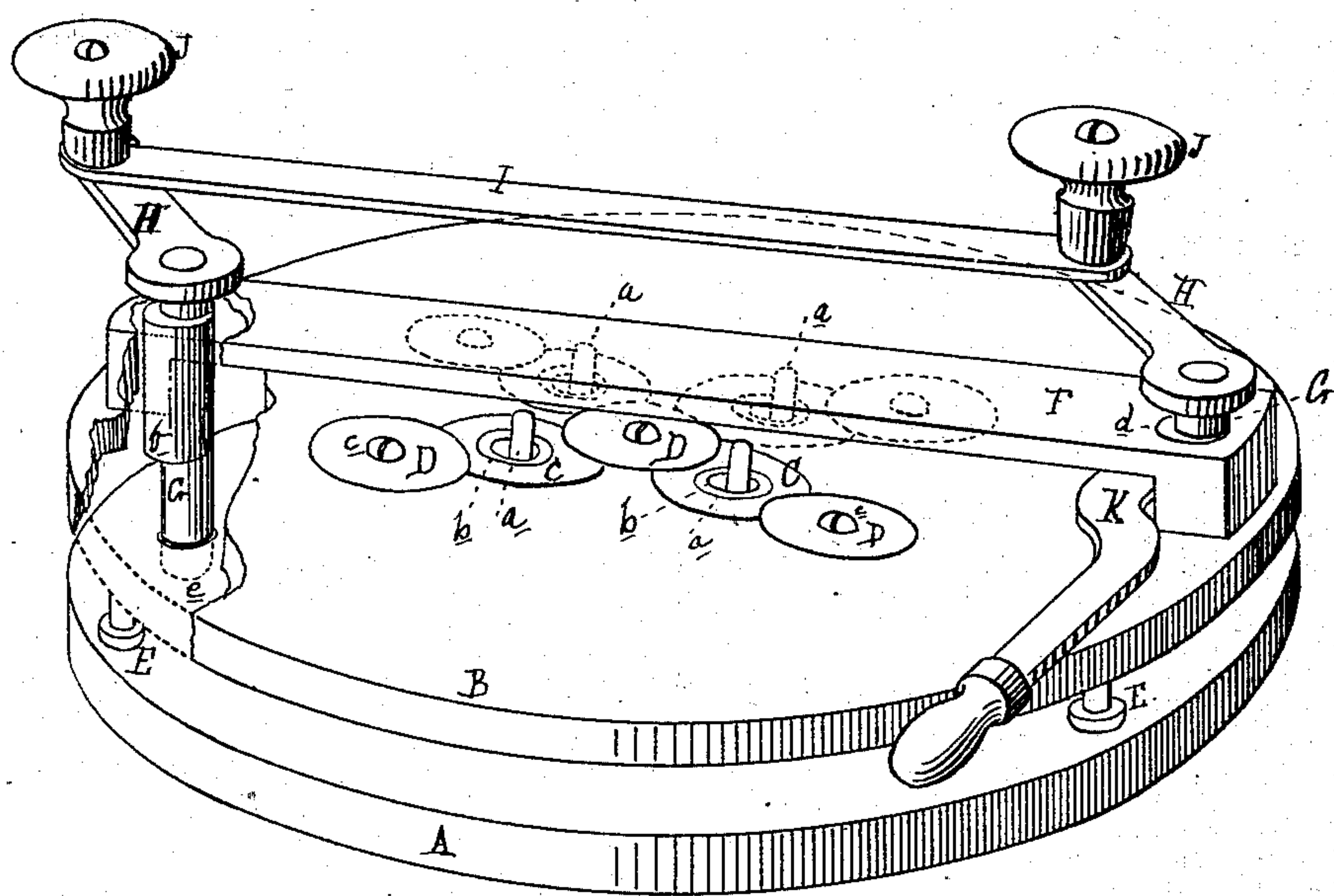


(No Model.)

J. KREHBIEL.
CAPSULE MACHINE.

No. 315,417.

Patented Apr. 7, 1885.



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UNITED STATES PATENT OFFICE.

JOHN KREHBIEL, OF DETROIT, MICHIGAN.

CAPSULE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 315,417, dated April 7, 1885.

