

(No Model.)

J. SCHMIDT.

APPARATUS FOR FILLING CAPSULES.

No. 255,680.

Patented Mar. 28, 1882.

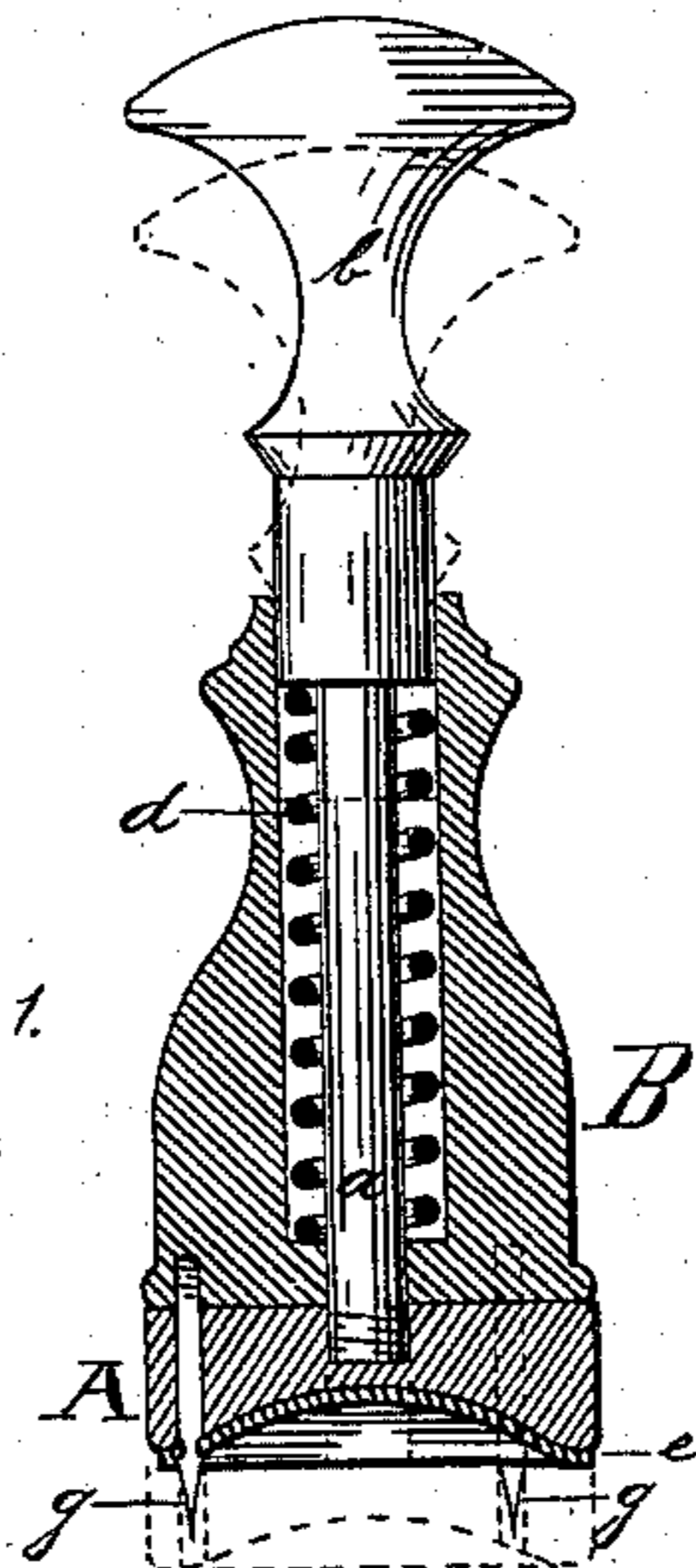


Fig. 1.

Fig. 2.

