

(No Model.)

F. W. MÜLLER.

DROPPER FOR CONFECTIONERS AND BAKERS.

No. 361,313.

Patented Apr. 19, 1887.

Fig. 2.

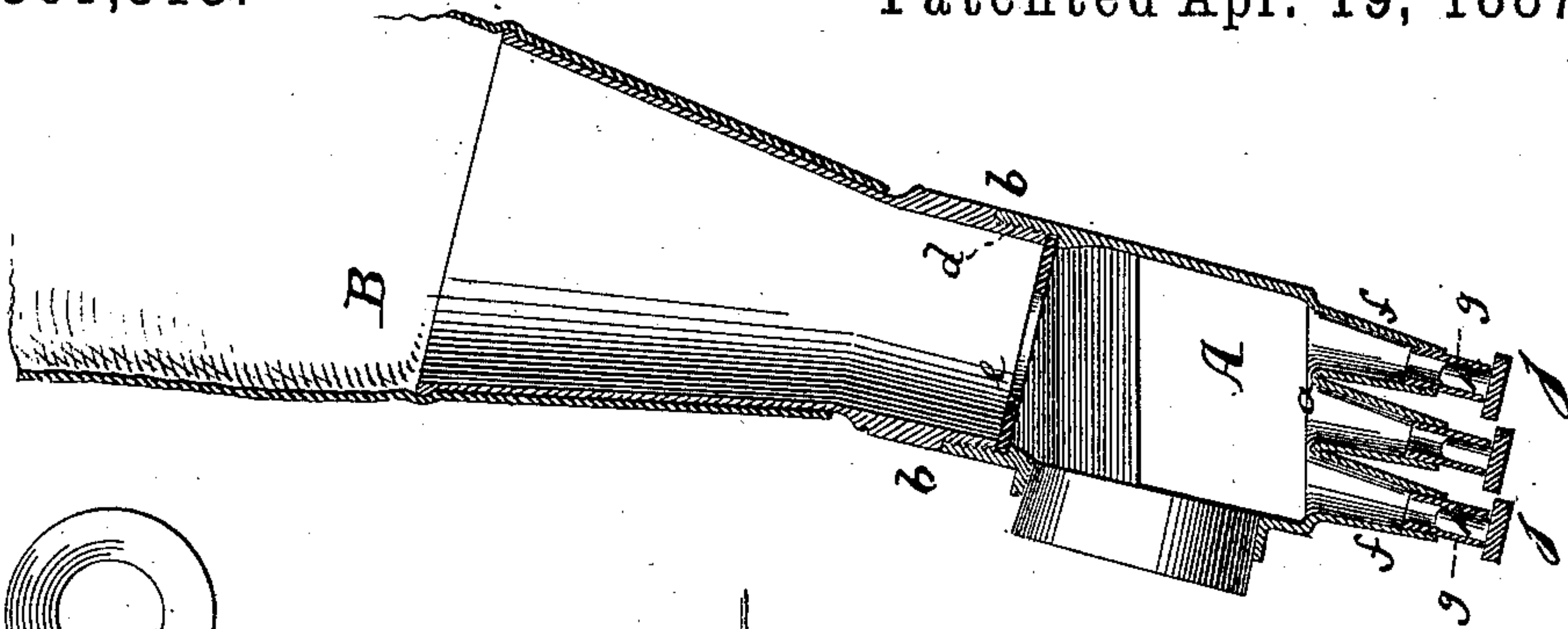


Fig. 4.

