

(No Model.)

C. W. HOBBS & W. W. JOHNSTON.
ADJUSTABLE CUTTER FOR SCORING MACHINES.

No. 566,758.

Patented Sept. 1, 1896.

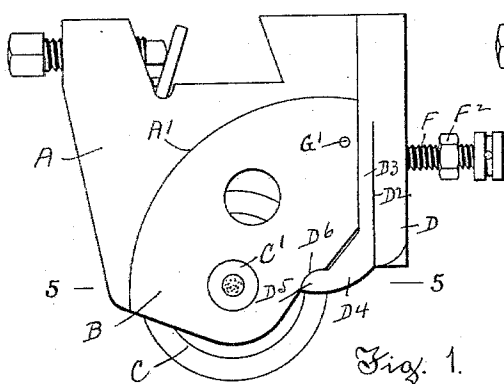


Fig. 1.

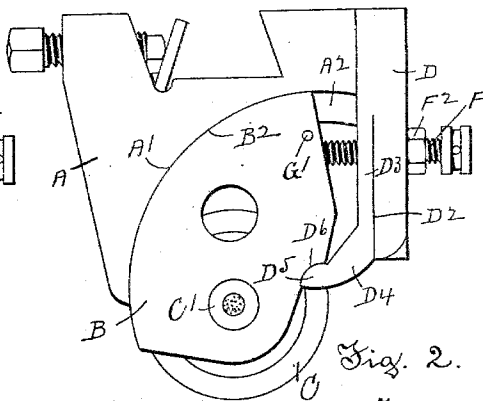


Fig. 2.

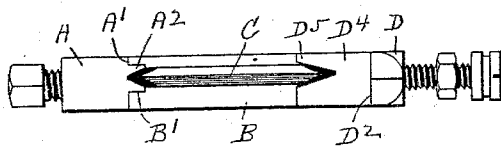


Fig. 3.

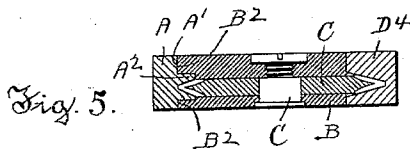
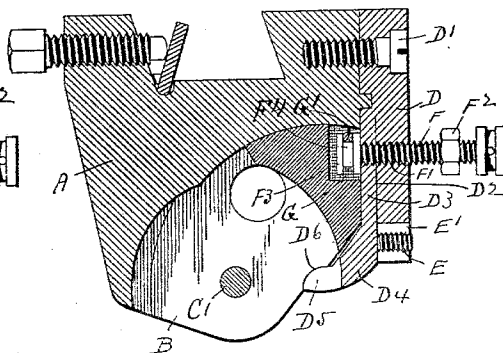
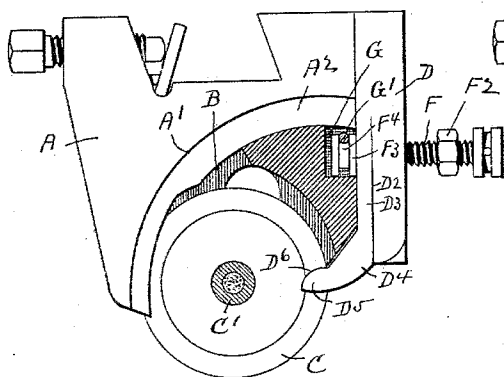


Fig. 5.

Fig. 6.

Fig. 4.

Fig. 7.



Witnesses
A. Whiting
Lena Foster.

By Attorney

Inventors
Clarence W. Hobbs.
William W. Johnston
Rufus B. Fowler

UNITED STATES PATENT OFFICE.

CLARENCE W. HOBBS AND WILLIAM W. JOHNSTON, OF WORCESTER,
MASSACHUSETTS.

ADJUSTABLE CUTTER FOR SCORING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 566,758, dated September 1, 1896.

Application filed June 8, 1896. Serial No. 594,658. (No model.)

