

(No Model.)

2 Sheets—Sheet 1.

A. P. BROWN.
GAGE FOR PAPER CUTTING MACHINES.

No. 421,546.

Patented Feb. 18, 1890.

Fig.1.

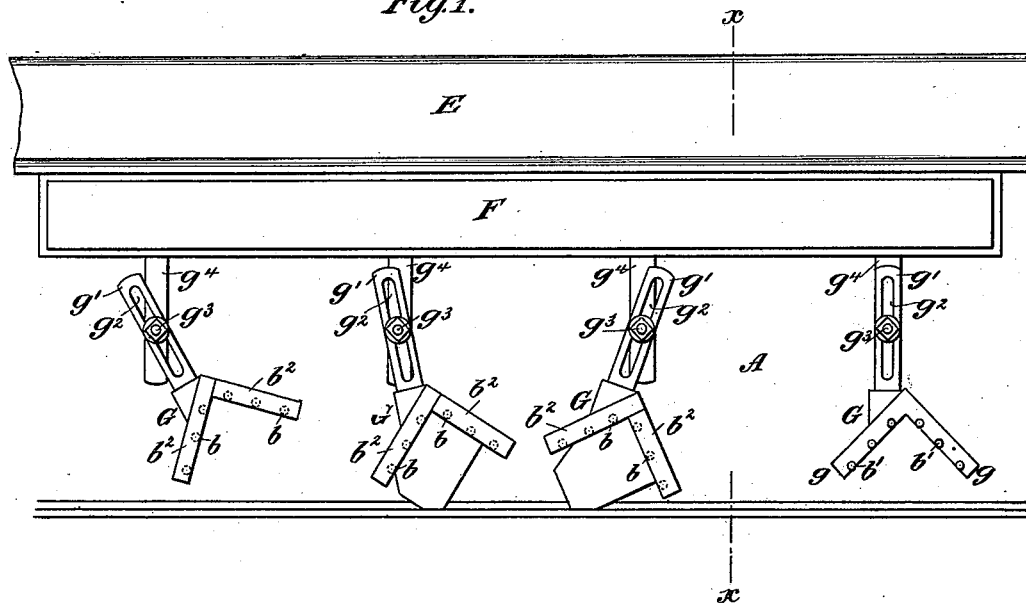


Fig. 2.

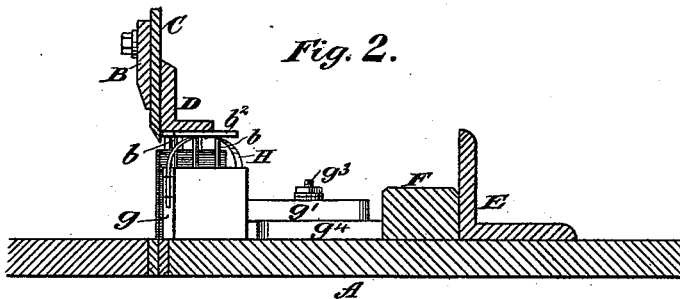
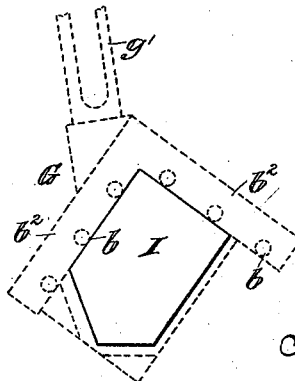


Fig. 3.



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Inventor:-
Alfred P. Brown
by his Attorneys
Brown & Grinwald

(No Model.)

2 Sheets—Sheet 2.

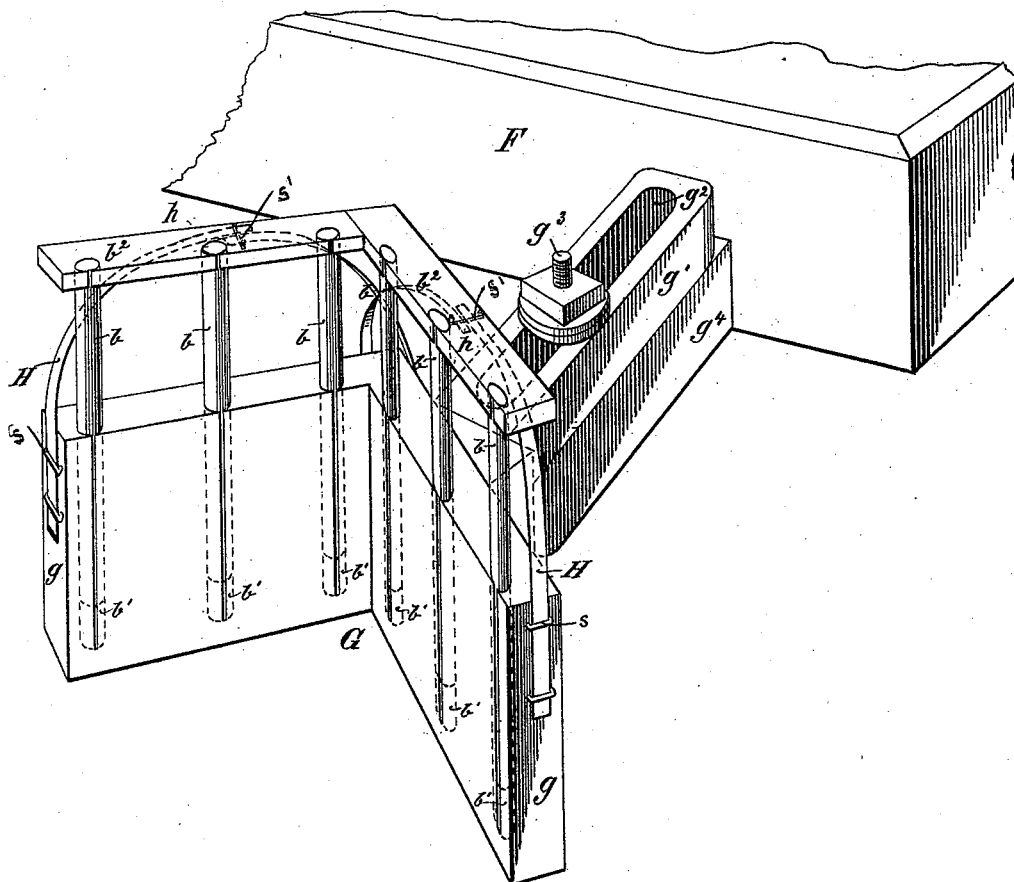
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Fig. 4



