## J. S. GILMAN.

HEATING DRUM ATTACHMENT FOR OIL AND GAS STOVES.

No. 261,845.

Patented Aug. 1, 1882.

Fig. 1,

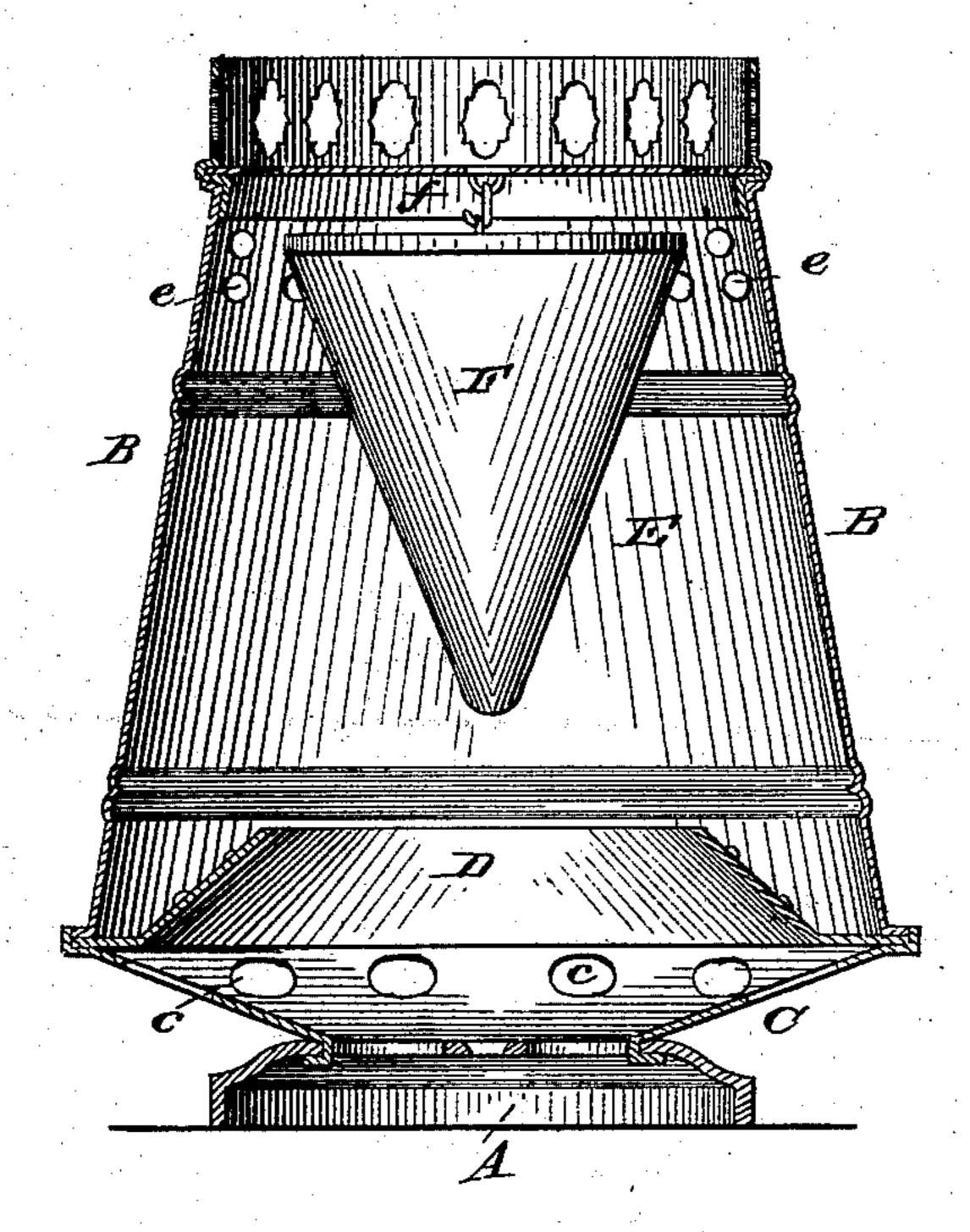
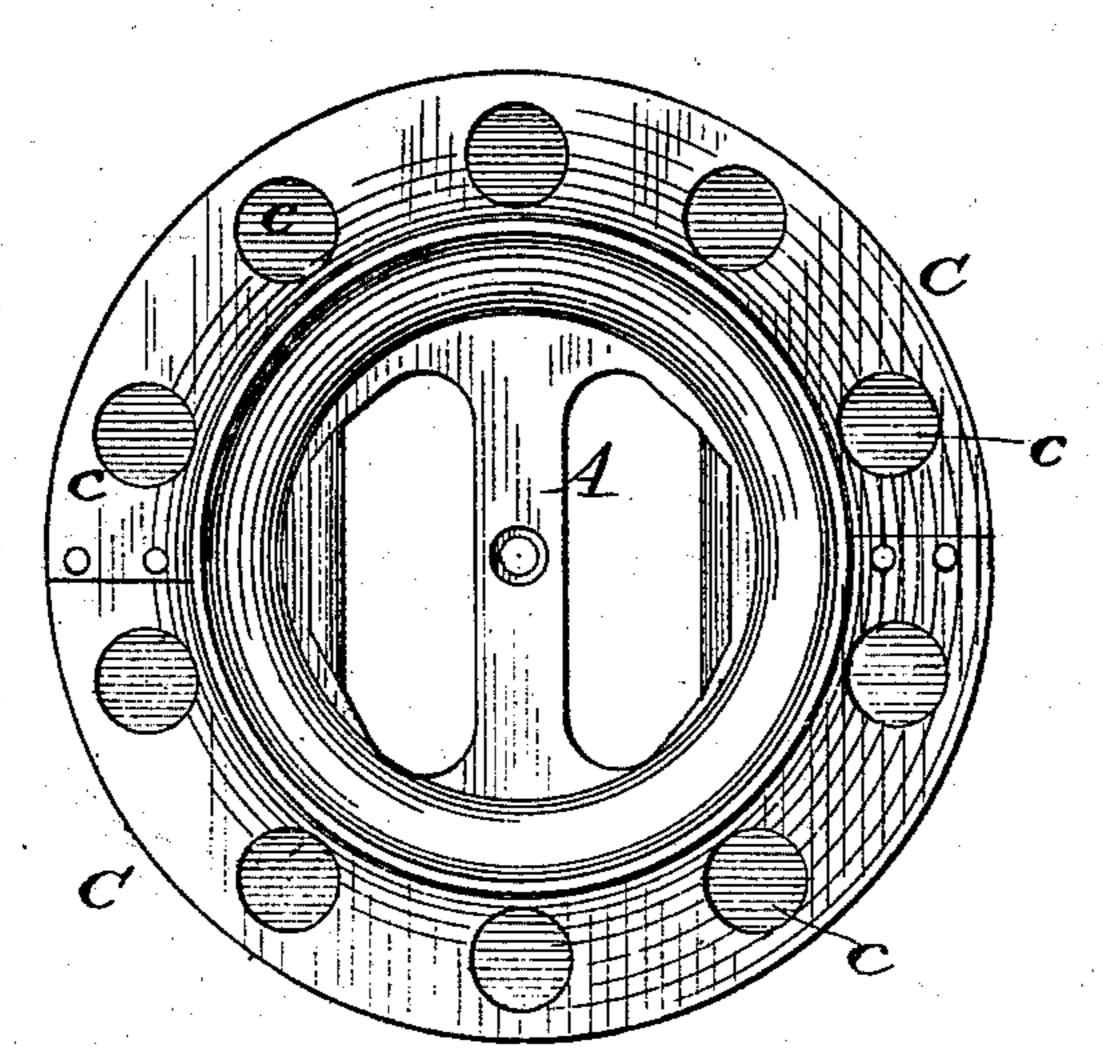


