

S. A. A. LIMOUSIN.

PROCESS OF CAPSULING MEDICAMENTS.

No. 173,226.

Patented Feb. 8, 1876.

Fig. 1.

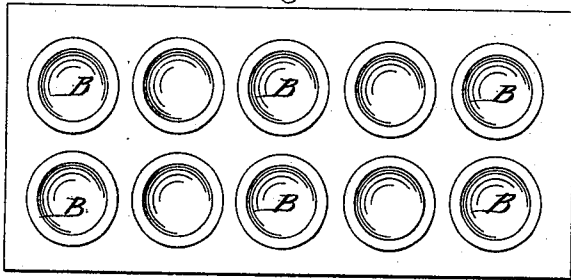


Fig. 3.

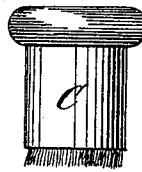


Fig. 4.

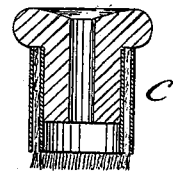


Fig. 2.



Fig. 5.

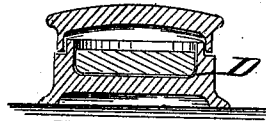


Fig. 6.

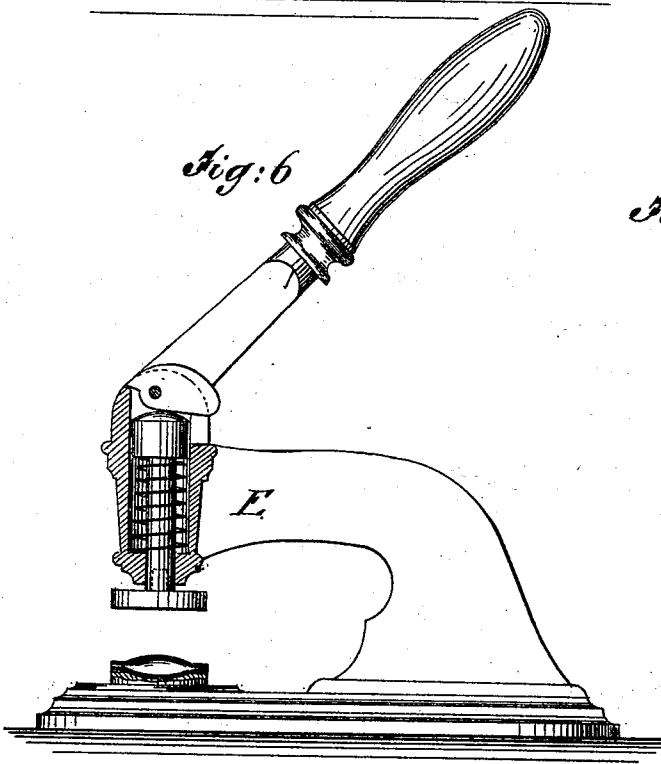


Fig. 7.

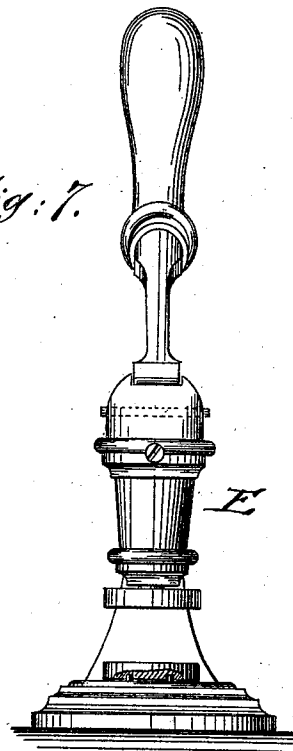


Fig. 10.



Fig. 8.



Fig. 9.

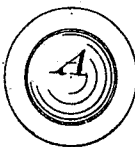


Fig. 11.



WITNESSES:

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UNITED STATES PATENT OFFICE.

STANISLAUS A. A. LIMOUSIN, OF PARIS, FRANCE.