Witnesses.

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Inventor.

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UNITED STATES PATENT OFFICE.

ALFRED P. BROWN, OF BROOKLYN, NEW YORK.

GAGE FOR PAPER-CUTTING MACHINES.

SPECIFICATION forming part of Letters Patent No. 421,546, dated February 18, 1890.

Application filed May 8, 1889. Serial No. 310,006. (No model.)

To all whom it may concern:

Be it known that I, ALFRED P. BROWN, of Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improvement in Gages for Paper-Cutting Machines, of which the following is a specification.

My improvement relates to gages used with machines for cutting paper, card-board, or similar material, particularly paper in piles and in small sizes where it is desired to trim off the corners.

I have only illustrated such portions of a paper-cutting machine as are essential to an understanding of my improvement. All the other parts of the machine may be of the usual or ordinary construction.

In the accompanying drawings, Figure 1 is a plan or top view of a portion of a paper-cutting machine and a gage embodying my improvement. Fig. 2 is a vertical section of the same, taken on the line $x x$, Fig. 1. Fig. 3 is a detail showing a certain block which I may employ and its relations to other parts. Fig. 4 is an enlarged view in perspective showing certain parts of the gage.

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

A designates the bed of the machine.

B designates a knife-holding bar.

C designates a knife, which may be secured to the bar by clamping-screws in the usual manner.

D designates a clamp adapted to descend and clamp the paper, card-board, or similar material to be cut. The knife and clamp may be operated by ordinary mechanism in the usual manner.

E designates a back gage, which may be adjusted toward and from the plane of cut of the knife in the usual manner.

F designates a bar adapted to be placed against the back gage, but which is unconnected with the machine. To this bar are secured angle-gages G. The angle-gages G comprise uprights g , which may be made of any suitable material, but are preferably made of wood, and which, when made of wood, are united together so as to extend at right angles to each other, or, in other words, to form an angular gage. To each of these gages is secured a tongue g' , which tongue is provided

with a longitudinal slot g^2 . Through the slots g^2 extend clamping-screws g^3 , which engage projecting pieces g^4 , extending from the bar F.

It will be readily seen by an examination more particularly of Fig. 1 that by loosening the clamping-screws g^3 the gages G may be adjusted into various positions. If a stack of cards or paper rectangularly cut is placed in one of the angular gages, as shown more clearly in Fig. 1, and the gages be turned to any desired angle, it is quite apparent that the knife C, when brought down, will operate to cut off the corners of the cards or paper at the desired angle.

It is sometimes desirable to place piles of cards or paper in the guides to be cut, which piles of cards or paper will extend above the tops of the portions g . To accommodate this, I provide the portions g with vertically-movable sections, which will operate to maintain such piles of cards or paper in proper position in the gages. I have represented these movable sections as consisting of rods b , which rods extend into apertures b' , formed vertically in the portions g . These apertures are so formed that their outer sides will be open, or so that the rods, when arranged within them, will be flush with the inner surfaces of the portions g . The upper ends of the rods b are secured in cross-pieces b^2 . The movable sections may be detached from the portions g by withdrawing the rods b from the apertures b' . I have shown separate movable sections for each of the portions g to facilitate the insertion and removal of the former.

H designates springs detachably secured at their ends to the ends of the portions g of the gages. They are shown as thus secured by means of loops s , which may be of metal and driven into the portions g , and which operate to retain the springs by friction. These springs are shown as lapping past each other beneath the cross-pieces b^2 , at about midway in the lengths of which they extend through loops s' , similar to the loops s . The tendency of the springs H is to maintain the movable sections of the gage always in an elevated position. When the movable sections of the gages are detached, the springs will be removed with them. When the clamp D is brought down in the usual manner, it con-

tacts with the movable sections of the gages and moves the latter until the clamp comes to a bearing upon the piles of cards or paper. In Fig. 1 I have shown the movable section
5 removed from the gage at the right.

When piles of cards or paper which are of less height than the angular gages are placed in said gages, blocks I, of wood or similar material, are placed upon the piles of cards or
10 paper, with which the clamp D will contact when brought down to hold the paper in proper position. These blocks I have at least two of their edges so cut that when placed in the gages they will fit the angles of the gages,
15 and one of their edges so cut that when placed in the gages such edge will be parallel to the plane of the cut of the knife.

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

1. In a gage for a paper-cutting machine, 20 the combination, with a loose bar adapted to be placed against the back bar of a paper-cutting machine and to be moved thereby, of an angular gage supported by said bar and adapted to be adjusted into various positions an- 25 gularly relatively to the bar, substantially as specified.

2. In a gage for a paper-cutting machine, the combination, with a bar, of an angular gage having a spring-actuated section, said
30 gage being adapted to be adjusted into various positions angularly relatively to the bar, substantially as specified.

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Witnesses:

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