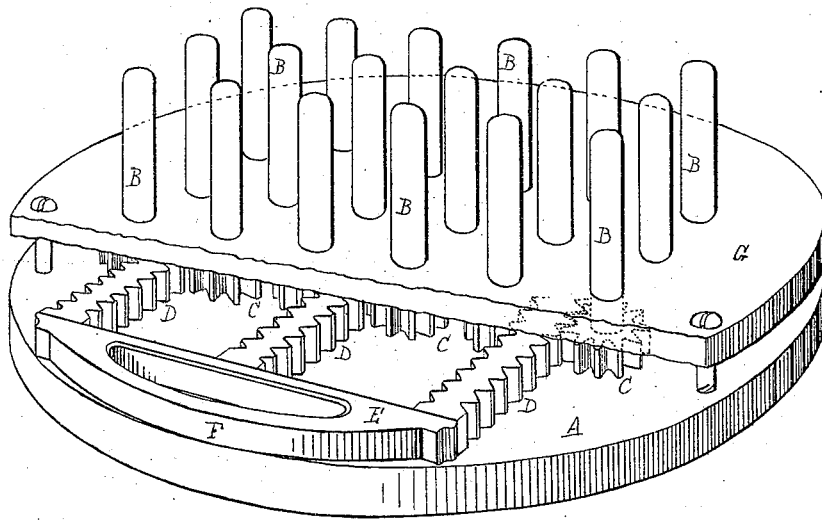


(No Model.)

J. KREHBIEL.
CAPSULE MACHINE.

No. 306,163.

Patented Oct. 7, 1884.



WITNESSES:

J. S. Sprague
A. Barthel

INVENTOR

Johann Krehbiel
by Atty. J. S. Sprague

UNITED STATES PATENT OFFICE.

JOHN KREHBIEL, OF DETROIT, MICHIGAN, ASSIGNOR TO THE GLOBE CAPSULE COMPANY, OF SAME PLACE.

CAPSULE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 306,163, dated October 7, 1884.

Application filed March 12, 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 Capsule-Mold Plates; and I do 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.

This invention relates to certain new and useful improvements in the construction of molds upon which to form gelatine capsules, wherein the mold-pins are adapted to be revolved by hand when necessary in the manufacture of such capsules, that such revolution should be had for any purpose.

The invention consists in the peculiar construction of the various parts, their combination and operation, as more fully hereinafter described.

In the accompanying drawings, which form a part of this specification, A represents a bed-plate, in the upper face of which are stepped at regular intervals the mold-pins B, in any desired manner that will allow them to be rotated on the axis of their stepped ends. Upon each one of these mold-pins is secured a cog-wheel, C, and a cogged rack, D, cogged on both edges, enters between each pair of rows of the pins, so that the cogs of the rack will engage with the cogged pinions on each side of it and give them a rotary motion by giving a reciprocating motion to the rack-bars. The ends of the rack-bars at one end are connected together by means of a cross-bar, E, which is provided with a handle, F, so that a like motion can be imparted simultaneously to all the pins on the mold-plate. Another plate, G, of the same size and circular form as the bed-plate A, is provided with a series of holes coincident with the mold-pins, which, when this plate G is in place, will project through, as shown, such holes being of a suitable size not

to interfere with the free rotation of such mold-pins. This plate is secured to the bed-plate in any convenient removable manner, and steadies the mold-pins in their rotation and holds them in an upright position. The form of these plates must be circular to allow them to roll. The purpose to be accomplished by such rolling is, as the mold-pins are lifted out of the gelatine mixture into which they have been dipped in the process of manufacturing gelatine capsules, the mold-plate is immediately set upon its periphery and set in motion rotarily to insure the equal thickness of the walls of the capsules.

What I claim as my invention is—

1. A cluster of capsule-mold pins arranged in pairs of rows side by side and at equal distances apart, each mold-pin stepped into a bed-plate and adapted to turn upon its axis by means of a toothed pinion secured to each mold-pin immediately above the bed-plate and rack-bars, the reciprocating motion of which will communicate a rotary motion to such mold-pins in either direction, such rack-bars being connected together by a cross-bar and handle, substantially as and for the purposes described.

2. In combination, a circular bed-plate, a series of mold-pins stepped at regular intervals into said bed-plate, and in pairs of rows, toothed pinions, one secured to each of said mold-pins, rack-bars engaging with said pinions in pairs, and secured together and provided with a common handle, and a circular confining-plate sleeved on such mold-pins and removably secured to the bed-plate, the parts being constructed, arranged, and operating substantially as and for the purposes specified.

JOHN KREHBIEL.

Witnesses:

H. S. SPRAGUE,
E. J. SCULLY.