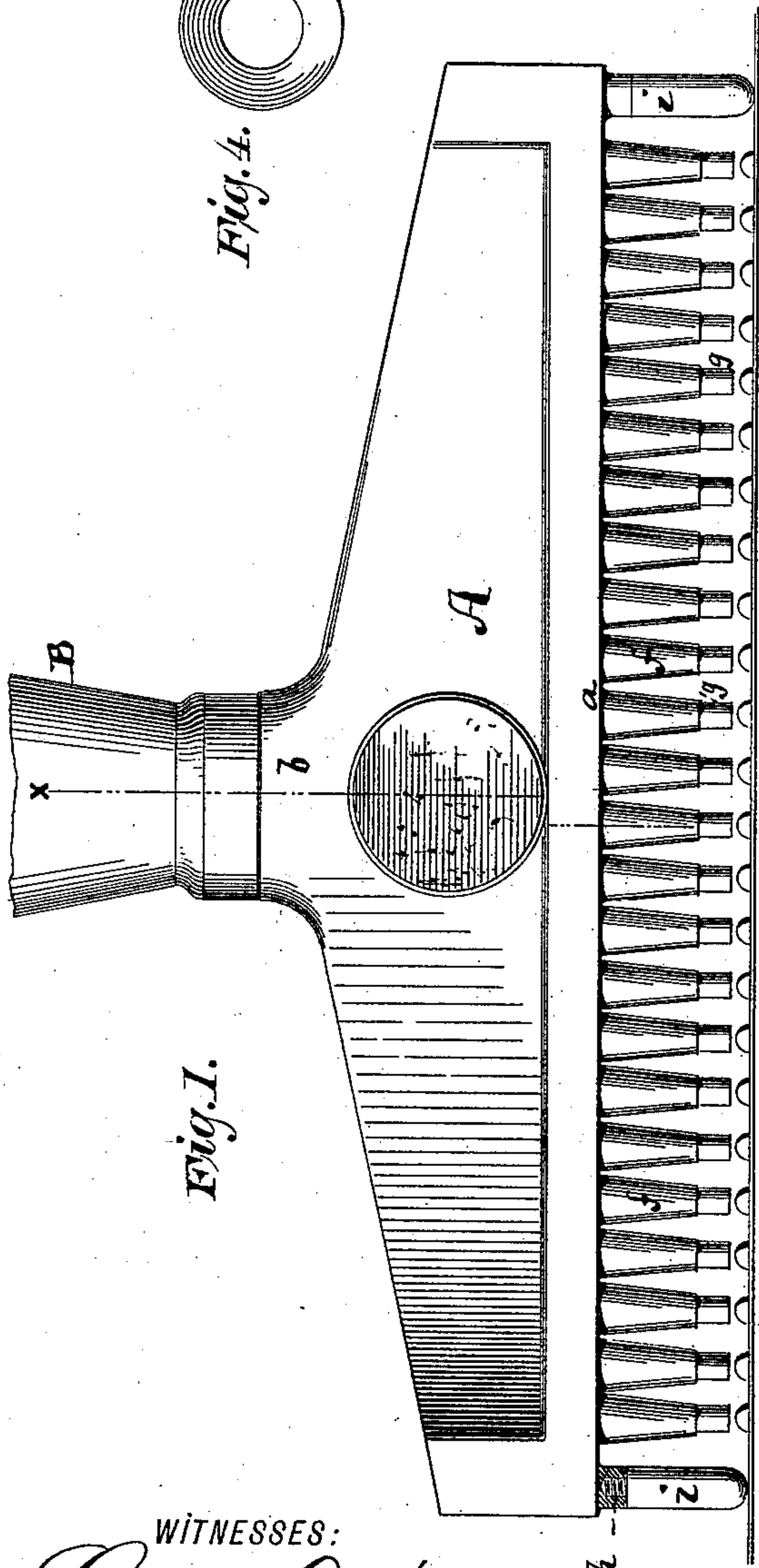


Fig. 3.

