P. CAUHAPÉ. PILL MACHINE.

No. 110,630.

Patented Jan. 3, 1871.

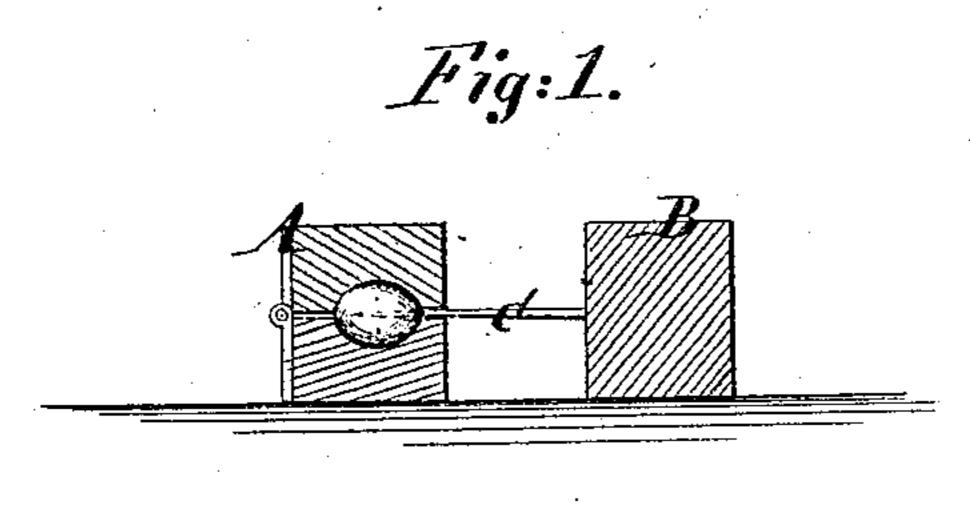
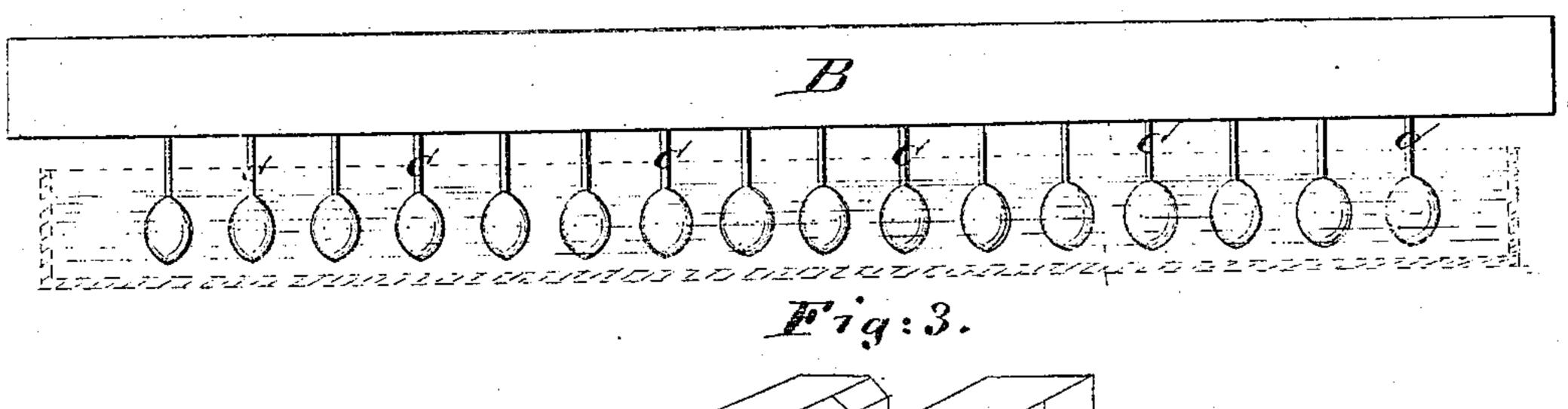


Fig:2.