To all whom it may concern:

Be it known that we, CLARENCE W. HOBBS and WILLIAM W. JOHNSTON, citizens of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Adjustable Cutters for Scoring-Machines, of which the following is a specification, accompanied by drawings, forming a part of the same, in which—

Figure 1 represents a side view of an adjustable cutter embodying our invention with the cutting-disk in its highest position. Fig. 2 is a side view of our adjustable cutter with the cutting-disk in a lower position. Fig. 3 is a bottom view. Fig. 4 is an end view. Fig. 5 is a sectional view on line 5 5, Fig. 1. Fig. 6 is a side view of the cutter-supporting frame and rotating cutting-disk with the sliding block which carries the cutting-disk shown in central vertical sectional view; and Fig. 7 is a central vertical sectional view on line 7 7, Fig. 4.

Similar letters refer to similar parts in the different figures.

Our invention relates to certain improvements in the construction of the adjustable cutters used in machines for scoring cardboard, and it has for its object to simplify the construction and to provide means for the vertical adjustment of the cutting-disk and for taking up lost motion in the movable parts of the cutter; and it consists in the construction and arrangement of parts as hereinafter described, and set forth in the annexed claims.

Referring to the accompanying drawings, A denotes a frame adapted to be adjustably attached to the cutter-bar of a scoring-machine in the usual and well-known manner. Upon the lower edge of the frame A is a curved track A', formed in the arc of a circle and provided with a projecting rib A², which enters a groove B' in the correspondingly-curved edge B³ of the block B. The block B carries a spindle C', upon which a rotating cutting-disk C is journaled.

Attached by a screw D' to the front edge of the frame A is a plate D, projecting downward in front of the block B. The plate D is provided with a slit D², dividing the end of

the plate a little more than half its length in a plane at right angles to the plane of the frame A, thereby forming an elastic section D³, which is provided at its lower end with a lateral projecting foot D⁴, having the upper surface of the toe B⁵ curved, as at D⁶, concentrically with the curved track A', and entering a circular notch C², formed in the edge of the block B opposite the curved edge B² and concentric therewith. The plate D holds a tightening-screw E, bearing against the heel of the foot D⁴, by which the foot is crowded forward to hold the toe D⁴ firmly against the notched edge of the block B in close contact with the track A', allowing the block to slide freely between the concentrically-curved surfaces of the track A' and the toe D⁵. The plate D is also provided with a screw-threaded hole F', opposite the upper portion of the front edge of the block B, to receive an adjusting-screw F, provided with a check-nut F². Attached to the inner end of the adjusting-screw F is a cylindrical block F³, which is provided with an annular groove F⁴. The block is inserted within a recess G in the block B and is held therein by a pin G', held in the block and engaging the annular groove F⁴. The adjusting-screw F serves to adjust the position of the block B in order to raise or lower the cutting-disk C to regulate the depth of the cut in the cardboard, the cutting-disk C being shown in its highest or raised position in Fig. 1 and in a lower position in Fig. 2. The tightening-screw E is prevented from working loose by means of a vertical slit E', extending from the vertical end of the plate D and on diametrically opposite sides of the screw E, causing the screw E to be pinched in the bifurcated end of the plate B.

We are aware that it is not new to construct the adjustable cutters of scoring-machines with a curved track, as at A', and with a cutter-carrying block adapted to slide on said track and actuated by an adjusting-screw, as F, and we do not herein claim these features.

What we do claim as our invention, and desire to secure by Letters Patent, is—

1. In an adjustable cutter for scoring-machines, the combination of a frame provided with a curved track, a block adapted to slide

on said track, a cutting-disk carried by said block and a foot arranged to bear against the side of said block opposite said track, substantially as described.

5 2. In an adjustable cutter for scoring-machines, the combination of the frame A provided with a curved track A', a block B arranged to slide on said track, a foot bearing against the side of said block opposite said
10 track and means for crowding said foot against said block, substantially as described.

3. In an adjustable cutter for scoring-machines, the combination of a frame provided with a circular track, a block sliding on said
15 track, a cutting-disk carried by said block, said block having a circular notch on its side opposite said track and concentric therewith,

and a curved support entering said notch, by which said block is held between said track and said support, substantially as described. 20

4. In an adjustable cutter for scoring-machines, the combination of a frame A having a curved track A', a block B sliding on said track, a plate D having an elastic section D³, a foot D⁴ carried by said elastic section and
25 bearing against said block and a tightening-screw E, substantially as described.

Dated this 23d day of May, 1896.

CLARENCE W. HOBBS.
WILLIAM W. JOHNSTON.

Witnesses:

RUFUS B. FOWLER,
LENA KESTER.