

J. R. RUSSELL.
Nap Forming Apparatus.

No. 227,585.

Patented May 11, 1880.

Fig. 1.

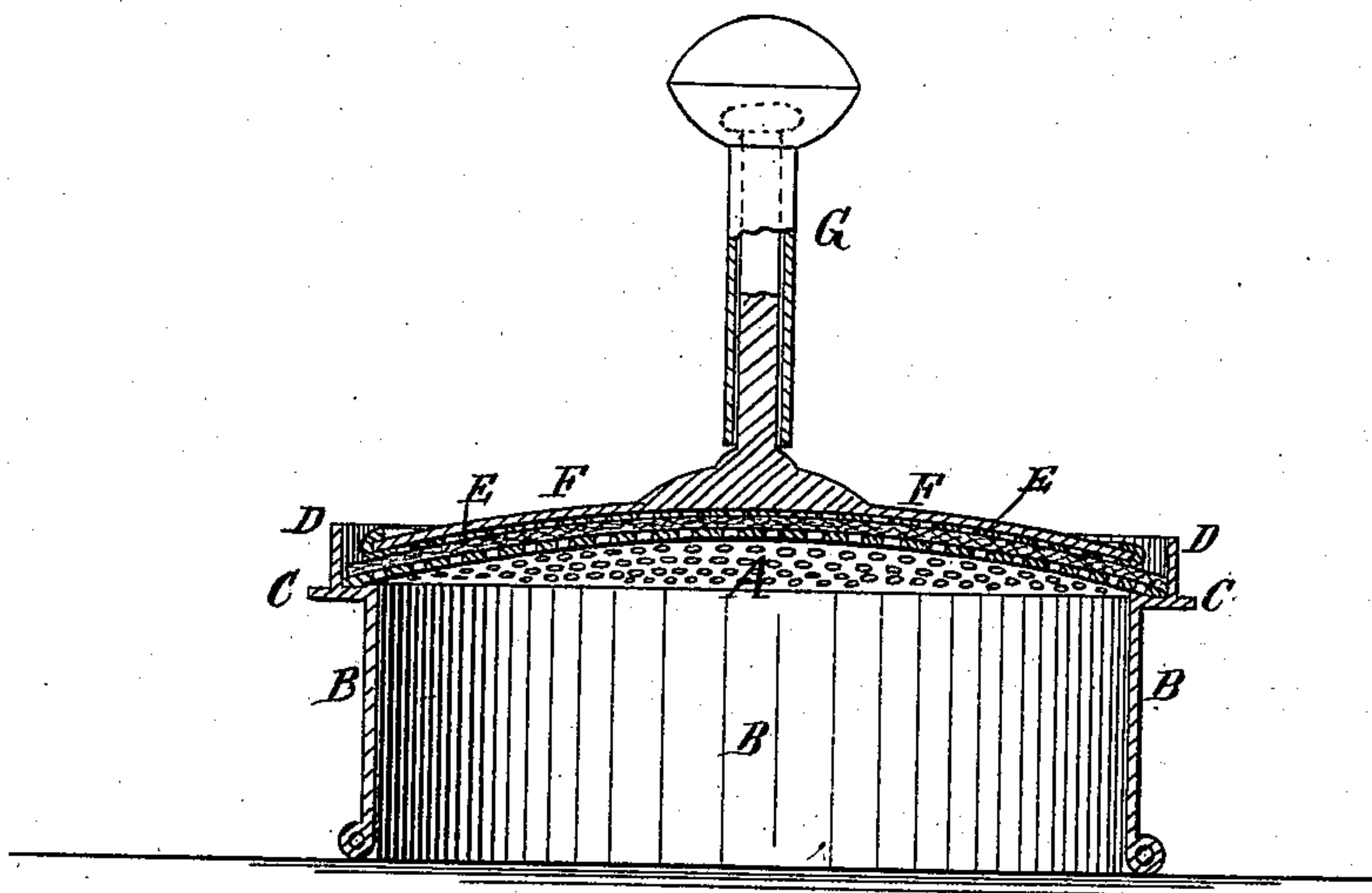


Fig. 2.