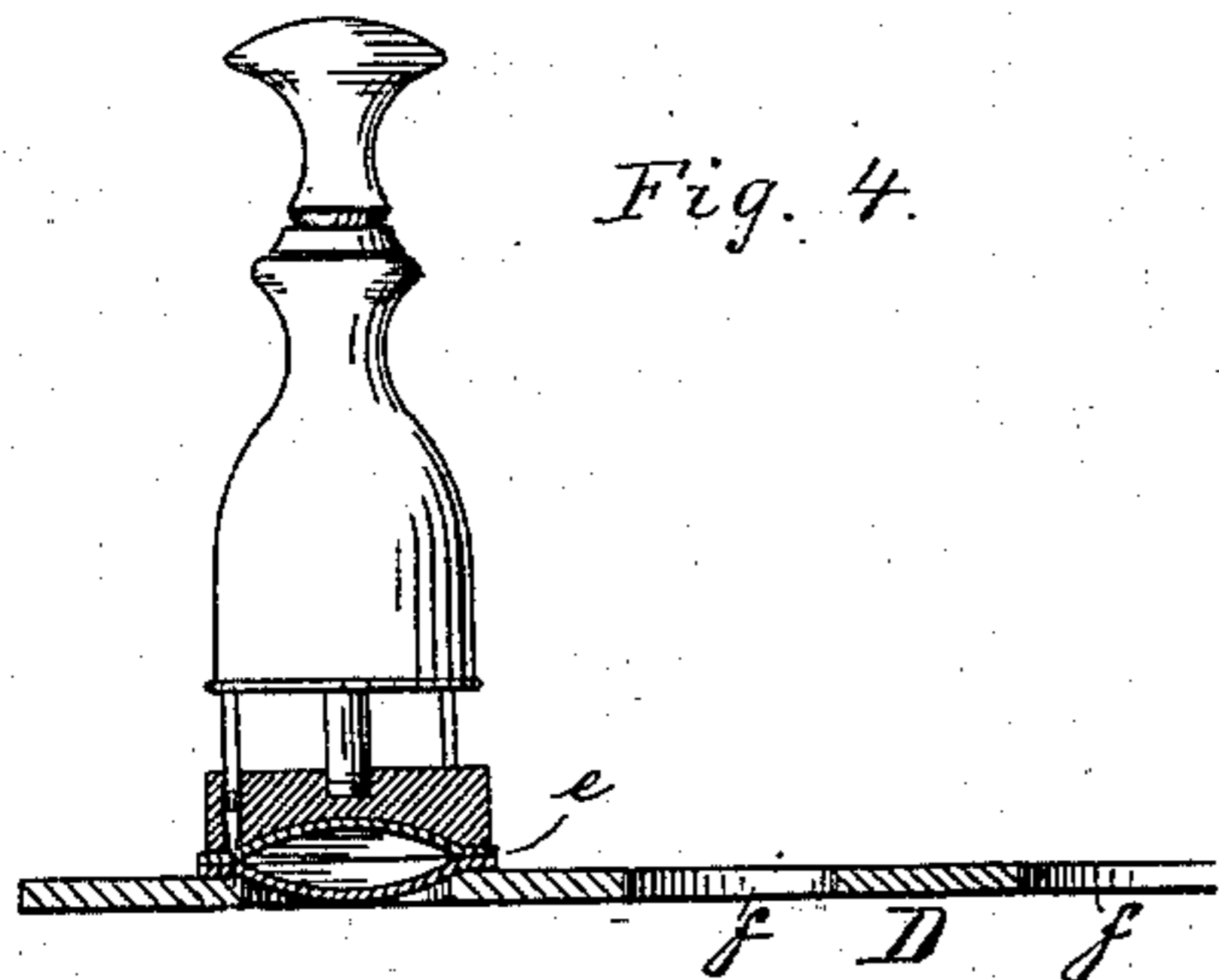
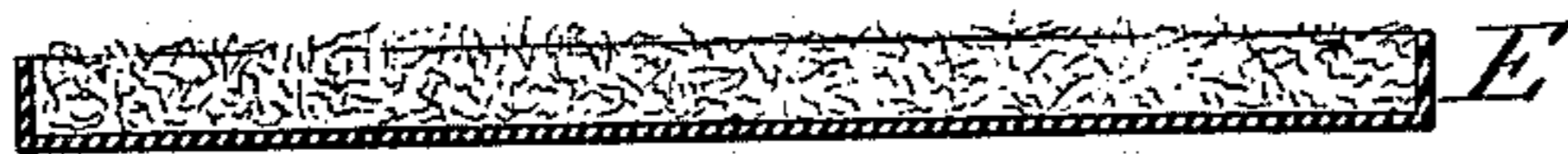
