

C. W. Packer.
Paper Cutting Mach.

N^o 45565.

Patented Dec. 20, 1864.

FIG. 1.

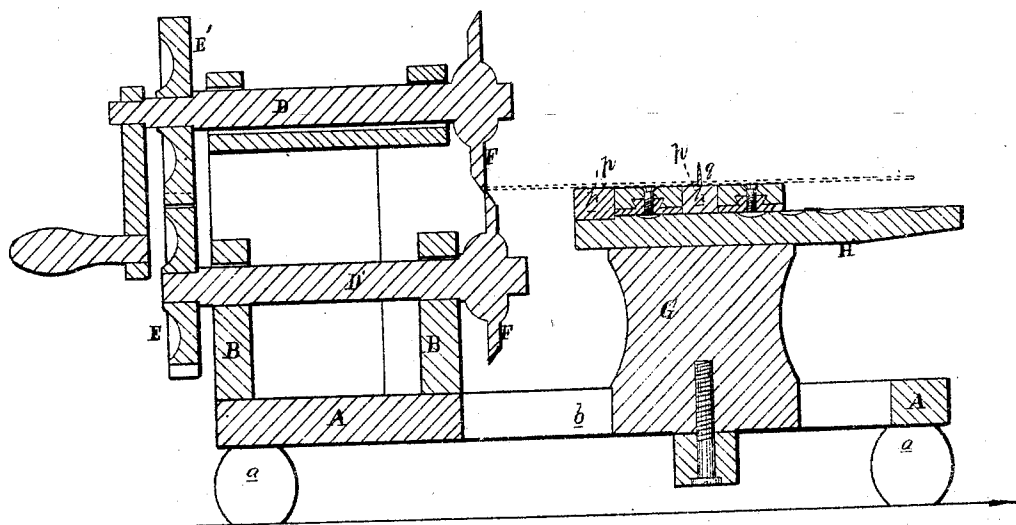
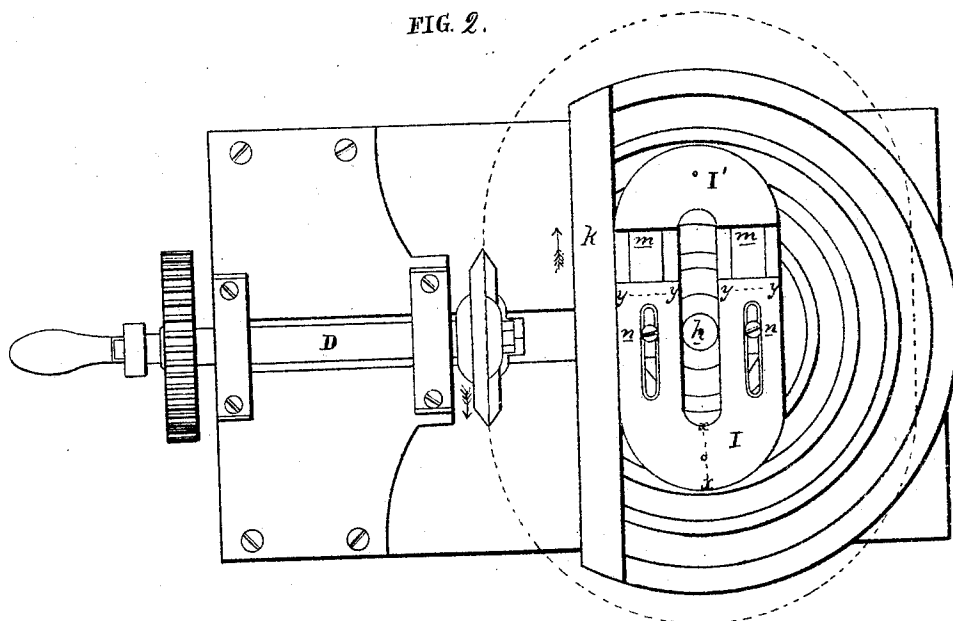


FIG. 2.



Witnesses { *C. H. Hovson*
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Inventor
H. H. Hovson
per C. B. Rice
Att'y for C. W. Packer

UNITED STATES PATENT OFFICE.