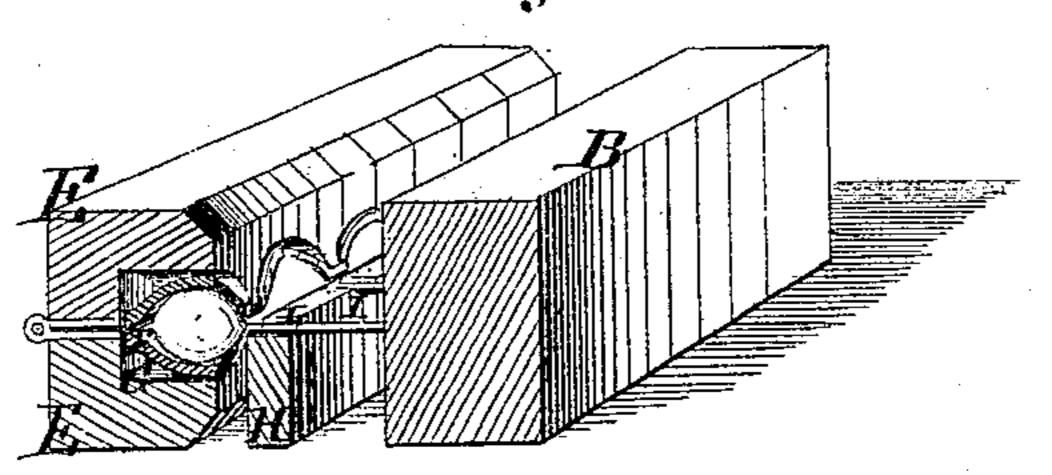
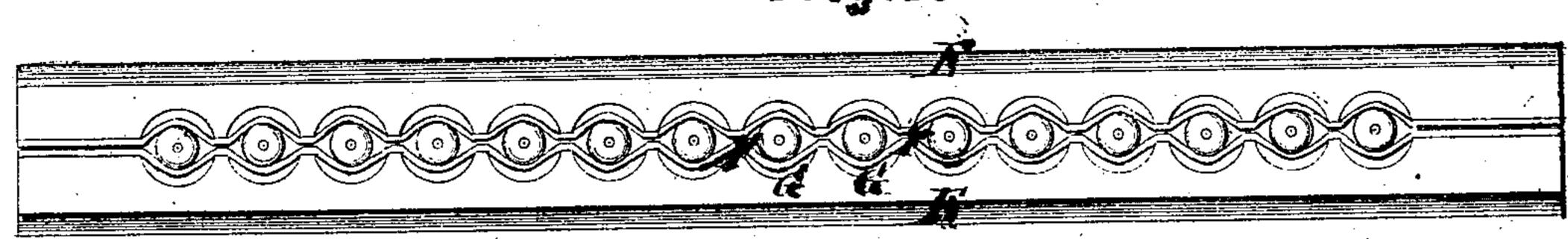


Fig: 4.



Fig:5.



Mitnesses: M. Vorlaenter

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UNITED STATES PATENT OFFICE

PIERRE CAUHAPÉ, OF NEW YORK, N. Y.

IMPROVEMENT IN PILL-MACHINES.

Specification forming part of Letters Patent No. 110,630, dated January 3, 1871.

To all whom it may concern:

the city of New York, in the county and State of New York, have invented a new and useful Improvement in the Manufacture of Pills; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of

this specification.

This invention relates to improvements in the manufacture of pills; and it consists in the employment, either in a combination with a molding device for shaping pills, or other holder for them, of a comb-bar with pins or needles, adapted for inserting a pin in each mold-cavity for taking the pills and dipping them in the coating-solution, and a clamp and stripper for taking them from the needles and redipping them, for filling and covering the cavities formed by the pins, all as hereinafter described.

Figure 1 is a transverse section of the mold and the device for taking them therefrom. Fig. 2 is a side view of the device for taking the pills from the mold and dipping them; also a sectional view of the bath, showing the manner of dipping them. Fig. 3 is a perspective view of the clamp, stripper, and the device for taking them from the mold, showing the manner of stripping them. Fig. 4 is a side elevation of the clamp; and Fig. 5 is a

face view of the same.

Similar letters of reference indicate corre-

sponding parts.

The pills are to be formed in a mold or flask, A, composed of two parts, either hinged together or not, each having a part of the cavities, of which there may be any convenient number, and from each cavity a groove extends to one side, so that where the two parts of the mold are closed together a pin may be thrust into the pill for removing and holding it, and in connection with this mold a comb-bar, B, is used, having as many pins or needles, C, as there are cavities, projecting from it, the same distance apart as the cavities, for inserting into said cavities and taking the pills therefrom. The mold is then opened, the pills removed on the pins, and inserted in the bath of glycerine or other substance with which they are to be coated.

Then for holding and redipping the pills,

Be it known that I, PIERRE CAUHAPÉ, of drawal of the pins, I use a clamp composed of the two bars E hinged together, as shown in Fig. 3, and the elastic frictional strips R of india-rubber or other like substance, the latter being placed on the faces of the said bars, which come together, when closed, over cavities G made considerably larger than the pills, and opening out through the front edges of said hinged bars, as clearly shown in Figs. 3 and 5, in which the pills are inserted by opening the clamp, presenting them thereto coincident with the cavities, while on the pins, and drawing the latter back over the stripping-bar H, placed in front of the clamp, and having the small grooves I, in the upper surface, placed in front of the cavities, for guiding the pins of the comb-bar in placing the pills in the clamp.

The pills are held by the soft, flexible, and elastic strips F, so that the ends having the holes project, as shown in Fig. 4, and may be dipped to cover and fill the holes, and then be

discharged by opening the clamps.

In practice, the molds, comb-bar, clamp, and stripper may be made in any convenient length, and with any preferred number of holes best calculated to effect a rapid operation, and any number of sets of apparatus may be used in case it may be required to retain the pills on the pins, or in the clamp for drying the substance with which they are coated.

The pills may be taken on the comb-bar while in any suitable holder, after having been formed in other molds, and I propose to use it in this way, if found advisable.

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

1. The combination of the comb-bar B, clamp E, and strippers H, substantially in the manner described, and for the purpose specified.

2. The combination of the molds A with the comb-bar B, substantially as and for the pur-

pose specified.

The above specification of my invention signed by me this 2d day of November, 1870

PIERRE CAUHAPE.

Witnesses: GEO. W. MABEE, T. B. MOSHER,