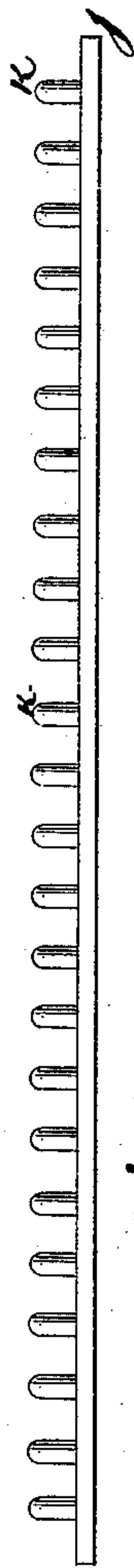
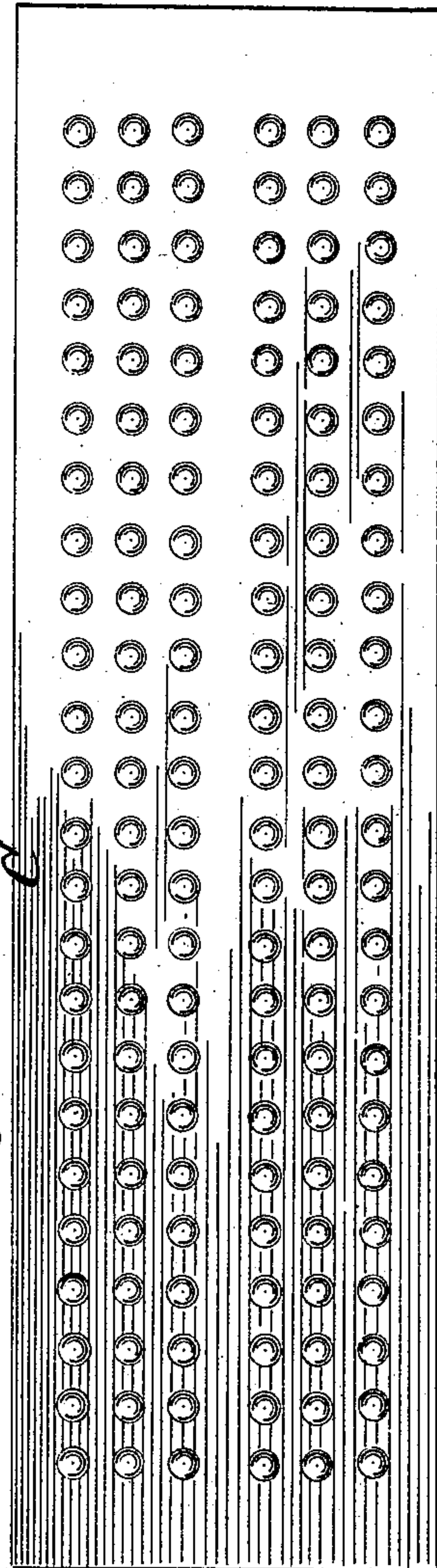


Fig. 5.



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DROPPER FOR CONFECTIONERS AND BAKERS.

SPECIFICATION forming part of Letters Patent No. 361,313, dated April 19, 1887.

Application filed July 21, 1886. Serial No. 208,612. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK W. MÜLLER, a resident of New York city, in the county and State of New York, have invented an Improved Dropper for Confectioners and Bakers, of which the following is a full, clear, and exact description, reference being made to the accompanying drawings, in which—

Figure 1 is a face view of my improved dropper. Fig. 2 is a vertical central section of the same on the line *x x*, Fig. 1. Fig. 3 is a face view of the bar for closing the discharge-tubes. Fig. 4 is a detail plan view of the washer for regulating the flow of the matter to be discharged. Fig. 5 is a top view of a sheet of paper carrying drops that were applied by my invention.

This invention relates to an instrument for producing confectioners' drops of all kinds and sizes, and round or 8-shaped cakes for bakers.

The invention consists in the novel arrangement of parts hereinafter more fully described.

In the drawings, the letter A represents the body of my improved dropper, the same having a flat bottom, *a*, and a contracted neck, *b*. The said contracted neck *b* is, by preference, made of two parts, as in Fig. 2, said two parts being screwed together, as at *d*, so that between them an annular washer, *e*, may be secured for regulating the flow of the mass to be ejected by the dropper.

The upper part of the tubular neck *b* is intended to be connected with a supply-bag, B. From the bottom *a* extend downwardly a series of tapering tubes, *f*, in one, two, or more rows, three rows being shown in Fig. 2. Each of these tapering tubes *f* has at its lower part a cylindrical tube, *g*, which is soldered or otherwise fastened in the tapering portion *f*. The lower ends of the cylindrical tubes *g* of each row are on the same level, but the different rows may be on varying levels, as is indicated in Fig. 2. To the ends of the bottom are secured, by a screw-connection, *h*, downwardly-projecting feet *i*. These feet extend farther down than the tubes *g*, as is clearly shown in Fig. 1.