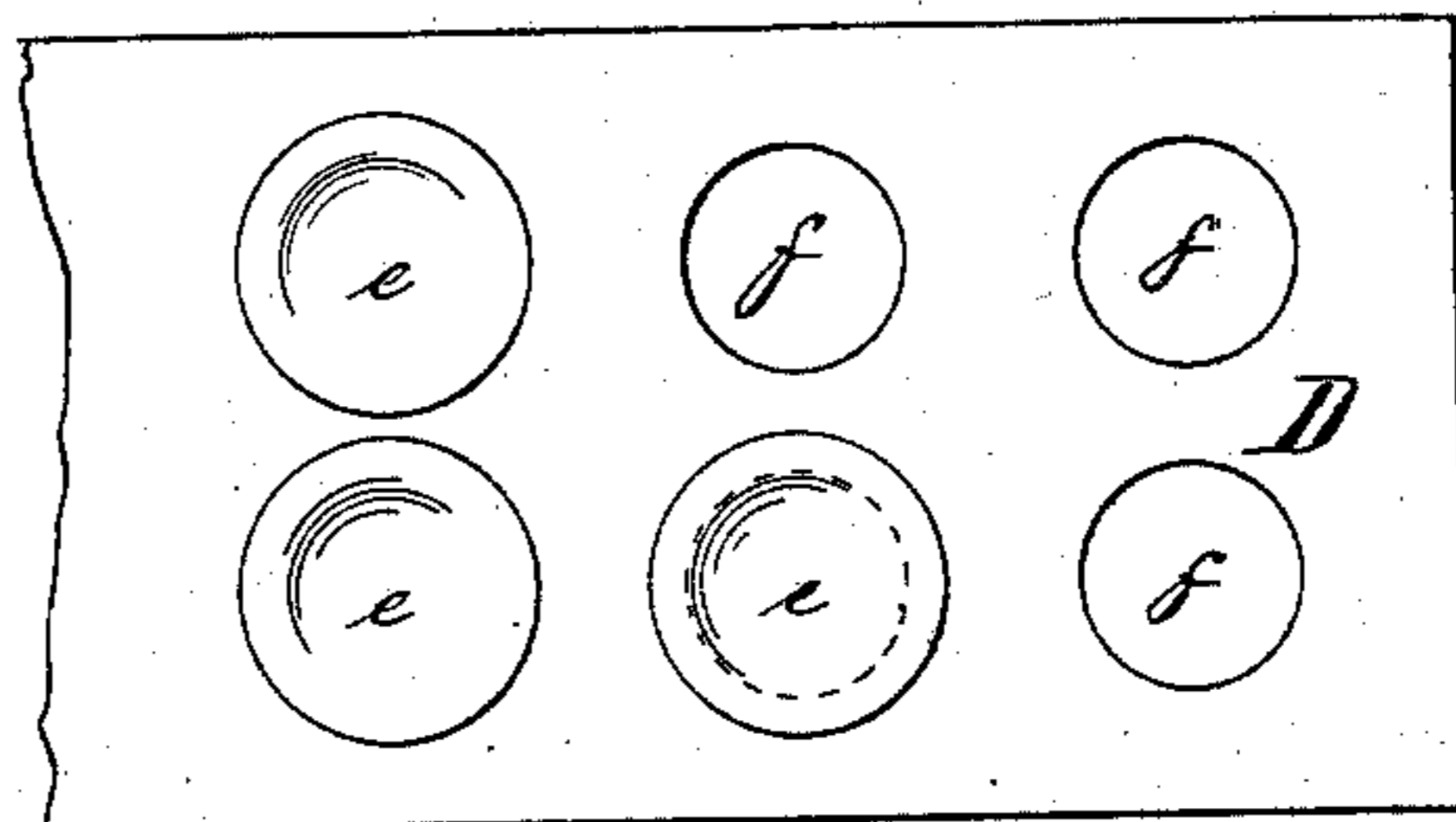