CHARLES W. PACKER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND GEORGE BATES, OF SAME PLACE.

MACHINE FOR CUTTING OBJECTS WITH STRAIGHT SIDES AND SEMICIRCULAR ENDS.

Specification forming part of Letters Patent No. **45,565**, dated December 20, 1864.

To all whom it may concern:

Be it known that I, C. W. PACKER, of Philadelphia, Pennsylvania, have invented a Machine for Cutting Objects with Straight Sides and Semicircular Ends; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention consists in a certain mechanism, described hereinafter, whereby sheets of pasteboard or other material may be readily cut in the form of objects with straight sides and semicircular ends; and my invention further consists in a device, described hereinafter, whereby the length of objects so cut may be regulated at pleasure.

In order to enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

On reference to the accompanying drawings, which form a part of this specification, Figure 1 is a vertical section of my machine for cutting objects with straight sides and semicircular ends, and Fig. 2 is a plan view.

A is the base of the machine, and to this base, near one end of the same, is secured a frame, B, in which turn the two shafts D and D'. These shafts are geared together by cog-wheels E and E', so that they may revolve in contrary directions to each other. Each shaft is provided with a steel disk, F, the peripheries of which are beveled so as to form cutting-edges, the cutting-edge of one disk overlapping that of the other, as seen in Fig. 1. In the base A is an oblong slot, b, to which is adapted the lower end of the head-stock G, the latter being provided with a suitable set-screw, by means of which the head-stock may be secured after adjustment. To the top of the head-stock is secured a table or platform, H, from the center of which a pin, h, projects through an oblong slot in a plate which rests on the platform H. This plate is made in two pieces, I and I', the latter having dovetailed ribs m, adapted to dovetailed grooves formed in the under side of the piece I, so that the plate may be extended or contracted longitudinally. Two set-screws, n n, pass through elongated slots in the piece I, and into the piece I', so that the two pieces may be secured together after adjustment.

It will be seen that the plate thus composed of the two pieces I and I' has two straight sides parallel with each other, and that the opposite ends are semicircular, the form being the same as that to which it is desired to cut the pasteboard or other material. One edge of the plate rests against a flange or rib, p, which is arranged parallel to the plane of the cutting-edges of the two disks F.

It should be understood that the ends of the oblong slot of the plate I I' are semicircular and adapted to the pin h, and that the plate is exactly of the same width between the points x x as it is between the points y y.

Two or more sharp-pointed pins project from the plate I I', and over these is placed the sheet of pasteboard to be cut, the sheet being penetrated by the points and resting on the plate. The sheet is then introduced between the cutting-edges of the disks, and a rotary motion is imparted to the same.

Supposing the upper disk to revolve in the direction of the arrow, Fig. 2, the two disks will impart a motion to the sheet of pasteboard, and to the plate I I', the motion being straight and in the direction of the arrow, Fig. 2, owing to the straight side of the plate bearing and sliding against the guiding-rib p.

When the sheet with the plate, however, have been moved so far forward by the action of the cutters that the semicircular end x' of the elongated slot of the plate is in contact with the central pin, h, the plate will begin to turn on the pin h as a center, until the opposite straight edge of the plate coincides with the edge of the guiding-strip.

It will be seen without further description that the figure cut from the pasteboard must correspond with that of the plate—that is, a figure with opposite parallel straight edges and semicircular ends, suitable for the bottom and lids of bonnet or other pasteboard boxes or for other purposes.

The width of the sheet will depend upon the distance to which the head-stock G has been adjusted from the cutting-disks, and the length of the sheet will depend upon the adjustment of the two pieces I and I' of the plate in respect to each other.

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

1. A slotted plate with straight paralleled

edges and semicircular ends, guided by the pin *h* and strip *p*, in combination with the rotary cutters, or their equivalents.

2. So constructing the said plate of two pieces, I and I', that it can be elongated or shortened at pleasure.

In testimony whereof I have signed my name

to this specification in the presence of two subscribing witnesses.

CHAS. W. PACKER.

Witnesses:

CHARLES E. FOSTER,
JOHN WHITE.