J. A. BERSTLER.

Paper-Cutter.

No. 223,103. Patented Dec. 30, 1879.

Fig. 1.

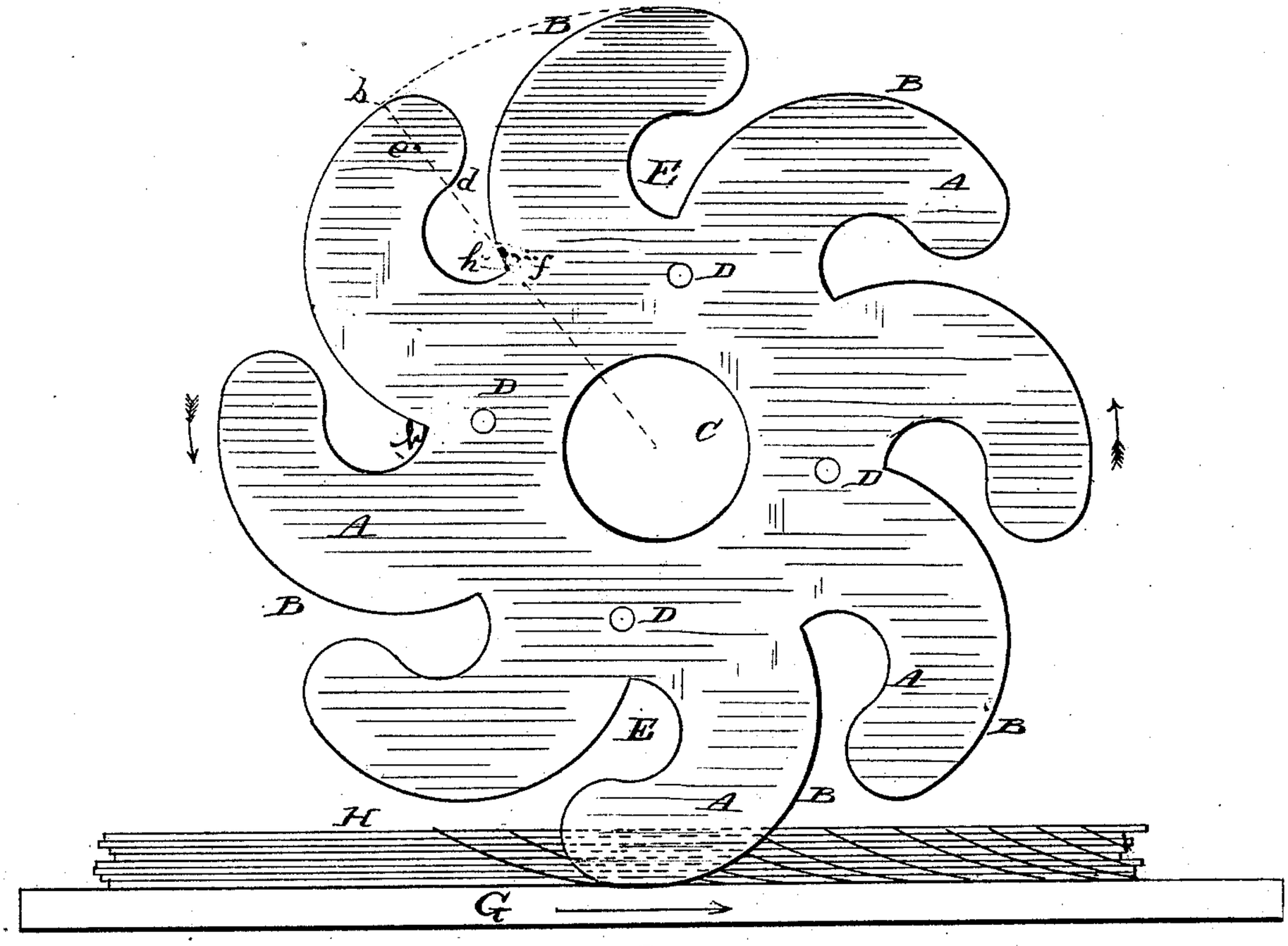

Fig. 2.

Witnesses.

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JOHN A. BERSTLER, OF COATESVILLE, PENNSYLVANIA.

IMPROVEMENT IN PAPER-CUTTERS.

Specification forming part of Letters Patent No. **223,103,** dated December 30, 1879; application filed September 11, 1878.

To all whom it may concern:

Be it known that I, JOHN A. BERSTLER, of Coatesville, Chester county, in the State of Pennsylvania, have invented an Improvement in Paper-Cutters, of which the following is a specification.

The invention relates to rotary paper-cutters; and it consists of a series of curved radial blades projecting from the body of the cutter and having rounded ends, with wide interspaces between the blades.

The object of this improvement is to cut wet paper without any waste of material and leaving the edges of the cut paper smooth.

Figure 1 of the drawings is a side view of my improved cutter in position for cutting a pile of paper, H, upon the edge of a table, G, in the usual manner. Fig. 2 is a view of the edge of the cutter.

I prefer to make the cutter from a thin plate of steel—say No. 20 wire-gage. The plate is first cut out round, of the desired size; after which the series of blades A are laid off as follows: With *f* as a center, describe the arc *b h* as the edge of the curved radial blade A. Then, taking the point *e* as a center, describe the arc *b d* for the rounded end of the blade A, and then complete the outlines by a semicircle, *d h*, and finish up one of the blades. The other blades are made in the same way. Thus the cutting follows the arcs of circles, which is the simplest mode of operation.

The cutter is to have an axle, in the usual way, passing through the hole C, Fig. 1, and collars secured by bolts in the holes D; but it is not necessary to describe the operating machine, as my improvement is limited to the cutter. The narrow curved blades A with the wide interspaces act like a series of independent knives, one knife completing, or nearly completing, its stroke before the next knife or blade begins to cut, as will be easily understood from Fig. 1.

This cutter will trim the edges of a pile of paper, or divide the pile, without any waste of material and without making any ragged edges on the paper, and will work in damp paper, which is very difficult to be cut. The edge of the cutter is left the full thickness of the plate, as seen in Fig. 2.

Having described my invention, what I claim is—

A paper-cutter having a series of curved blades, A, of the full thickness of the plate, projecting from the body of the cutter, with wide interspaces between the blades, substantially as and for the purposes set forth.

The above specification of said invention signed and witnessed, at Coatesville, this 30th day of August, A. D. 1878.

JOHN A. BERSTLER.

Witnesses:

JOHN W. TOWNSEND,

BENJ. T. LEWIS.