

(No Model.)

J. KREHBIEL.
CAPSULE MACHINE.

No. 296,848.

Patented Apr. 15, 1884.

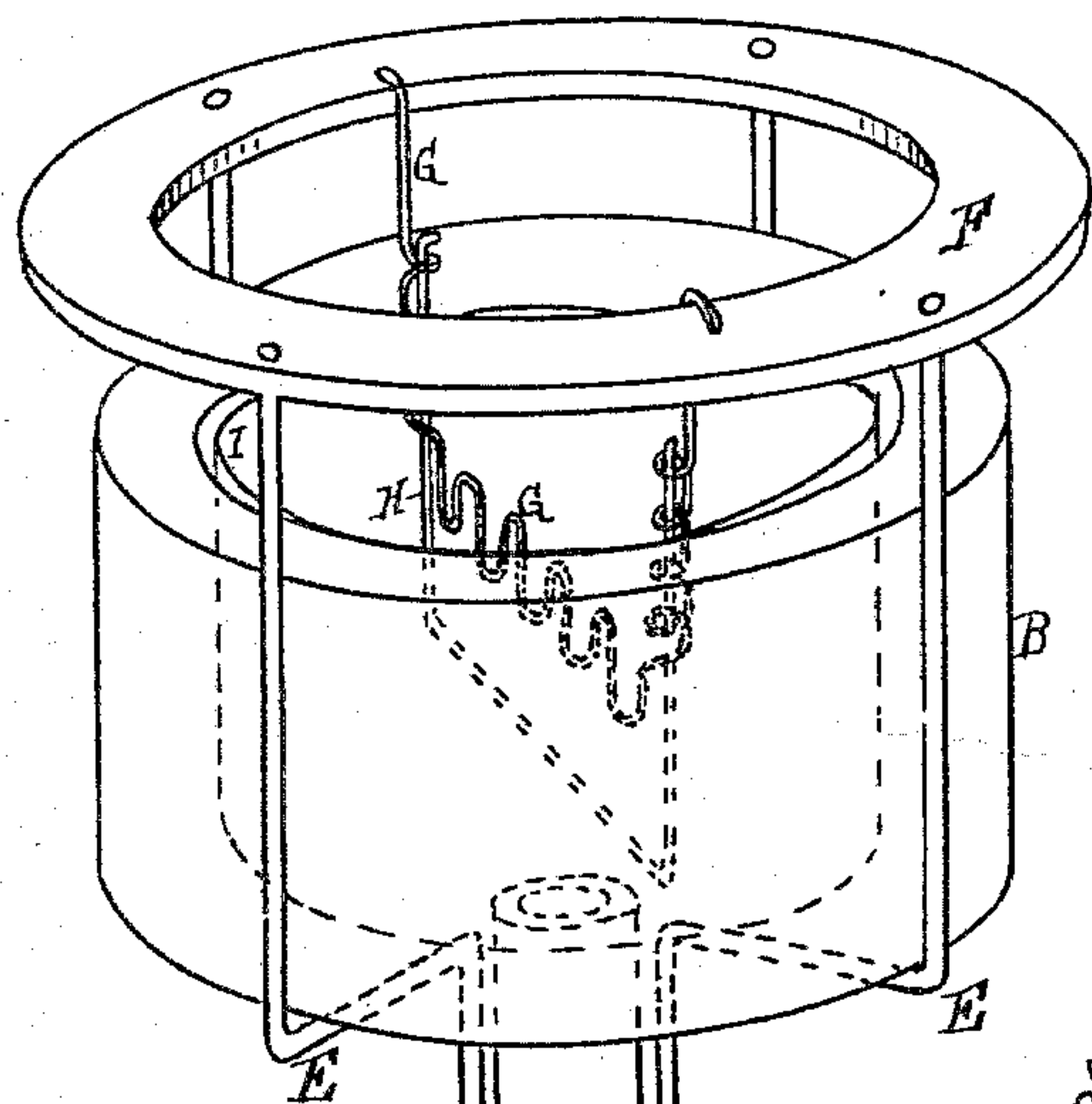


Fig. 1.

