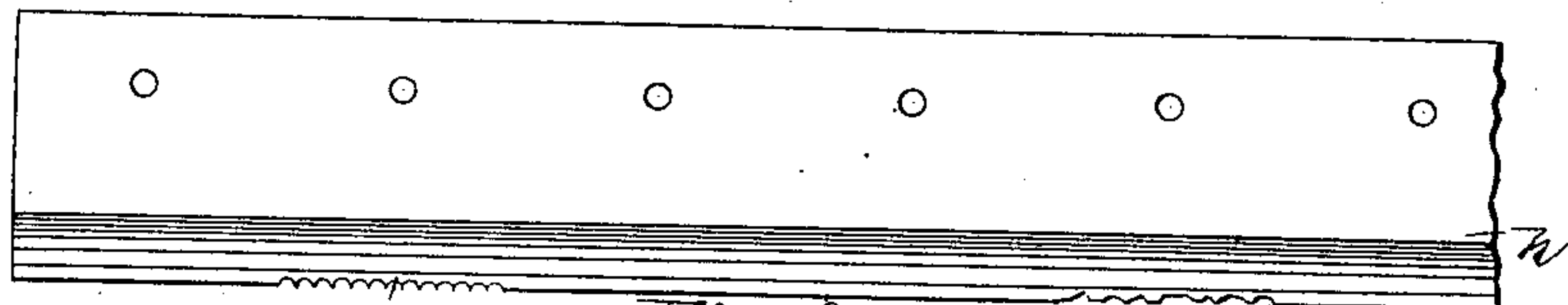
C. COATES & C. E. PERRY.  
PAPER CUTTING MACHINE.

No. 467,082.

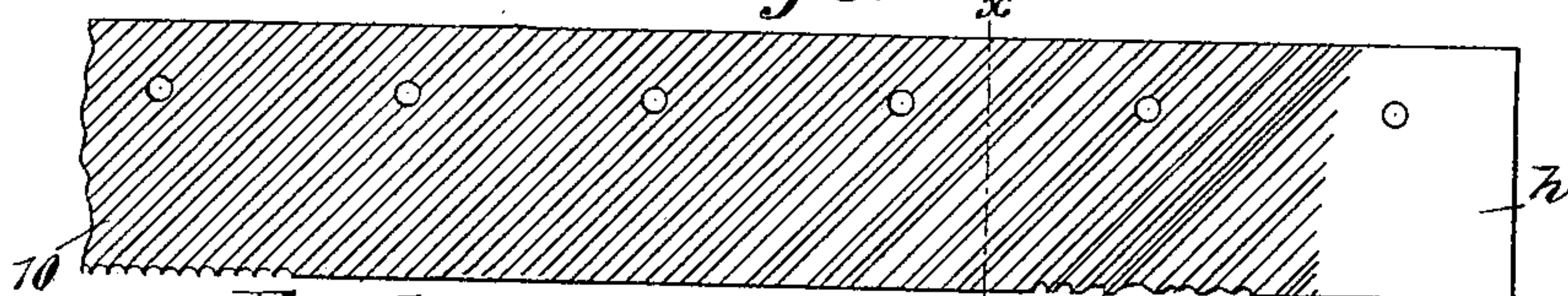
Patented Jan. 12, 1892.



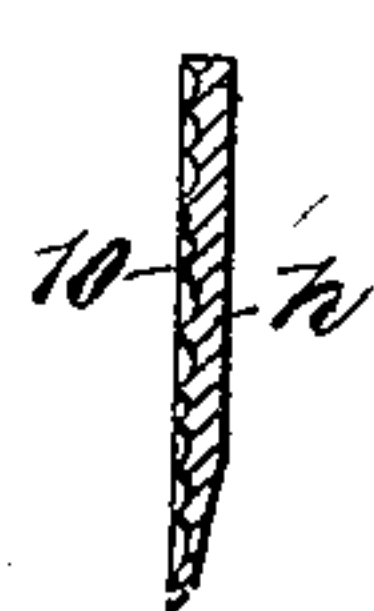
*Fig. 2.*



*Fig. 3.*



Witnesses,  
*Geo. C. Huntington,*  
*Fred. S. Greenleaf*



*Fig. 4.*  
Inventors,  
*Clarence Coates,*  
*Charles E. Perry,*  
by *Leahy & Gregory* Attys



# UNITED STATES PATENT OFFICE.

CLARENCE COATES, OF CLIFTONDALE, AND CHARLES E. PERRY, OF HYDE PARK, MASSACHUSETTS.