IMPROVEMENT IN PROCESSES OF CAPSULING MEDICAMENTS.

Specification forming part of Letters Patent No. **173,226**, dated February 8, 1876; application filed September 17, 1875.

To all whom it may concern:

Be it known that I, STANISLAUS A. A. LIMOUSIN, of Paris, in the Republic of France, have invented a new and useful Improvement in Capsuling Medicaments, of which the following is a specification:

My invention relates to an improved mode of capsuling medicaments by which druggists may furnish them in a neat and readily made up form to the public, to be taken in an easy and convenient manner; and the invention consists of capsules made of two concaved disks of wafer that are joined by being moistened at the circumference, the cavity of the wafers being filled with the required quantity by means of measuring, moistening, and edge-compressing devices.

In the accompanying drawings, Figures 1 and 2 represent top and sectional side views of a series of concaved disks on which the wafers are placed for receiving the medicaments. Figs. 3 and 4 are, respectively, a side view and central section of the device for moistening the edges of the top wafers; Fig. 5, a central section of a dish with sponge or similar moisture-retaining fabric for supplying the moistening device evenly with water. Figs. 6 and 7 are, respectively, a sectional side elevation and end view of the press for connecting the edges of the wafers; and Figs. 8, 9, 10, and 11 represent side and top views of the finished capsules in different sizes.

Similar letters of reference indicate corresponding parts.

For the purpose of inclosing in a neat and secure manner medicaments of all kinds, especially such as are taken in a pulverized state and in certain fixed quantities, I employ disk-shaped wafers A of different sizes, according to the quantity to be inclosed by the same, and produce them with a concave central part, which may be at the same time embossed with the name, address, &c., of the druggist, and the name and quantity of the medicament contained therein. The flat circumferential edges of the disks are connected by being moistened and then compressed in a suitable manner, different devices being used to facilitate and expedite the capsuling process. A number of concaved stamped wafers are first placed on a series of concaved disks, B, of the same size

and shape, so as to fit exactly thereto, the disks forming the support for the wafers, which are then filled by a graduated measure with the exact quantity of the medicament. The outer edges of a corresponding number of wafers are then moistened by the device C, (shown in Figs. 3 and 4,) which consists of a double metallic tube with interior filling of suitable fabric that retains and distributes the water, taking it up by dipping it in a dish, D, with spongy material saturated with water. The main object of the dish and moistener is to supply only so much of the moisture as will be sufficient to produce the adhesion of the edges of the wafers when placed one on the other. The second series of wafers, when moistened at the edges, are then placed on those supplied with the medicaments and transferred with them to the lever-press E, to be firmly closed at the edges. The press E has concaved metal disks, corresponding in size and shape to the wafers, so that only the edges are compressed while the central part of the wafers is not interfered with. The jointed wafers form a lens-shaped central space or cavity in which the powders are contained and held securely inclosed by the wafers.

Any medicament taken in the form of a powder may be made up in this manner and kept on hand for any length of time without deterioration. They may be sold in suitable packages and be taken with the greatest ease, without the slightest disagreeable taste, by dipping them into water until saturated and swallowing them, together with water, wine, or other liquid, in the customary manner. The wafers are readily dissolved by the stomach, and the medicaments thereby quickly absorbed.

The wafer capsules form thus an elegant and convenient means of taking medicaments of all kinds, with the advantage of having them made up in the exact quantities required, so that the taking of greater or lesser doses by the spoon or knife may be avoided, and a neat and cheap mode of furnishing them to the public be provided.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A capsule for containing medicaments

composed of two concaved wafers or disks joined at their edges, substantially as and for the purpose set forth.

2. The process herein described of capsuling medicaments consisting in placing the exact quantity into a dished or concave wafer, moistening the edges of the closing wafer, and pressing them firmly together at the edges, sub-

stantially in the manner and for the purpose described.

The above specification of my invention signed by me this 6th day of August, 1875.

S. A. A. LIMOUSIN.

Witnesses:

E. J. BRUNOT,

D. F. S. FULLER.