For provisionally closing the lower ends of the tubes *g*, I have supplied a series of bars or plates, *j*, having upwardly-projecting pins *k*. These pins are adapted to enter the lower ends of the tubes *g* in each row, to close the same, as in Fig. 2.

When this apparatus is to be used, I first close the lower ends of the tubes *g* by the plates *j* and pins *k*. I then pour the sugary or bakers' mass into the bag, having first put a washer, *e*, in the neck *b*, to enable the mass to flow with the desired speed. The mass fills the entire apparatus and all the tubes *f* and *g*, and is forced out by hand-pressure upon the bag B. When but a small quantity of the mass is left, air-pressure may be used, if desired, to assist it in flowing—that is to say, the attendant may blow into the empty upper part of the bag B until the same is full of air, and then tie the upper end of said bag and use his hand, pressing on the air-bag so formed as a means of regulating the speed of the flow from the apparatus. The plates *j* and pins *k* are now taken off, and the operation of forming the sugary or bakers' drops may proceed. The attendant holds the dropper A down over a sheet, C, of paper or the like, until sufficient matter has flowed from the pipes *g* for forming under each a drop of the desired size. During this operation the instrument is supported on the legs *i*. After the drops have thus been formed the instrument is carried to another part of the sheet to produce thereon a new series of drops, and so on.

By the use of this instrument very large quantities of drops or analogous forms of sugar or the like may be produced in a very short space of time. The instrument is readily cleaned by pouring the cleansing-liquid through the neck *b* into the hollow or chamber of the vessel A, and allowing it to escape through the tubes *f*. None of the parts is exposed to wear except the legs *i*. These, being constantly placed on the paper or other support, are apt to wear short in course of time, and for this reason I prefer to fasten them to the vessel A by screw attachments, so that they can be readily removed and replaced.

If from any cause it should be desirable to shorten the cylindrical tubes *g*, this can be readily done by filing them all down to the new length. Being of cylindrical form, they can be produced economically from ordinary tubing, and can be filed down without varying the outlet diameters. The tapering upper parts, *f*, of the discharge-tubes facilitate the flow of the liquid in the desired direction. Whenever the flow is to be reduced, a washer, *e*, having a smaller opening can be inserted. One

having a larger opening will be put in when the flow is to be increased, and for the greatest flow no washer at all is used.

The articles that can be made with the aid of this dropper are round candies of all kinds—tablets, lozenges, &c.—and also 8-shaped cakes—such as those known as “eclairs” and “lady-fingers.” These latter are produced by a dropper having but a single row of tubes, *f*, *g*, by first leaving the dropper on the paper for a certain length of time, and then moving it in its lower position slowly along the paper, and leaving it at rest again in another place. This will produce an elongated body with a contracted middle; but of course with the invention round cakes can also be produced.

It is not necessary that the dropper should have three rows of tubes, *f g*, as its advantages will also be enjoyed when it has but one row of the same.

What I claim is—

1. The dropper A, having one or more rows of tapering discharge-tubes, *f*, and cylindrical

discharge-tubes *g* at the ends of said tapering tubes, substantially as herein shown and described. 25

2. The dropper A, having downwardly-projecting discharge-tubes and downwardly-projecting legs *i*, which are longer than said tubes and detachable, as specified. 30

3. The dropper A, having contracted neck *b*, downwardly-projecting discharge-tubes *f g*, and downwardly-projecting legs *i*, as specified.

4. The dropper A, having contracted neck *b*, made in two parts, for connection with a washer, *e*, substantially as herein shown and described. 35

5. The dropper A, having downwardly-projecting discharge-tubes, in combination with the closing-plates *j*, having upwardly-projecting pins *k*, substantially as herein shown and described. 40

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Witnesses:

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