(No Model.)

2 Sheets—Sheet 1.

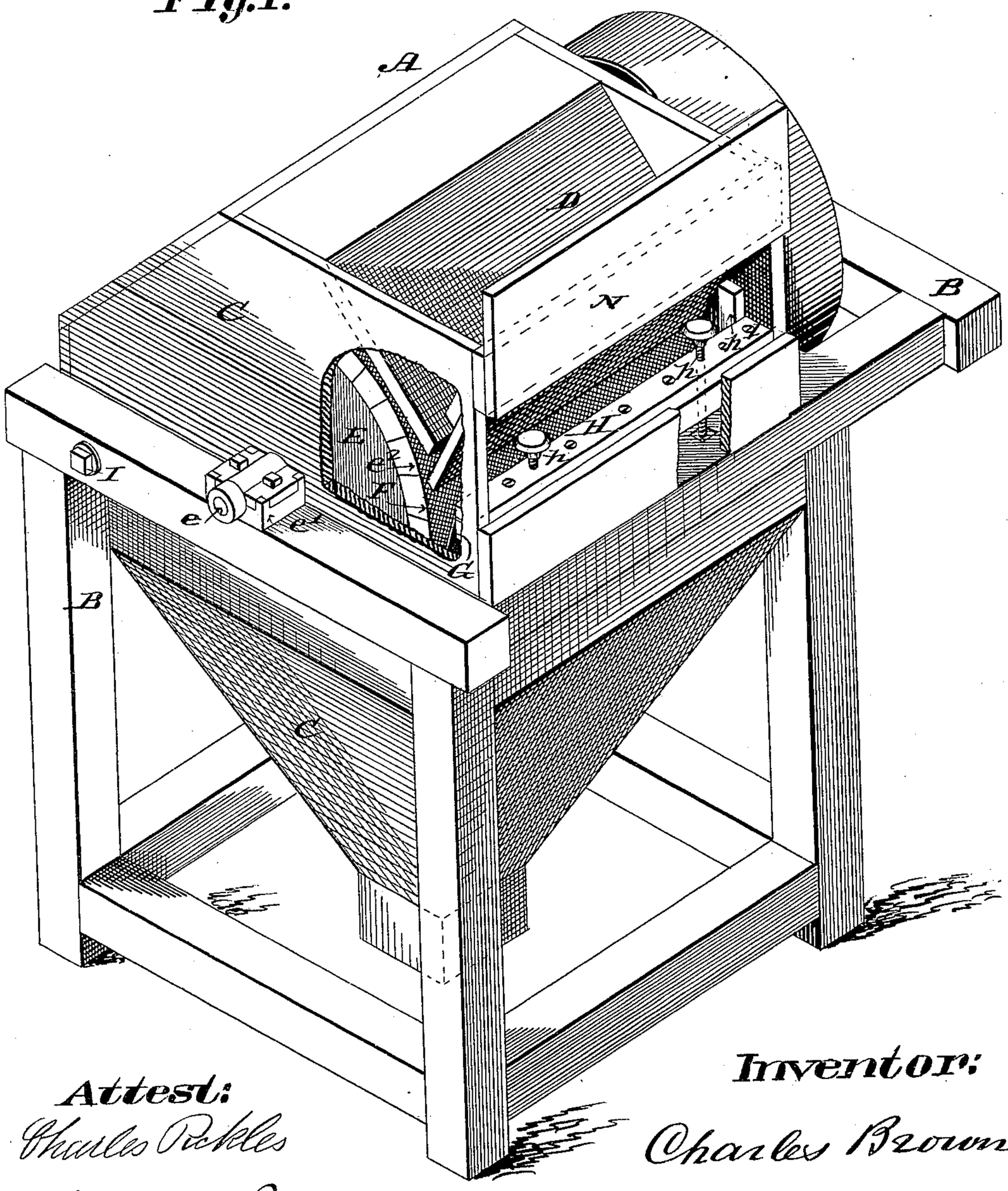
C. BROWN.

MIDDLINGS DETACHER.

No. 258,552.

Patented May 30, 1882.

Fig. 1.



Attest:

Charles Pickles

Lemuel. V. Boyd

Inventor:

Charles Brown

by C. D. Moody

atty

(No Model.) 2 Sheets—Sheet 2.

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Fig. 2.