Fig. 4.

Fig. 3.



Witnesses:

Frank Thomason  
Adolph Lotz

Inventor:

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# UNITED STATES PATENT OFFICE.

JOHANN SCHMIDT, OF NUREMBERG, BAVARIA, GERMANY, ASSIGNOR TO  
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## APPARATUS FOR FILLING CAPSULES.

SPECIFICATION forming part of Letters Patent No. 255,680, dated March 28, 1882.

Application filed September 29, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, JOHANN SCHMIDT, of the city of Nuremberg, in the Kingdom of Bavaria and Empire of Germany, have invented a certain new and useful Improvement in Apparatus for Filling Capsules, of which the following is a specification.

This invention relates to devices for enwrapping medicine so as to be swallowed without experiencing the offensive taste of the same; and it is my object to produce a simple apparatus by which the medicine may be inclosed between two wafers formed of a circular and concave shape, and that will enable anybody to make their own capsules as they are required.

For this purpose my invention consists of the method and devices as hereinafter described and specifically claimed.

In the accompanying drawings, Figure 1 represents a sectional view of a stamp having a wafer attached that is to form the cap portion for a capsule; Fig. 2, a cross-section of a shallow box containing a pad of hair or felt or other moisture absorbing and elastic material; Fig. 3, a plan view of a plate of rubber that is perforated for supporting a series of concave wafers on their edges; and Fig. 4, a sectional view of the rubber plate with a ready-formed capsule placed thereon, and with the stamp in position for disengaging the wafer that forms the upper half of the capsule.

Like letters represent corresponding parts in all the figures.

A denotes the stamp, which is secured to the shank *a* of a knob, *b*. The shank *a* of the knob is surrounded by a sleeve, B, and the hole in said sleeve through which the shank *a* is passed is counterbored for forming an annular chamber around said shank that will admit of a coil-spring, *d*, which surrounds said shank and presses the knob *b* upward in said sleeve.

Into the bottom face of sleeve B, and near the exterior edge of the same, are secured three (more or less) pointed wires, *g*, that project through corresponding holes in plunger A near the periphery of the same, and the bottom face of said stamp A is concaved to correspond with the shape of the wafers *e*.

D is a plate, of rubber or other elastic mate-

rial, having a series of circular holes, *f*, punched therein, which are sufficiently smaller in diameter than the wafers, each of said holes being intended for receiving and holding one of these wafers while they are filled with powdered medicine. For this purpose these wafers *e* are made concave at one side and convex at the other, with a straight flange or edge, so as to somewhat resemble a miniature soup-plate in shape, and they are composed of a paste of flour that is pressed and baked between heated molds.

E is a shallow box or pan that contains a pad of hair, felt, or other absorbent, and which is to be soaked with water.

For making capsules I place as many wafers as capsules are desired, with their concaved sides up, in as many holes in rubber plate D, and fill each with the required amount of powdered medicine. Then I place the same number of wafers with their convex side up on a piece of thick pasteboard. Now I grasp the sleeve B of stamp A with the hand and pick up one of the wafers on the pasteboard by pushing the points *g* through the edge of the same, when the convex side of said wafer will enter the concave portion in the stamp, as shown in Fig. 1. The edge of this wafer I moisten on the dampened hair pad E, and next I press the wafer down upon a wafer that has been previously filled with medicine, when the edges of the two wafers will stick together, entirely inclosing the medicines; and, finally, I press the forefinger down upon the knob *b* while I slowly raise the sleeve, whereby the spring *d* is compressed and the points *g* are retracted into the stamp A, when the capsule will drop off.

The wires *g* are provided near their points with a small annular groove for better holding the wafer *e*.

Heretofore gelatine capsules have been in general use, which, however, will not always dissolve in a sick stomach, while flour-paste wafers will be dissolved without difficulty by simply becoming moist.

As will be noticed, the method and apparatus above described for making capsules is very simple, and will be desirable for every family.

I am aware that it is not new to mold the two sections of capsules by means of a spring-stamp having concaved lower end; and I am also aware that it is not new to unite such sections after filling by first moistening the edges and then pressing them together. I therefore make no claim thereto.

What I claim is—

1. The stamp A, with shank *a* and knob *b*, in combination with the sleeve B, spring *d*, and points *g*, all substantially as and for the purpose set forth.

2. The stamp A, with shank *a* and knob *b*, and the sleeve B, with spring *d* and points *g*, in combination with the rubber plate D, having perforations *f*, all substantially as and for the purpose described and shown.

In testimony that I claim the foregoing I have hereunto set my hand this 3d day of August, 1881.

JOHANN SCHMIDT.

Witnesses:

LEONH HAHN,  
MAX LEVINGER.