Application filed March 26, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN KREHBIEL, of Detroit, in the county of Wayne and State of Michigan, have invented new and useful Improvements in Ring-Cutters for Cutting Capsules; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

10 This invention relates to a certain new and useful device or hand-tool adapted to be used for cutting off capsules to a uniform and desired length upon the mold-pins upon which such capsules are formed; and the invention

15 consists in the peculiar construction of the device, its parts, their combination and operation, as more fully hereinafter described.

In the accompanying drawing, which shows a perspective view of the entire device, A represents a circular plate, from the upper face of which, at equal distances apart, project the mold-pins *a*, which are set in said circular plate A. B is another circular plate, of the same size as the plate A, and this plate B

25 is provided with a series of holes, *b*, which, when the two plates A and B are coincident, are coincident with the projecting mold-pins over which the plate B is slipped. Resting upon the upper side of this plate B, coincident with the holes therein, are the ring-cutters C, formed of thin pieces of steel sharpened upon the inner edge of the ring, and these ring-cutters are held in place by means of the thin metallic plates D, which in turn

35 are secured to the outer side of the circular plate B by means of set-screws *e*, and by slightly loosening one of the set-screws the ring-cutters may be removed for sharpening or other purposes, and easily replaced and secured.

E are studs projecting from the upper face of the plate A, or from the lower face of the plate B, as may be desired, and the ends of these studs are threaded to engage with such plates to adjust the distance between the two

45 when the cutters are in use, such distance determining the length of the capsule.

F is a bar rigidly secured to the plate B centrally, and through this bar and the plate

50 B, at each end of said bar, is formed a circular hole, *d*, through which holes *d* pass the

two rods or shafts G, the lower ends of such shafts being stepped when the cutting device is in operation into coincident recesses *e* in the upper face of the plate A. The holes

55 through which the shafts pass are of sufficient size to allow a cam or eccentric face, *f*, to be built or formed upon the shaft G, and the upper end of each of these shafts is provided with a crank, H, both such cranks being connected

60 together by a bar or rod, I, which is provided with handles J, by means of which a simultaneous movement is given to both shafts.

In practice, the length of the capsules to be cut upon the molds *a* having been determined,

65 and the studs or stops E properly regulated, the plate B, carrying the cutters, is placed over the plate A, the mold-pins passing up through the ring-cutters, and the lower ends of the shafts G engaging with the recesses *e*

70 in the plate A. Now, the operator with each hand grasps the handles J, and gives a turn of the cranks, whereby an eccentric movement is given to the plate B, carrying the cutters, by which the ring-cutters are brought suc-

75 cessively into contact all around the mold-pins, thereby cutting off the capsules to the desired length. K is a lever pivotally secured at one end, and adapted by its movement to slightly change the position of the

80 upper plate, B, by so much as the thickness of the cams or eccentric beyond the common axis of the shaft.

A substantial equivalent for the plate carrying the cutters, the eccentric-shafts, and the

85 plate carrying the capsule mold-pins and provided with bearings for the shaft is shown in my application of even date with this, and having the Serial No. 125,607; but no claim therefor is made in that case.

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I am aware of the Patent No. 297,380, and make no claim to the construction shown therein as forming part of my invention.

What I claim as my invention is—

1. A hand-tool for the purposes described,

95 carrying upon its upper face a series of ring-cutters coincident with holes through said face, and removable and adjustably secured in place by thin plates bearing on two or more cutters, and set-screws for securing said plates, substantially as described.

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2. In a hand-tool for cutting off capsules,

the plate B, carrying the capsule-cutters, and provided with shafts constructed to give said plate an eccentric motion, in combination with a plate carrying the mold-pins, and provided
5 with bearings for the shafts, and stops, as the studs E, arranged between the plates to regulate the length of the capsules, substantially as described.

3. A hand-tool for cutting capsules, consisting of the following elements: a circular plate,
10 B, provided with one or more series of holes,

b, ring-cutters C, held in place by the plates D and set-screws e, the shafts G, provided with eccentrics f, the cranks H, coupling-bars I, and handles J, the parts being constructed,
15 combined, and operating substantially as and for the purposes specified.

JOHN KREHBIEL.

Witnesses:

CHARLES J. HUNT,
H. S. SPRAGUE.