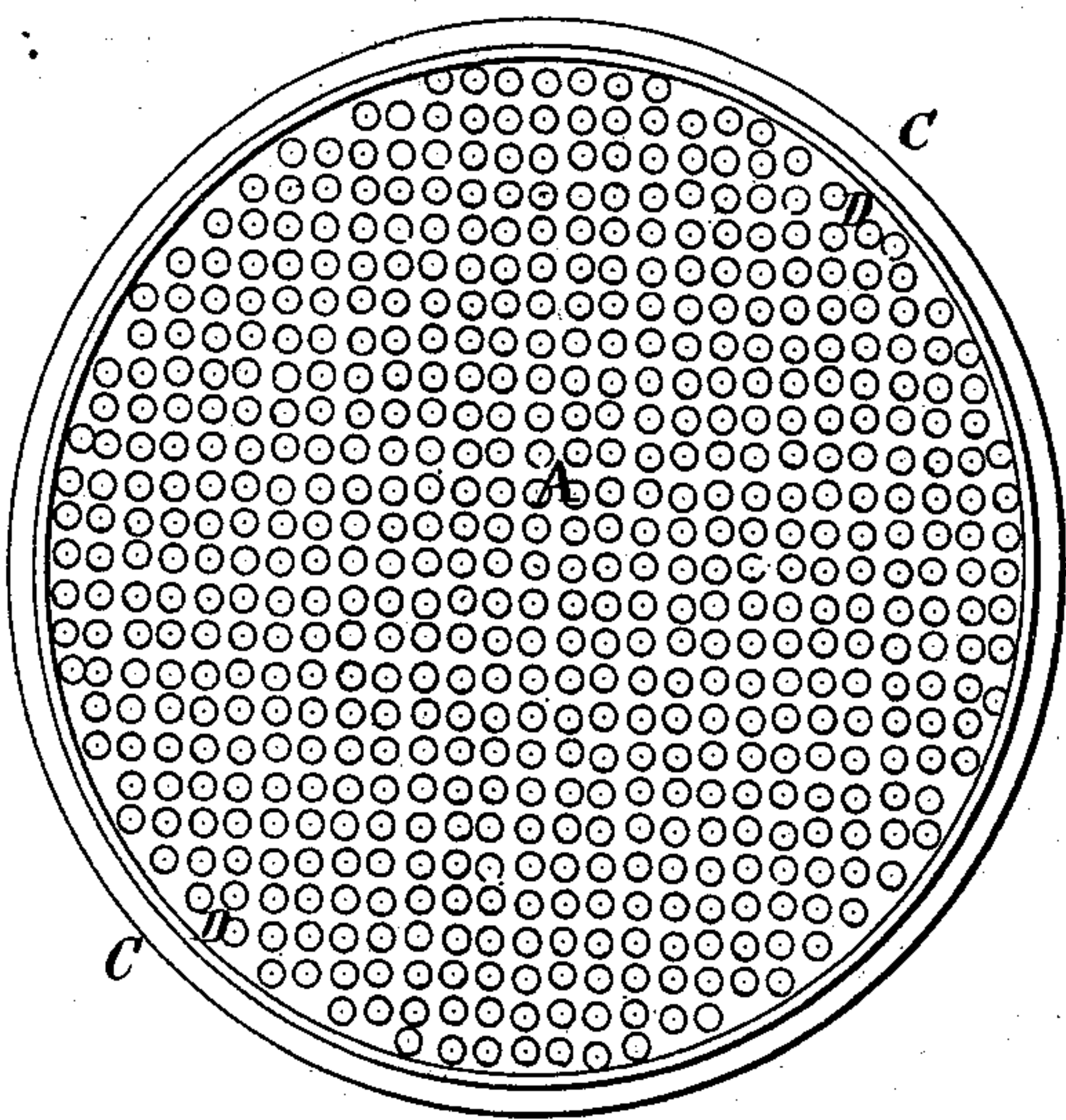