## PAPER-CUTTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 467,082, dated January 12, 1892.

Application filed October 25, 1890. Renewed December 8, 1891. Serial No. 414,436. (No model.)

*To all whom it may concern:*

Be it known that we, CLARENCE COATES, of Cliftondale, county of Essex, State of Massachusetts, and CHARLES E. PERRY, of Hyde Park, county of Norfolk, State of Massachusetts, have invented an Improvement in Paper-Cutting Machines, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

At the present time the dictates of fashion demand paper, cards, &c., with what is called "ragged" or "torn" edges. This class of work is now done by subjecting single sheets or a few sheets of the paper, cards, &c., at one time to the tearing mechanism and is quite expensive.

The object of this invention is the production of a machine by which to do this class of work automatically and by power.

In accordance with our invention we have provided a paper-cutting machine of usual construction with a blade serrated obliquely at one side down to its cutting-edge, thus leaving the said edge serrated or scalloped, the serrations or scallops being preferably of different sizes, so as to make a more irregular edge for the paper.

Figure 1 in front elevation represents a sufficient portion of a paper-cutting machine with our improvements added to enable our invention to be understood; Fig. 2, a front side view of the blade; Fig. 3, a rear side elevation thereof; Fig. 4, a section in the line  $x$ , Fig. 3, and Fig. 5 shows a piece of card-board with a ragged edge as left by our improved blade.

The frame-work A, the bed B, on which rests the paper to be cut, the presser-bar C, made adjustable vertically by the gearing  $a b b' c$  under the control of the hand-wheel  $b^2$ , to thus enable the presser-bar C to act upon the pile of paper to be cut, the blade-carrier  $d$ , slotted at  $d'$  to receive guide-studs  $d^2$ , the adjustable link  $e$ , the lever  $e'$ , pivoted at  $e^2$  on the bed B and slotted at 2 for the reception of a roller or other stud 3 on the gear  $f$ , and the gearing for rotating the gear  $f$  to actuate the lever  $e'$  and the blade-carrier are and may be all as usual, the parts so far described being common to the machine known as the "Dooley"

cutter, such a machine, with the exception of the adjusting device for the presser-bar, being shown in United States Patent No. 182,994.

In accordance with our invention we take a blade  $h$  and groove the same obliquely, as shown at 10, Figs. 3 and 4, so as to leave a notched or serrated edge, as best shown at 12, Fig. 2. These oblique grooves will preferably be of different sizes and shapes, and they may be separated from each other for different distances, so as to leave a more rough and uneven edge. It will be seen that the irregularity of the cutting-edge is increased by the bevel of the edge of the blade. As the blade-holder  $d$  is depressed it is moved obliquely or to the right, causing the obliquely-toothed or notched blade to cut obliquely through the pile of paper in the machine, leaving a very irregular scalloped or ragged edge, substantially as represented in Fig. 5. These scallops are and may be made of any desired contour or shape.

We do not herein broadly claim a serrated edged blade or die to descend on metal and cut teeth in the same while the metal is supported at its underside by a notched bar forming part of a die, as such construction is shown in United States Patent No. 10,166, reissued October 25, 1853, but with a die and support such as shown in said patent, or with a vertically-moving die, such as shown in the said patent, it would be impossible to do the work for which this our invention is especially constructed.

We claim—

In a paper-cutting machine, a bed to support the material to be cut, and an obliquely-movable blade-carrier, combined with a blade connected thereto having a beveled cutting-edge and grooved or notched obliquely at one side down to and intersecting said beveled portion to provide a notched or serrated cutting-edge, substantially as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

CLARENCE COATES.  
CHARLES E. PERRY.

Witnesses:

GEO. W. GREGORY,  
EMMA J. BENNETT.