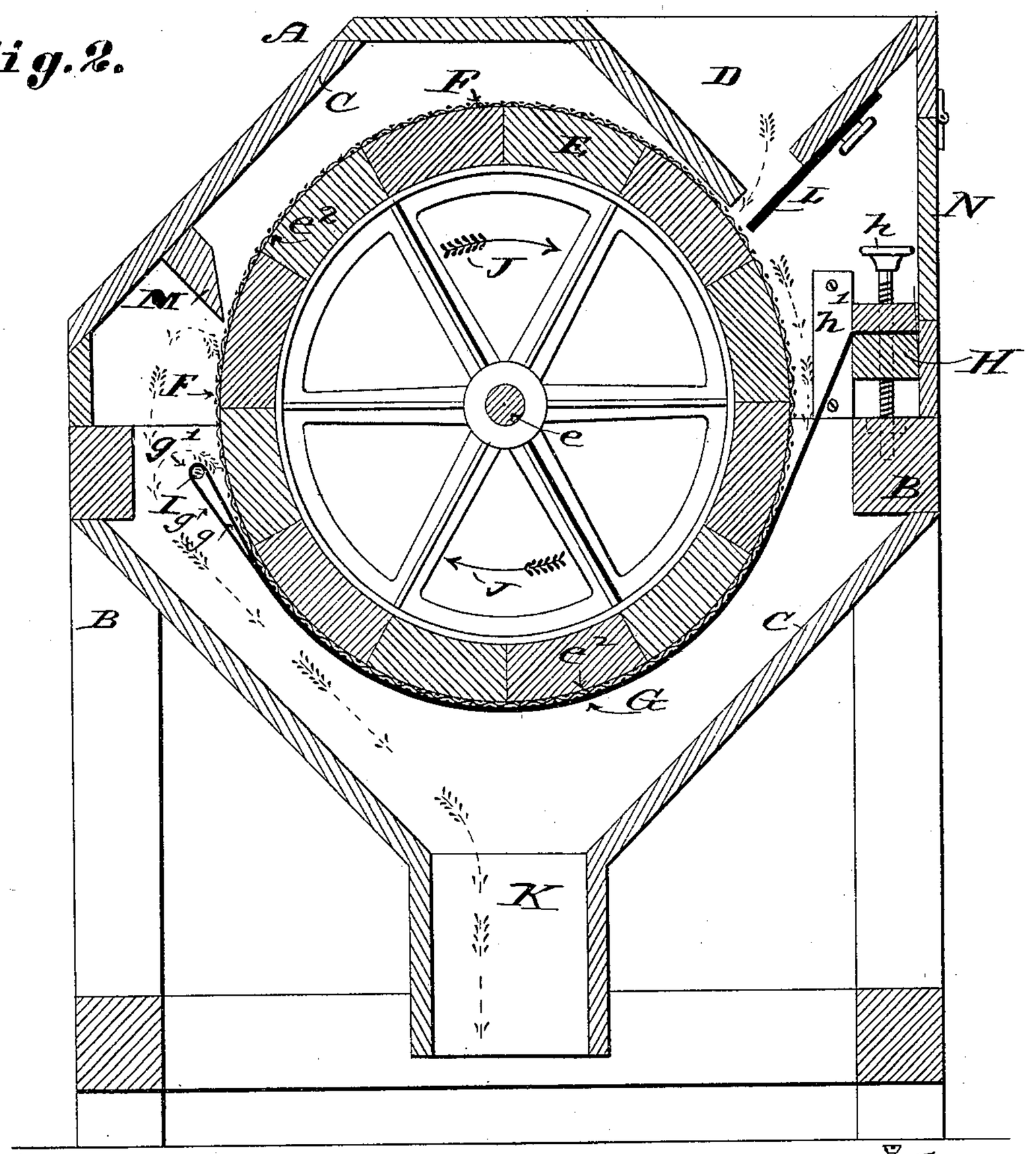
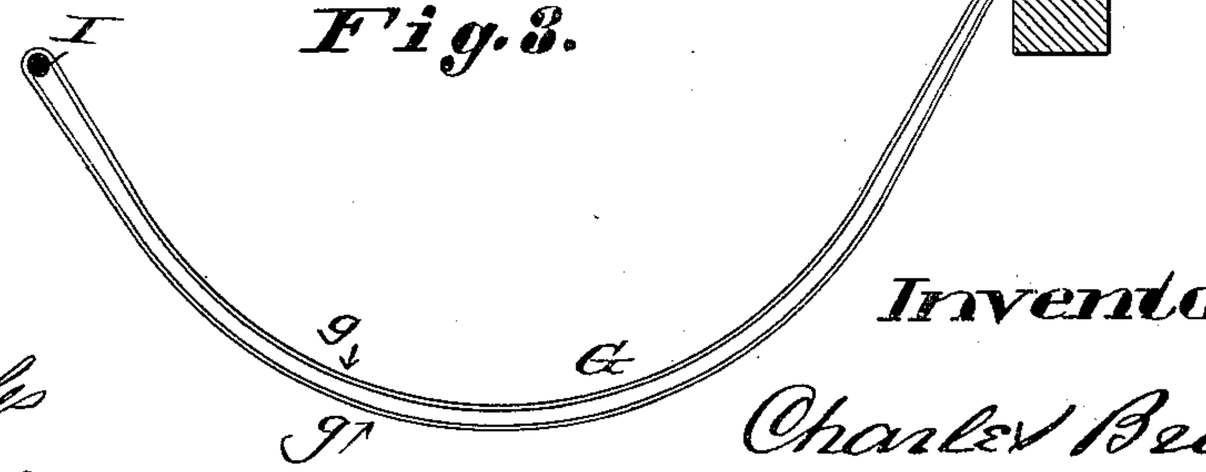


