

JOSEPH WORELL.

Improvement in Paper-Cutters.

No. 115,922.

Patented June 13, 1871.

FIG. 2

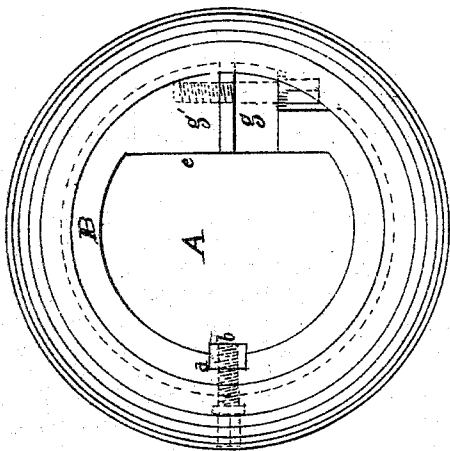


FIG. 3

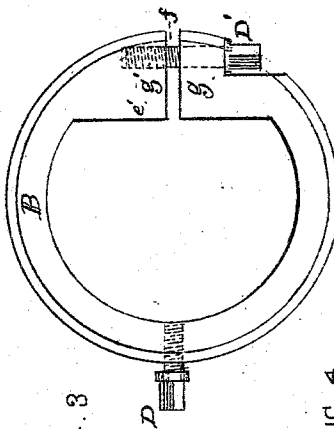


FIG. 4

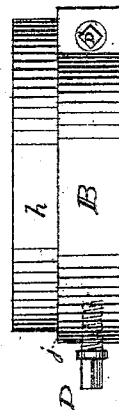


FIG. 1

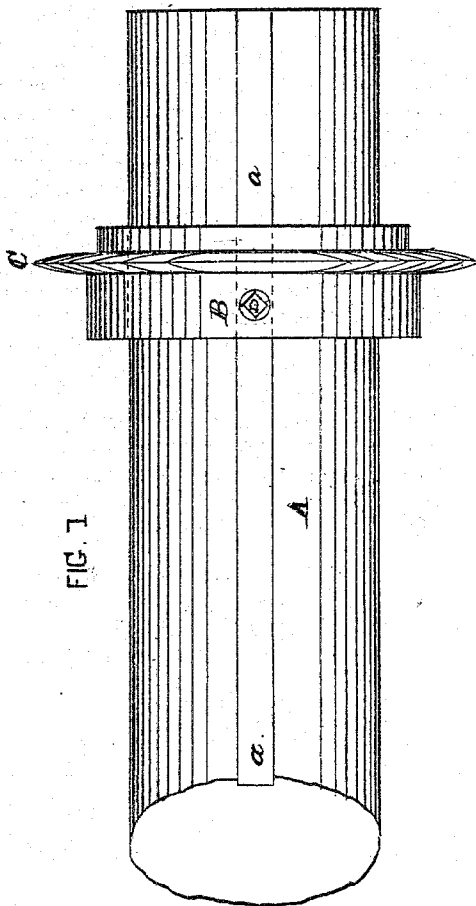
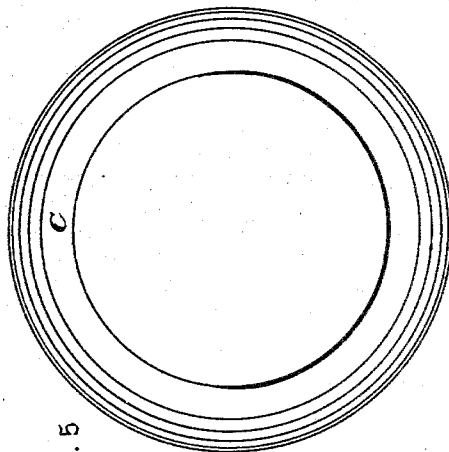


FIG. 5



WITNESSES

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UNITED STATES PATENT OFFICE.

JOSEPH WORELL, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN PAPER-CUTTERS.

Specification forming part of Letters Patent No. 115,922, dated June 13, 1871; antedated May 30, 1871.

I, JOSEPH WORELL, of the city of Philadelphia and State of Pennsylvania, have invented a Detachable Scorer for Cutting and Scoring Paper Boxes, of which the following is a specification:

My improvement consists in the combination of a scorer with a revolving shaft, concentric with the same, by means of an adjustable slotted collar. The scorer is tightly secured to the collar by means of an outward springing of the latter when a clamping-screw is loosened, which draws the cheeks of the slot together, as hereinafter described.

To enable others to make and use my improved cutter and scorer, I will now give a full description thereof.

In the accompanying drawing which makes a part of this specification—

Figure 1 is a face view of the revolving shaft A, having in connection an adjustable collar, B, which is provided with a detachable scorer, C. Fig. 2 is an end view of the same. Fig. 3 is an end view of the collar B, detached from the shaft A. Fig. 4 is an edge view of the same. Fig. 5 is a side view of the scorer C.

Like letters in all the figures indicate the same parts.

A represents a portion of a revolving shaft. B is a collar, which is provided with a scorer, C. The former is made adjustable on the shaft by means of the longitudinal groove *a* in the shaft, and the spline *b* in the eye *d* of the collar. The shaft has a flat surface, *e*, and the collar a corresponding surface, *e'*, in its eye. D is a screw in the collar, by means of which the two flat surfaces of the shaft and collar *e* and *e'* are drawn tightly together to secure the collar in its adjusted position. The collar has a slot, *f*, at the flat part *e'*, and the metal on one side of the slot is cut away to receive the screw D', which passes loosely through the

cheek *g* and screws into the cheek *g'*, for drawing the two parts together to loosen the collar from the scorer to admit of its removal. When the scorer is again put in place the screw D' receives a reverse movement to allow the collar to spring out tight against the eye of the scorer to hold it securely on its seat. The scorer C fits on the annular rabbet *h* of the collar B, against the shoulder *j*, whereby it is made true on the shaft A.

The operation is as follows: The scorer C, by means of the adjustable collar B, on which it is situated, is brought to the proper position on the shaft A to operate upon the paper, the collar being secured tightly in its adjusted position by means of the screw D, as above stated. When the scorer is required in another position on the shaft the screw D is loosened so as to admit of the free movement of the collar on the shaft. When the scorer C is not required to operate, the jaws *g g'* of the collar B are forced together sufficiently, by turning the screw D', to loosen the collar from the eye of the scorer. The latter is then slipped off the rabbet *h* of the collar, and, its eye being larger than the shaft A, the latter turns loosely therein to prevent the action of the scorer when not required.

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

The combination and arrangement of the scorer C, adjustable collar B, and shaft A, substantially in the manner and for the purpose above described.

In testimony that the above is my invention I have hereunto set my hand and affixed my seal this 6th day of October, 1870.

JOSEPH WORELL. [L. S.]

Witnesses:

STEPHEN USTICK,
EDWARD WILLIAMS.