No. 693,637. Patented Feb. 18, 1902.

A. E. BRETHOUR.

FILLER FOR CAPSULES, WAFERS, &c.

(Application filed Feb. 19, 1901.)

(No Model.)

FIG. 1.

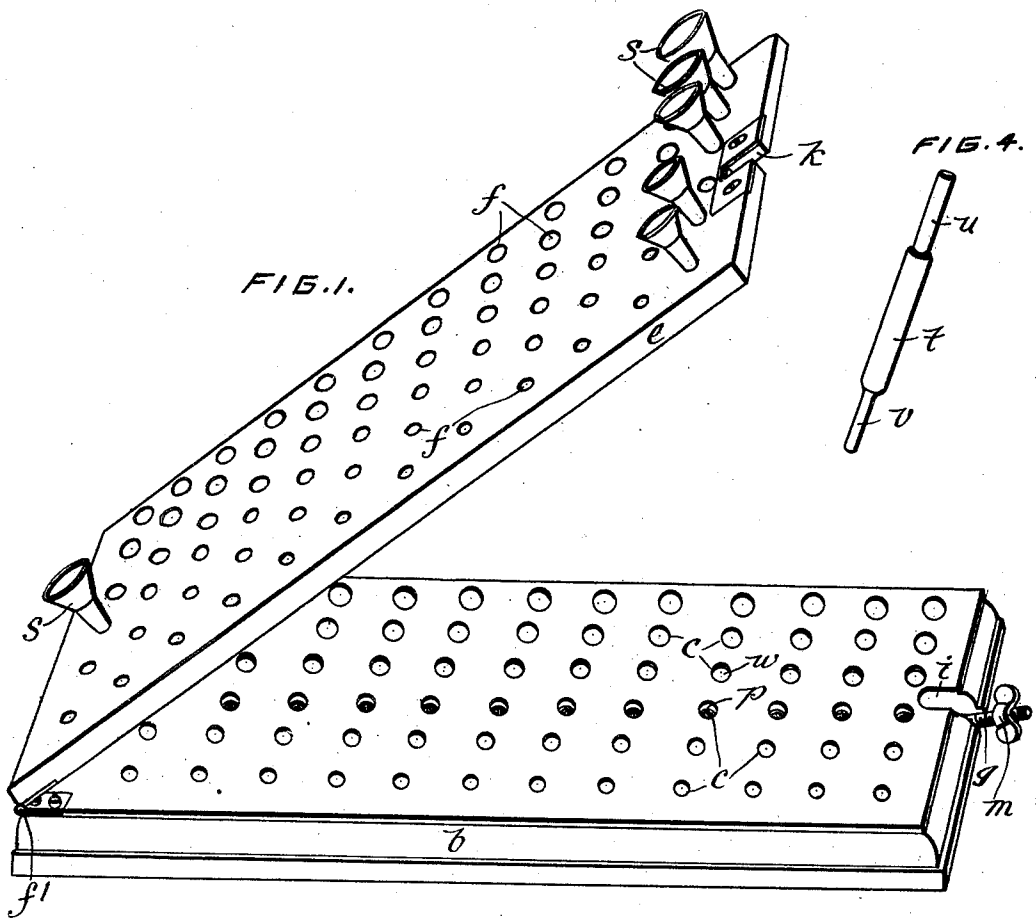
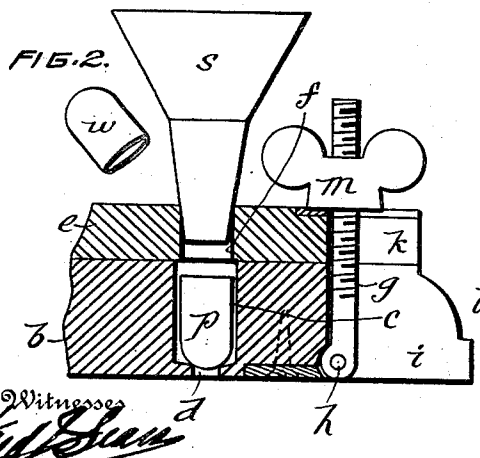


FIG. 4.

FIG. 2.



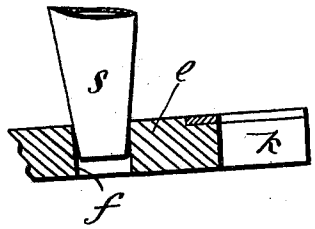
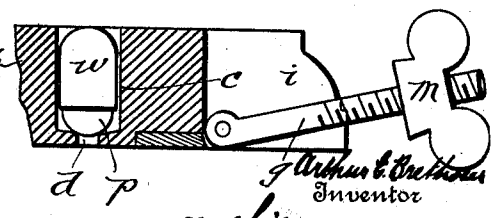


FIG. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

ARTHUR ERNEST BRETHOUR, OF OTTAWA, CANADA.

FILLER FOR CAPSULES, WAFERS, &c.

