

No. 815,608.

PATENTED MAR. 20, 1906.

J. MANGIN.
PELLET COATING MACHINE.
APPLICATION FILED SEPT. 25, 1905.

Fig. 1.

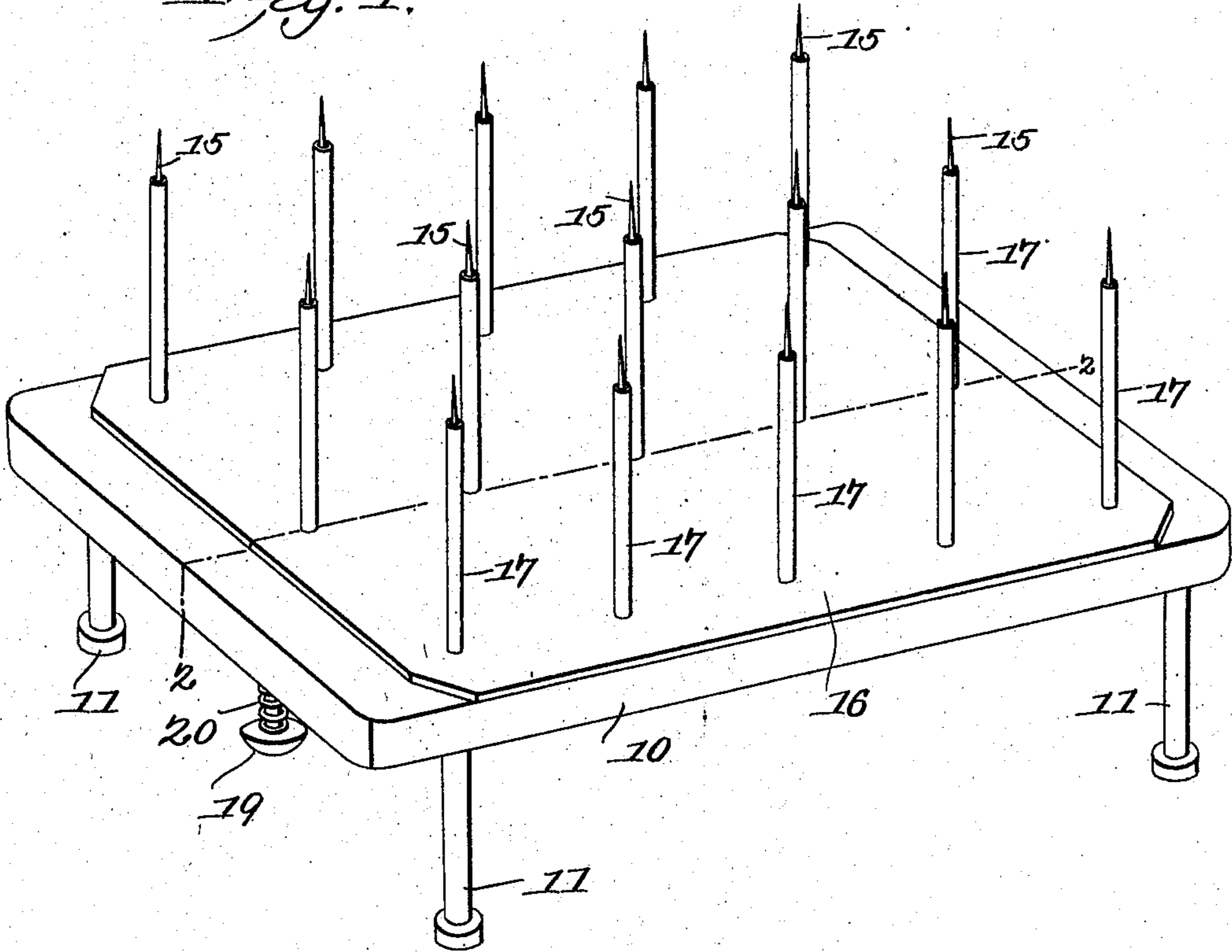
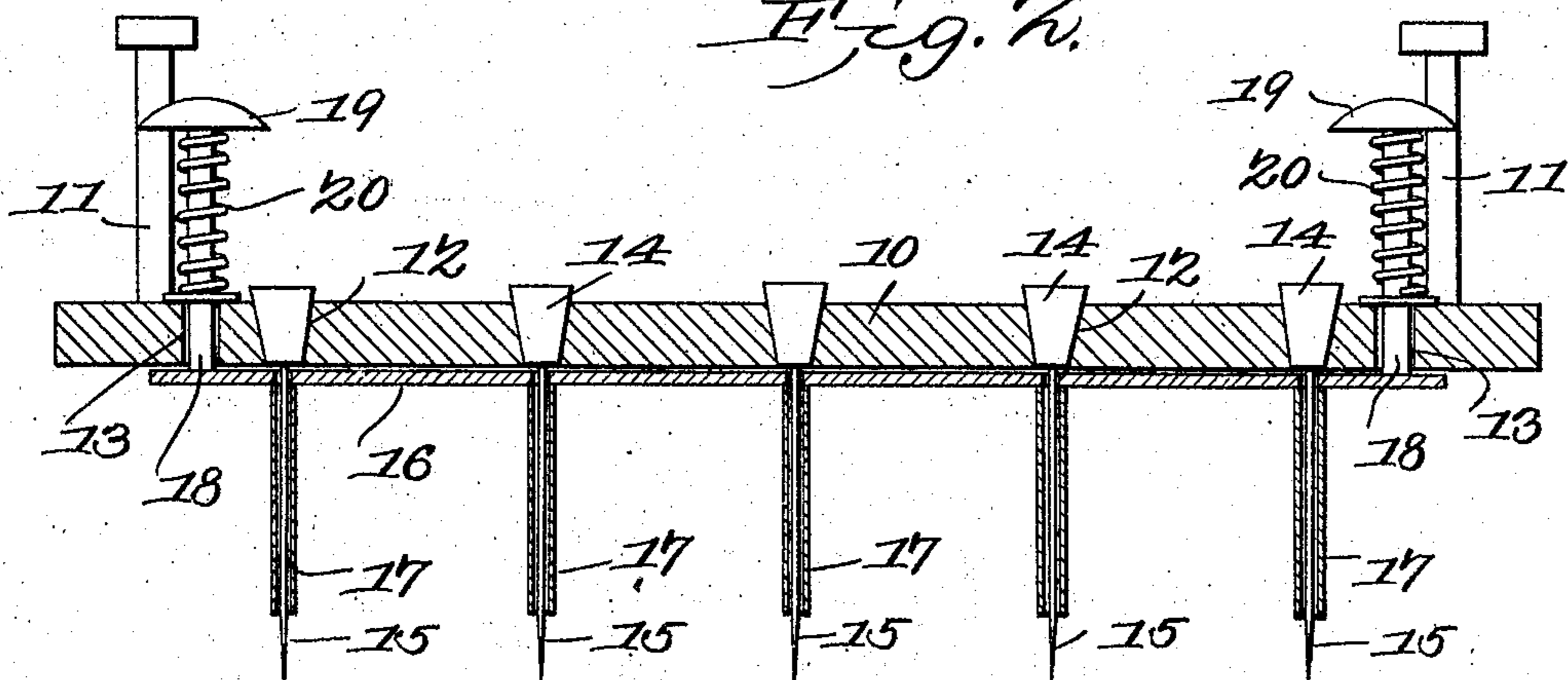