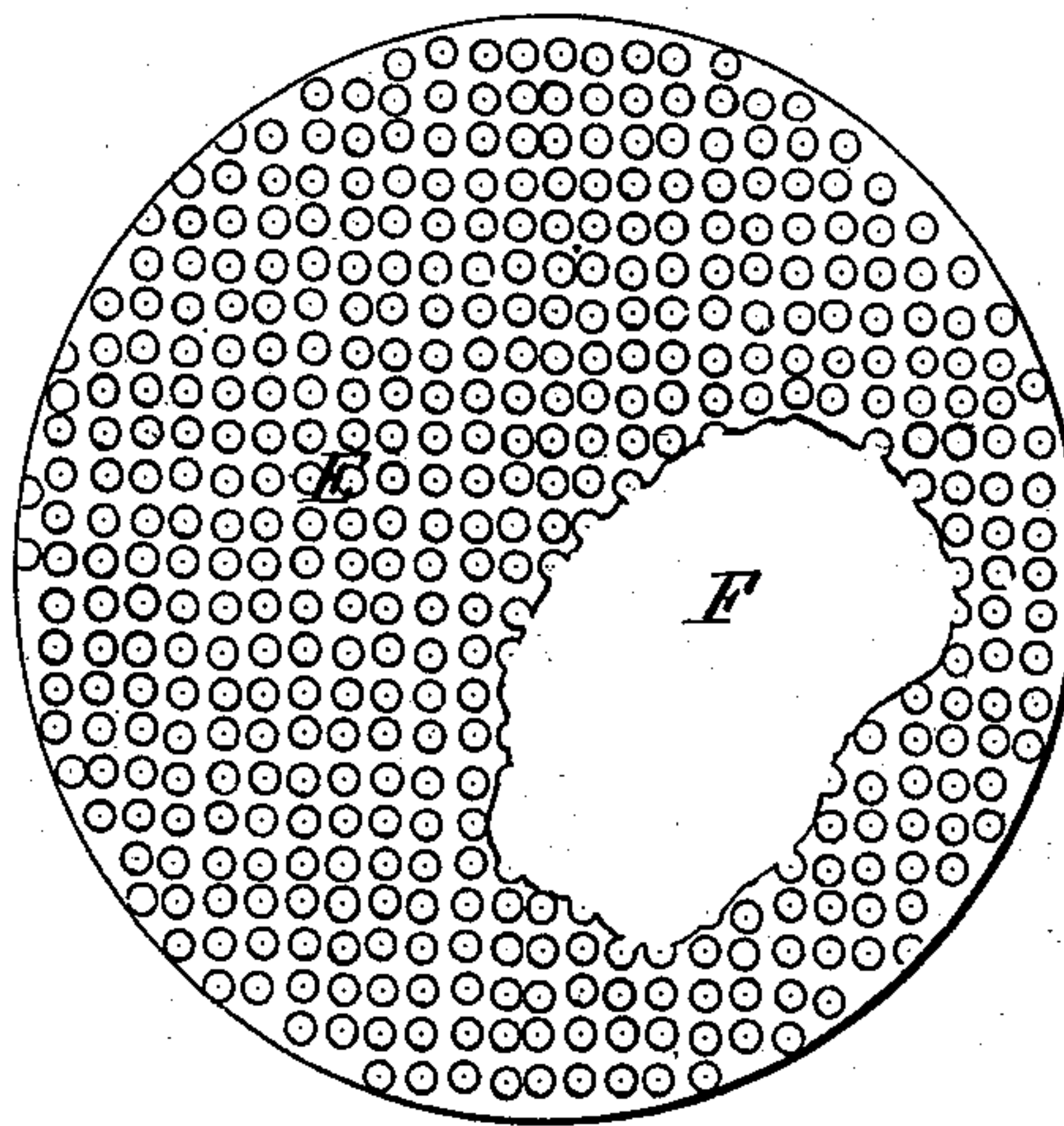