SPECIFICATION forming part of Letters Patent No. 693,637, dated February 18, 1902.

Application filed February 19, 1901. Serial No. 48,023. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR ERNEST BRETHOUR, of the city of Ottawa, Province of Ontario, Canada, have invented certain new and useful Improvements in Fillers for Capsules, Wafers, and the Like; and I do hereby declare that the following is a full, clear, and exact description of the same.

The preferred embodiment of my invention consists of a horizontal base-board provided with a series of rows of vertical perforations, the perforations of each row being of different diameter than the perforations of the other rows to accommodate capsules of different capacities. A capping-board is hinged to said base-board and is provided with perforations corresponding in diameter to and registering with the said perforations in the base-board, while a locking device is provided to lock said capping and base boards together.

For full comprehension, however, of my invention reference must be had to the accompanying drawings, forming a part of this specification, in which like symbols indicate the same parts, and wherein—

Figure 1 is a perspective view of the preferred embodiment of my invention. Fig. 2 is a detail vertical sectional view taken longitudinally of my filler and through the locking portion thereof. Fig. 3 shows the free ends of the base and capping boards in unlocked position, the end of the latter being slightly raised; and Fig. 4 is a detail view of the packing-stick.

The base-board *b* has preferably six series of holes or sockets *c*, each series being arranged in a row and the socket of each row being of uniform diameter, and a series of small openings *d* are formed through the bottom of the board and in line and communicating with said sockets. The capping-board *e* has a series of openings *f*, arranged in rows and corresponding to and registering with the sockets *c* when said capping-board rests in place upon the base-board. I prefer to connect the capping-board to the base-board at one end by a pair of hinges *f*, and I lock said boards together at the opposite end by a screw-bolt *g*, pivotally connected, as at *h*, in a slot *i* in the front edge of the base-board, with which slot a slot *k* in the capping-board registers, while a thumb-nut *m* takes upon said screw-bolt and serves as a means for clamping the boards together.

A series of funnels *s* are carried removably in the openings *d* in the capping-board, a different size of funnel being used for each row. A packing-stick *t* is provided and has its ends diminished, as at *u* and *v*, respectively, and said diminished ends being of different diameters, one end being of a diameter to fit the smallest socket, and therefore the two next larger, while the other end is of a diameter to fit the third to largest socket, and consequently the three largest shoulders formed by the diminishment of the ends limit the distance the stick can be thrust through the guiding-openings into the sockets.

In the operation of filling capsules I place the receptacle portion *p* thereof in the particular row of sockets *c* suitable for them. The capping-board should then be closed down and clamped in place, and the portions *p* of the capsules filled with the measured quantity of the drug, which is packed down by the packing-stick. When the receptacle portions *p* are filled and packed, the clamping-nut is loosened and the capping-board lifted, the capsule-caps *w* being then pressed down into the sockets and over the upper ends of the receptacle portion, after which the base-board is turned upside down and the filled capsules allowed to fall from the sockets. If the filled capsules should happen to stick in their sockets, they can be pushed from place through the openings *d* by the small end of the packing-stick. The capping-plate serves mainly as a guide or holder for the funnels.

It is obvious that with a change in the dimension of the sockets my improved filler can readily be used for filling wafers or other similar drug-carriers.

What I claim is as follows:

1. A filler for drug-carriers comprising a base-board having a series of rows of sockets, the sockets of each row being of different size than the sockets of the other rows, a capping-board having a series of rows of guiding-openings of less diameter than and registering with the said sockets, said guiding-openings serving to support funnels, and

means detachably connecting said capping-board to the base-board, substantially as described and for the purpose set forth.

2. A filler for drug-carriers comprising a base-board *b* having a series of rows of sockets *c*, the sockets of each row being of different size than the sockets of the other rows, said base-board also having a series of openings *d* in line with said sockets; a capping-board *e* having a series of rows of guiding-openings *f* of less diameter than and registering with the sockets *c;* said guiding-openings serving to support funnels; hinges permanently retaining one end of said capping-board continually in the same proximity to one end of the base-board and against lateral movement parallel to said base-board, and means for detachably connecting the opposite ends of said boards together, substantially as described and for the purpose set forth.

3. A filler for drug-carriers comprising a base-board *b* having a series of rows of sockets *c*, the sockets of each row being of different size to the sockets of the other rows, said base-board also having a series of openings *d* in line with said sockets; a capping-board *e* having a series of rows of guiding-openings *f* corresponding to and registering with the sockets *c;* hinges connecting said capping-board to the base-board, the opposite ends of said boards being correspondingly slotted; a screw-bolt *g* pivotally connected at one end in the slot in the base-board; and a thumb-nut *m* taking upon said screw-bolt, substantially as described and for the purpose set forth.

In testimony whereof I have affixed my signature in presence of two witnesses.

ARTHUR ERNEST BRETHOUR.

Witnesses:
WILLIAM P. MCFEAT,
FRED. J. SEARS.