

(No Model.)

H. D. SHUTT & E. T. RAGLAND.
SPRAYING APPARATUS.

No. 494,652.

Patented Apr. 4, 1893.

Fig. 1.

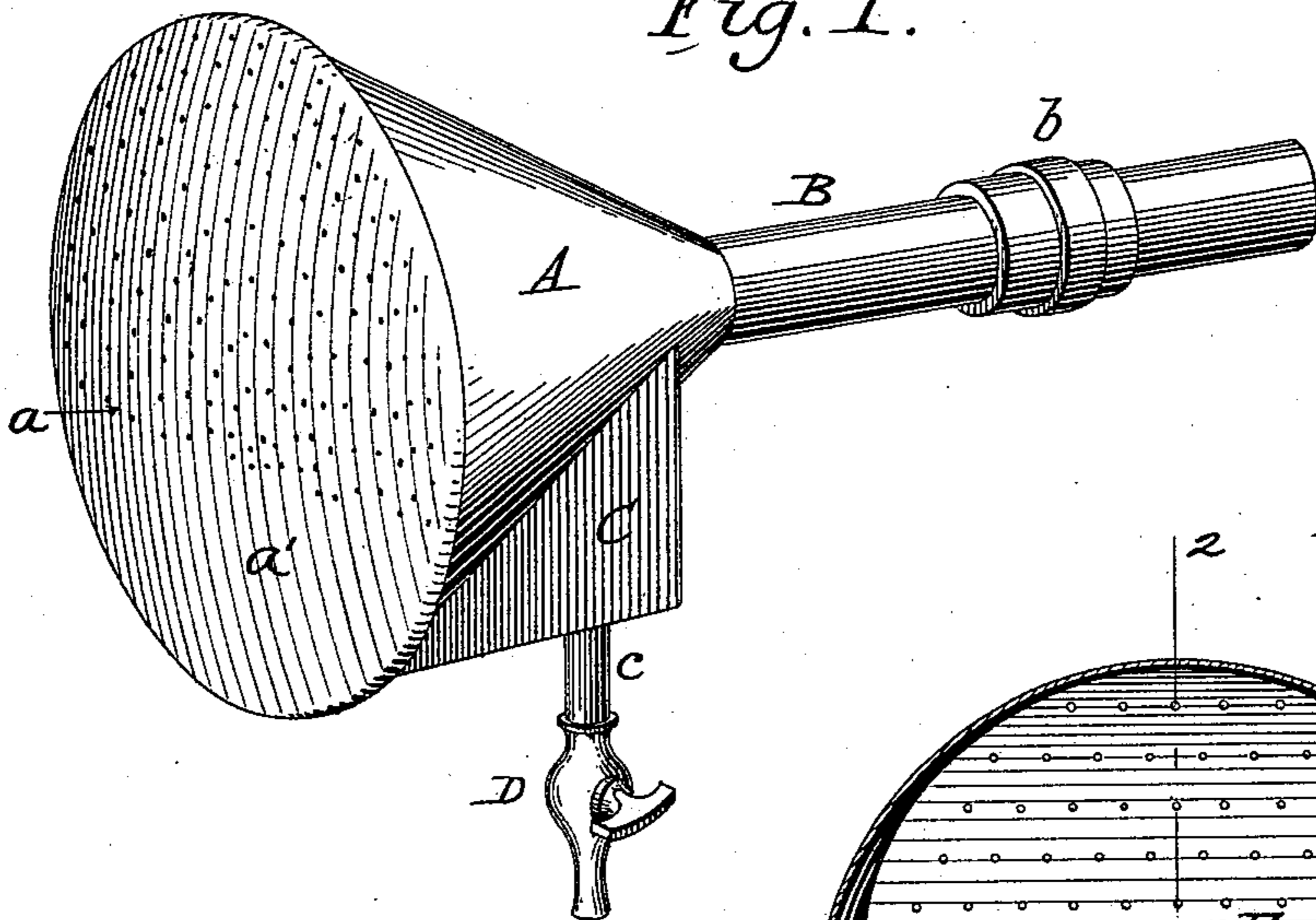


Fig. 3.
ON 2-3

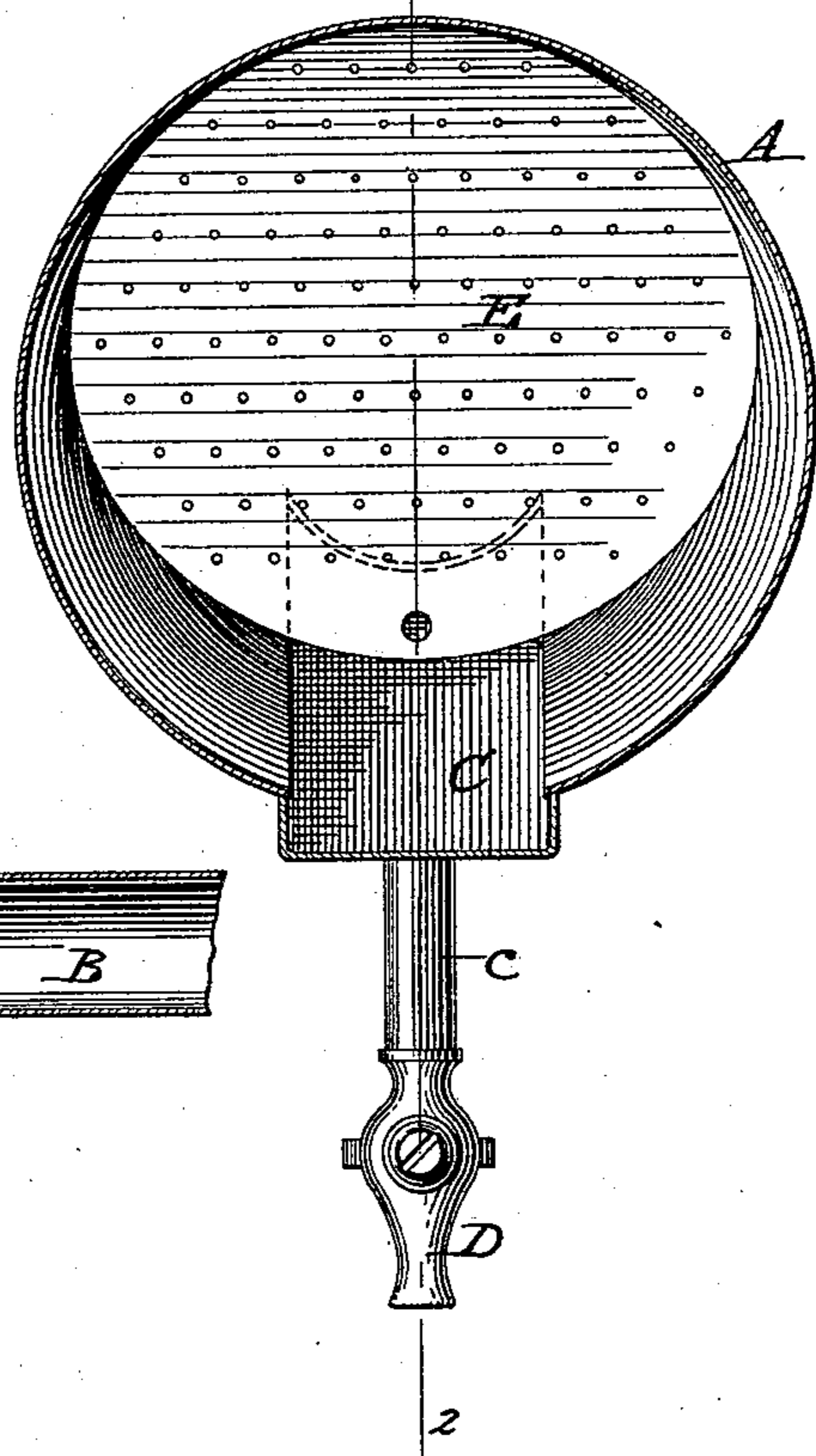
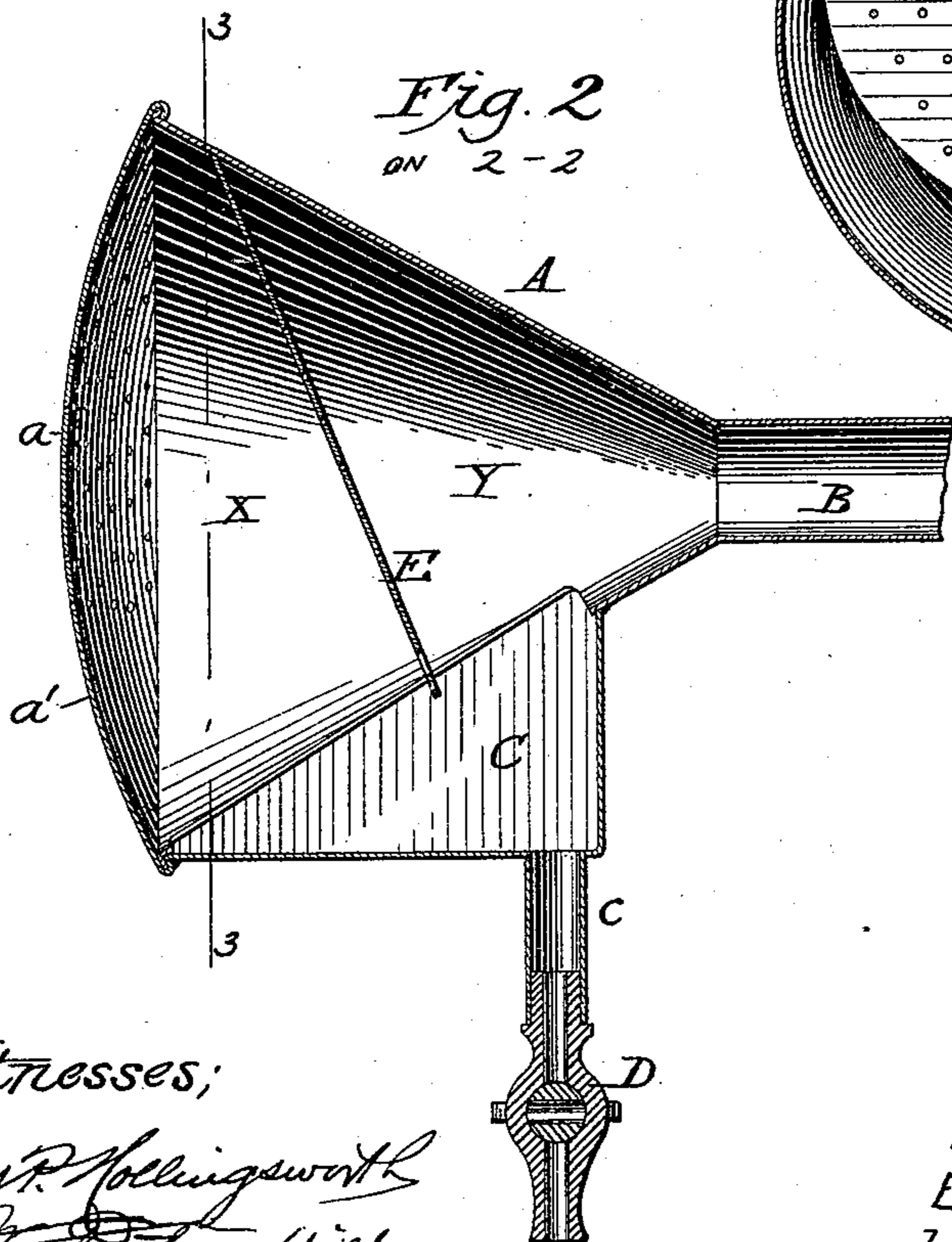