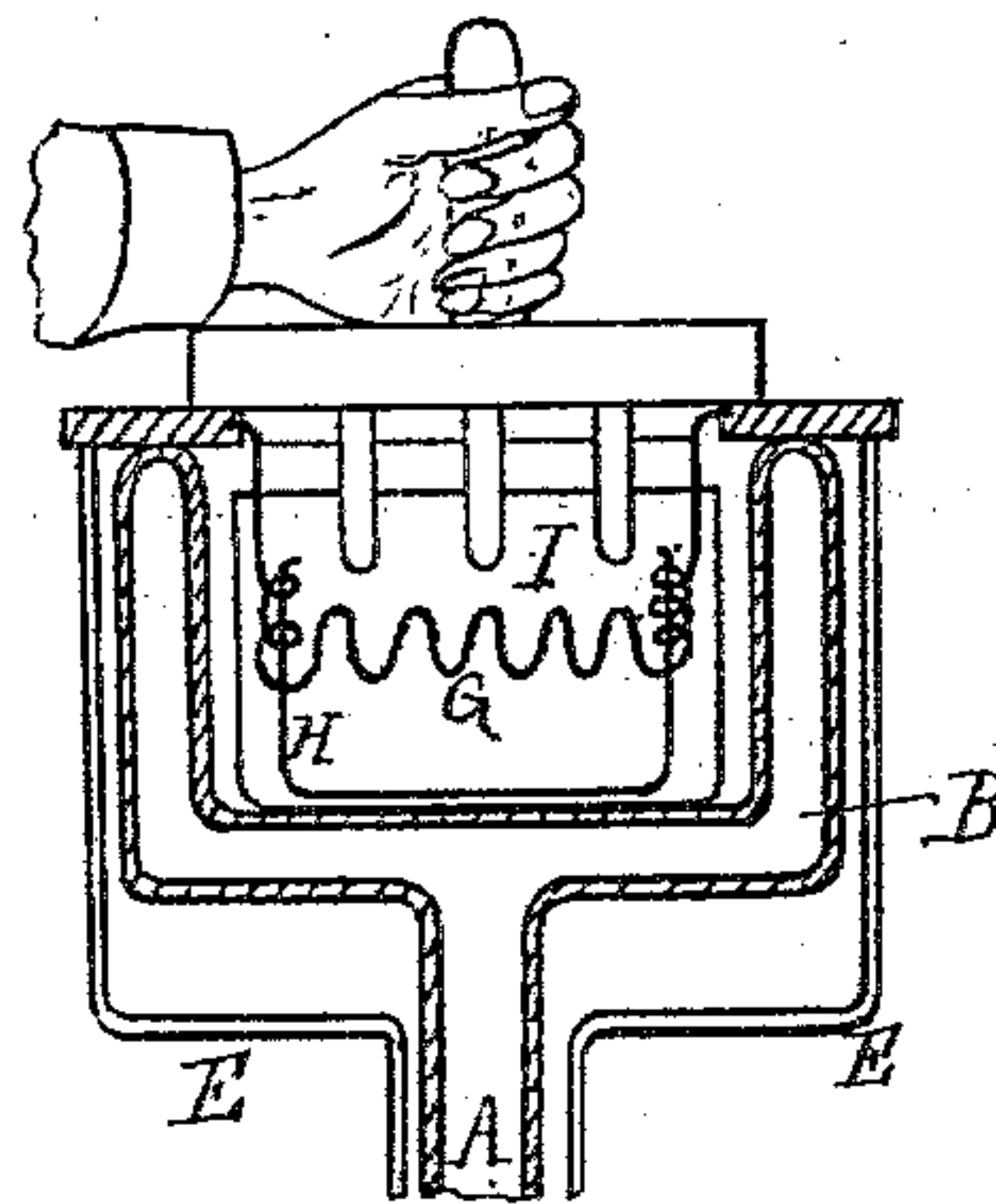


Fig. 2.

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UNITED STATES PATENT OFFICE.

JOHN KREHBIEL, OF DETROIT, MICHIGAN, ASSIGNOR TO THE GLOBE CAPSULE COMPANY AND HENRY J. MILBURN, OF SAME PLACE.