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES R. RUSSELL, OF NEWARK, NEW JERSEY.

NAP-FORMING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 227,585, dated May 11, 1880.

Application filed January 9, 1880.

To all whom it may concern:

Be it known that I, JAMES R. RUSSELL, of Newark, in the county of Essex and State of New Jersey, have invented a new and Improved Nap-Forming Apparatus, of which the following is a specification.

Figure 1 is a sectional elevation of the improvement. Fig. 2 is a face view of the lower part of the former. Fig. 3 is a face view of the upper part of the former.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an apparatus for forming naps for hats to take the place of the ordinary bowing process.

The invention consists in constructing the apparatus of a convexed perforated plate mounted upon a supporting-band and provided with ring-flanges, and the jigger formed of a face-plate, a strengthening and weight plate, and a swiveled handle, to receive the fur from a forming-machine and pack or harden it for handling, as will be hereinafter fully described.

A represents a circular sheet-metal plate, which is made slightly arched to give it the necessary strength, and which is perforated for the passage of the air that draws the fur to the said plate A as it issues from the fur-forming machine.

The plate A at its edge is secured to the upper edge of a hoop or band, B, which forms a supporting-frame for the plate A, and the lower edge of which is designed to stand upon the revolving table of the Burr forming-machine or other hat-forming machine.

Around the upper edge of the band B is formed an outwardly-projecting flange, C, to serve as a handle to catch hold of for removing the former A B from the revolving table.

Around the edge of the perforated plate A is formed an upwardly-projecting flange, D, to keep the fur from working off the plate A and to keep the jigger in place upon the said plate A.

E is a plate which is concaved to correspond with the convexity of the plate A, and which may be perforated or plain, as may be desired. I prefer to use a perforated plate, E, as it does the work faster. The plate E should

be about a quarter of an inch less in diameter than the plate A, to allow the plate E to have the necessary movement upon the plate A.

To the edge of the plate E is attached the edge of a sheet-metal plate, F, to give the necessary weight and strength to the plate E.

To the center of the metal plate F is swiveled a handle, G, by means of which the jigger is operated, and the swiveling of which handle prevents the plates E F from being turned by the movements of the operator's hand.

In using the apparatus, when the necessary amount of fur has been sucked upon the plate A by the current of air drawn through the said plate A, the former A B C D is removed from the revolving table of the machine and is placed upon a bench or table. The jigger E F G is then placed upon the fur upon the plate A, and is vibrated or slid back and forth within the flange D, to pack or harden the fur, so that it can be conveniently handled for the subsequent operations, about which operations there is nothing new.

It may be observed that the circular nap formed by this apparatus, when removed from the plate A, is divided into two semicircular parts and forms the naps for two hats.

I do not claim herein the process of producing naps for hats by blowing the fur upon a perforated cone of a hat-forming machine, or upon a horizontal cylinder made of wire-cloth; but,

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

1. The described mode of forming nap-bats for napping hats, consisting in blowing the fur or fibers upon a perforated former and hardening the same thereon, substantially as specified.

2. The described method of forming hat-naps, which consists in sucking the fur or fiber upon a perforated former and hardening the same thereon by means of a jigger, substantially as set forth.

3. A hat-nap former having a perforated fur-collecting top and a circumferential flange to confine the fur thereon, substantially as specified.

4. In a nap-forming apparatus, a perforated plate, a circumferential or surrounding flange, and means for handling such apparatus, substantially as specified.

5 5. In a nap-forming apparatus, a jigger composed of a handle and a packing-plate, for hardening the naps, substantially as specified.

6. A jigger for hardening hat-naps, composed of a handle, a perforated face, and an imperforate back, substantially as specified.

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Witnesses:

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