Fig. 2
ON 2-2



Witnesses;
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Henry D. Shutt,
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Paulson, Davidson & Knight

UNITED STATES PATENT OFFICE.

HENRY D. SHUTT AND EDDIE THOMAS RAGLAND, OF WINSTON, NORTH CAROLINA.

SPRAYING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 494,652, dated April 4, 1893.

Application filed June 8, 1892. Serial No. 435,976. (No model.)

To all whom it may concern:

Be it known that we, HENRY D. SHUTT and EDDIE THOMAS RAGLAND, both citizens of the United States, residing at Winston, in the county of Forsyth and State of North Carolina, have invented certain new and useful Improvements in Spraying Apparatus, of which the following is a specification.

The object of our invention is to provide an apparatus for atomizing steam or steam and water, or other fluids, for drying or spraying tobacco, wool and the like.

In the accompanying drawings,—Figure 1 is a perspective view of our improved apparatus. Fig. 2 is a central section on the line 2—2 of Fig. 3; and Fig. 3 is a transverse section on the line 3—3 of Fig. 2.

The main body A, of the apparatus, is conical in shape, and it has at its larger end a concavo-convex perforated end piece *a*. At its smaller end, the body portion connects with a pipe B, which may be connected by couplings *b* to a hose, pipe or other conduit connected with a suitable source or supply of steam, water or the like.

The main body portion A, is provided with an offset or chamber C, and this has a pipe *c*, connected with a valve or cock D. The interior of the body portion A, is divided into two chambers X and Y by a perforated partition or diaphragm E. This diaphragm is inclined from its front end rearwardly as shown in Fig. 2, and its lower rear end is secured to the casing about midway between the front and rear ends of the offset or compartment C. It will be observed that the front piece *a* is not perforated throughout its entire area. The lower portion *a'* is shown in Figs. 1 and 2 as not being perforated.

The apparatus may be conveniently used for steaming moistening or drying tobacco wool and the like.

If it is desired to supply dry steam to the tobacco or wool the stop-cock D, may be left

open and the steam will pass through the diaphragm E, and through the front piece *a*. The water will accumulate in the compartment C, and pass out through the stop-cock. If the stop-cock be closed, water will accumulate in the compartment C. When steam and water are supplied through the pipe B, the water or liquid will be broken up into the form of a fog by the diaphragm E, and will be delivered in a finely atomized vapor through the front piece *a*.

By the use of a diaphragm we prevent moisture or water from dripping from the front piece *a*, as surplus water is caught in the compartment C, and may be drained off into any suitable receptacle through the cock D.

We claim as our invention—

1. A spraying apparatus comprising a conical body portion, a concavo-convex perforated front piece connected to the larger end of the body portion, a supply pipe connected to the smaller end, an offset or compartment C, and an inclined perforated diaphragm dividing the body portion into compartments.

2. A spraying apparatus comprising a conical body portion, a concavo-convex front piece connected to the larger end of the body portion, the front piece having its upper portion perforated and its lower portion imperforate, a supply pipe connected to the smaller end of the body portion, an offset or compartment C, an inclined diaphragm dividing the body portion into compartments, having its upper portion perforated and its lower portion imperforate, and a stop cock connected to the compartment C.

In testimony whereof we have hereunto subscribed our names.

HENRY D. SHUTT.
EDDIE THOMAS RAGLAND.

Witnesses:

B. W. MILLER,
BALTUS DE LONG.