CAPSULE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 296,848, dated April 15, 1884.

Application filed November 21, 1883. (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-Immersing Machines; 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 devices especially designed for immersing capsule-molds in a gelatine solution; and the invention consists, first, in the peculiar construction and arrangement of parts forming the heating-jacket which receives the pan containing the gelatine which is to be kept in solution; second, in the peculiar construction and arrangement of devices for agitating or stirring such solution, or the solution contained in the pan, to prevent the forming of a crust upon its surface; third, in the devices employed for stirring the capsule-molds and immersing such molds in the solution; and, fourth, in the peculiar construction, arrangement, and combinations of the various parts, all as more fully hereinafter set forth.

Figure 1 is a perspective view of my improved device. Fig. 2 is a vertical section thereof.

In the accompanying drawings, which form a part of this specification, A represents a suitable stand-pipe, which supports the steam-jacket B, and into which steam has access through the pipe A from any convenient source of supply. Around this stand-pipe A, I place a coil-spring, C, which supports a sleeve, D, from which latter rises a series of brackets, E, upon the upper ends of which is detachably secured the ring-plate F. In this ring I secure the downwardly-projecting stirring-coil G, which carries a vertically-stirring bar, H. One or more of these stirring appliances may be used, as the size of the dipping-pan I may require, in order that in operation the solution contained therein shall be sufficiently agitated to prevent the formation of a crust upon the surface of the solution.

If desired, the sleeve D may be connected

to a treadle or foot-lever, so that the operator may, by pressing upon the lever, cause a partial rotation of such sleeve upon the pipe A, and necessarily impart a like motion to the stirrers within the dipping-pan, as shown in the drawings. Where power is convenient, a loose belt may be arranged in connection with this sleeve, so that such sleeve, together with the stirrers which are indirectly connected thereto, as hereinbefore described, will have a continuous movement, except at such times as when the capsule-mold plate is imposed upon the ring F, at which time the belt will slip upon the sleeve.

In practice, the parts being constructed substantially as described, and standing in the position shown in Fig. 1, the capsule-plate with its molds is placed upon the ring F, with the mold-pins projecting downward. By then pressing down upon this plate the mold-pins are immersed in the solution, the stirrer H sliding vertically in the coil-stirrer. The operator then allows the spring C to exert its force so as to gradually raise the parts which have been depressed, and thereby remove the capsule-molds from the solution. If it is desired to regulate the depth that such mold-pins shall be inserted in the solution, such can readily be done by having adjusting-stops between the ring and top of the heating-jacket, or by having a regulating-stop so arranged that the sleeve can be depressed to a greater or less degree, as desired. To keep the solution within the pan in its soluble state, steam is admitted into the jacket through the pipe A, the radiation from which will generally keep the gelatine at the desired consistency; but should it prove too hot, water may be placed in the jacket between it and the pan holding the solution.

What I claim as my invention is—

1. A device for dipping capsule-molds, consisting of a vertically-moving supporting-frame carrying stirrers adapted to recede and advance as the molds are immersed and withdrawn, substantially as set forth.

2. In a device for dipping capsule-molds, the combination, with a suitable vessel for containing the solution from which the cap-

sules are to be formed, of a vertically-moving supporting-frame carrying stirrers, and mechanism by means of which such stirrers are rotated or partially rotated within the dipping-
5 vessel, substantially as described.

3. In a device for dipping capsule-molds, the combination of the steam-jacket B, supporting frame or ring E, with the pan I and stirrers H G, substantially as set forth.

10 4. In a capsule-dipping device, the combination of the pan I with two stirrers, one of which moves vertically independent of the other, and means for rotating the same, substantially as described.

15 5. In a device for dipping capsule-molds, a

yielding supporting-frame arranged above the dipping-vessel, and adapted to be depressed by the operator and to assume its original position as the force of such depression is removed, substantially as set forth.

20 6. In a device for dipping capsule-molds, the combination, with a steam-pipe, A, and jacket B, of the spring C, sleeve D, and brackets E, carrying a supporting-frame, F, provided with advancing and receding stirrers
25 within the pan I, substantially as specified.

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Witnesses:

H. S. SPRAGUE,

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