Fig. 2.



Witnesses

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PELLET-COATING MACHINE.

No. 815,608.

Specification of Letters Patent.

Patented March 20, 1906.

Application filed September 25, 1905. Serial No. 279,998.

To all whom it may concern:

Be it known that I, JOSEPH MANGIN, a citizen of the United States, residing at Sigourney, in the county of Keokuk and State of Iowa, have invented a new and useful Pellet-Coating Machine, of which the following is a specification.

This invention relates to machines for coating confections and other pellets, and has for an object to provide a device of the class embodying new and improved features of convenience, simplicity, utility, and efficiency.

A further object of the invention is to provide a pellet-coating machine having a plurality of needles to hold the pellet while and after dipping and with tubes movable upon the needles to serve as strippers.

A further object of the invention is to provide a pellet-coating machine having a plurality of needles each independently carried by a removable plug whereby the needles may be changed at pleasure.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made without departing from the spirit or sacrificing any of the advantages of this invention.

In the drawings, Figure 1 is a perspective view of the improved pellet-coating machine in position for placing pellets thereon. Fig. 2 is a longitudinal sectional view of the improved coating-machine, taken on line 2 2 of Fig. 1.

Like characters of reference indicate corresponding parts in both figures of the drawings.

In its preferred embodiment the improved pellet-coating machine forming the subject-matter of this application comprises a table of any material having legs 11, a plurality of spaced tapered openings 12, and the openings 13 adjacent the middle of each end. Within the openings 12 are disposed tapered plugs 14, each carrying a needle 15, removable therewith. Upon the side of the table opposite the legs is disposed a plate 16 of any material, having tubes 17 rigid therewith and spaced to embrace the needles and so proportioned that the points of the needles extend beyond the ends of the tubes. Adjacent the ends of the plate are secured the pins 18,

which extend through the openings 13. Each pin has a head 19 at the end and a spring 20 between the head and the table to hold the plate and table in juxtaposition and with the points of the pins exposed.