Fig. 3.



Attest.
Charles Pickles
Emil. F. Bruce

Inventor:
Charles Brown
by C. D. Moody.
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UNITED STATES PATENT OFFICE.

CHARLES BROWN, OF ST. LOUIS, MISSOURI.

MIDDLINGS-DETACHER.

SPECIFICATION forming part of Letters Patent No. 258,552, dated May 30, 1882.

Application filed February 25, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES BROWN, of St. Louis, Missouri, have made a new and useful Improvement in Middlings-Detachers, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a view in perspective of the improved machine, a portion of the casing being broken away to exhibit the interior, and the lid in front being opened; Fig. 2, a vertical section; and Fig. 3, a detail, being an end elevation of the concave as before its folds are cemented together.

The same letters denote the same parts.

The present invention is an improved means for effecting the detaching of crushed middlings, or the pulverizing of the caked white flour of crushed middlings, sufficiently to enable it to be separated ultimately, by bolting, from the germs and bran.

A represents the improved detacher, having the frame B, the casing C, and the hopper D.

E represents a cylinder attached to the shaft *e*, and turning in bearings *e'*. Its surface, e^2, is wrapped with fine wire-gauze, F, wire-cloth known as "No. 30" giving the best results.

G represents a flexible concave, made preferably of cloth like duck, and upheld against the gauze F by means of the supports H I, one of which, I, may be a rod held at its ends in the casing C, and the other, H, a clamp which receives and holds the edge of the cloth, and made vertically adjustable by means of the screws *h h*, the clamp working up and down inside the casing, and kept from being drawn toward the cylinder by means of projections, such as *h'*. By raising the clamp the cloth is brought nearer the gauze. The concave is preferably prepared by folding the cloth, as shown at *g g*, Fig. 3, and then pasting together that portion of the folds that comes against the cylinder. The cylinder having the gauze, as described, constitutes one of the surfaces in question, and the cloth concave the other surface.

The crushed middlings are fed from the hopper D, and so as to fall between the gauze F and the concave G. The cylinder E is rotated in the direction indicated by the arrows J, Fig. 2. The gauze F acts to move and to gently rub the middlings along and against the concave, pulverizing the flour thereof in so doing, and finally discharging the contents at the farther end, *g'*, of the concave, thence to fall and be discharged from the machine at K, as indicated by the arrows in broken lines in Fig. 2. The discharge from the hopper is regulated by the adjustable slide L, and a guard, M, prevents the middlings from being carried too far upward. By opening the door N the clamp H can be reached and adjusted.

I claim—

1. The combination of the cylinder E, gauze F, and concave G, substantially as described.

2. The combination of the cylinder E, the gauze F, the concave G, and means for adjusting relatively the gauze and concave.

3. The combination of the cylinder E, the gauze F, the concave G, the rod I, and the adjustable clamp H, substantially as described.

4. The combination of the casing C, the hopper D, the cylinder E, the gauze F, and the concave G, substantially as described.

CHARLES BROWN.

Witnesses:
C. D. MOODY,
SAML. S. BOYD.