In operation, the device is positioned as shown in Fig. 1 and the nuts, confections, or pellets placed upon the upstanding needle-points. When the needles are filled, the device is inverted and the impaled pellets dipped in the coating material. After coating and any drying which may be desirable the heads 19 are pressed by the thumbs of the operator, which moves the plate 16 and tubes to cover the points and strip the coated pellet from the needle upon any prepared surface, as waxed paper, the operation being repeated as often and as rapidly as the conditions make desirable.

For coating different articles needles of different sizes are found desirable, and to effect a change it is only necessary to withdraw the removable plugs and their associated needles and replace them by other needles similarly mounted. In case of damage to a needle a new one may be similarly substituted.

It is obvious that the stripper-tubes will contact with but a small portion of the coated pellet, whereby the coating is but little damaged by the act of stripping. It will also be apparent that in dipping confections the tubes may be dipped into the coating material for a short distance and when the pellet is discharged sufficient of the coating material will drop or flow from the tube to heal the mark of the stripper.

Having thus described the invention, what is claimed is—

1. A pellet-coating machine having a perforated table, plugs removably disposed within the perforations, and needles carried by the plugs.

2. A pellet-coating machine having a perforated table plugs removably disposed within the perforations, and needles carried by the plugs and in parallelism.

3. In a pellet-coating machine, needle-tubes, needles disposed within the tubes, and means to move the tubes longitudinally relative to the needles.

4. In a pellet-coating machine, needle-tubes, needles disposed within and their points extending without the tubes, and means to move the tubes over the points.

5. A pellet-coating machine comprising a table, needles carried upon the table and in

parallelism, tubes embracing the needles, and means to move the tubes longitudinally relative to the needles.

6. A pellet-coating machine comprising, a
5 table, needles carried by the table and in parallelism, tubes embracing the needles and carried by a plate, and means to separate the plate and table.

7. A pellet-coating machine comprising, a
10 table, needles carried by the table and in parallelism, tubes embracing the needles and carried by a plate and with the points of the needles extending without the tubes, and means to move the tubes to cover the needle-
15 points.

8. A pellet-coating machine comprising, a table provided with spaced perpendicular needles, a plate provided with tubes spaced and proportioned to embrace the needles
20 with the impaling-points extended without the ends of the tubes and means to separate the plate and table and to move the tubes over the points.

9. A pellet-coating machine comprising a
25 perforated table, plugs disposed in the perforations, needles carried by the plugs, and a stripper for the needles.

10. A pellet-coating machine comprising, a perforated table, removable plugs disposed
30 in the perforations, needles carried by and removable with the plugs and parallel with each other, and a stripper for the needles.

11. A pellet-coating machine comprising, a table provided with spaced and interchangeable
35 needles, tubes disposed upon the needles and means to move the tubes simultaneously.

12. A pellet-coating machine comprising a perforated table, plugs disposed in the perforations, needles carried by the plugs, tubes
40 disposed upon the needles, and means to move the tubes simultaneously.

13. A pellet-coating machine comprising,

a perforated table removable plugs disposed in the perforations, needles carried by and removable with the plugs, tubes disposed upon
45 the needles, and means to move the tubes simultaneously.

14. A pellet-coating machine comprising, a table provided with spaced and interchangeable needles, a plate provided with tubes
50 spaced to embrace the needles and with the points of the needles extending beyond the tubes, means to hold the plates and table in yieldable juxtaposition, and means to separate the plate and table and move the tubes
55 over the points of the needles.

15. A pellet-coating machine comprising a perforated table, plugs disposed in the perforations, spaced and parallel needles carried
60 by the plugs, a plate provided with tubes spaced to embrace the needles and with the points of the needles extending beyond the tubes, means to hold the plate and table in yieldable juxtaposition, and means to separate the plate and table and move the tubes
65 over the points of the needles.

16. A pellet-coating machine comprising, a perforated table, movable plugs disposed in the perforations, needles carried by and removable with the plugs and disposed in parallelism, a plate provided with tubes spaced
70 to embrace the needles and with the point of the needles extending beyond the tubes, means to hold the plate and table in yieldable juxtaposition, and means to separate the
75 plate and table and move the tubes over the points of the needles.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOSEPH MANGIN.

Witnesses:

H. F. WAGNER,
RICHARD FRIDAY.