Fig. 2,



WITNESSES: Red. S. Steterich

Charles H Bake

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Fig.3

WITNESSES:

Thed & Dieterich.

INVENTOR.

Julius S. Gilman

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## United States Patent Office.

JULIUS S. GILMAN, OF NEW YORK, N. Y.

## HEATING-DRUM ATTACHMENT FOR OIL AND GAS STOVES.

SPECIFICATION forming part of Letters Patent No. 261,845, dated August 1, 1882.

Application filed February 11, 1882. (No model.)

To all whom it may concern:

Be it known that I. Julius S. Gilman, a citizen of the United States, residing at New York city, in the county of New York and 5 State of New York, have invented certain new and useful Improvements in Heating-Drum Attachments for Oil and Gas Stoves; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in heating-drum attach-15 ments, especially designed for use in connection with oil and gas stoves for furnishing hot air for heating rooms, the invention having for its object the production of a heating-drum attachment that can be readily applied to the 20 ordinary class of oil and gas stoves now in general use, by which the cold air from the room can be constantly taken in the drum and deflected into and on the heat and flame from the stove, by which any impurities contained 25 therein may be destroyed or burned, and the air discharged from the drum in a pure and heated state; and to this end the invention consists in novel features of construction and combination of parts, all as will be hereinafter 30 fully described, and set forth in the claim hereto annexed.

Referring to the accompanying drawings, forming a part of this specification, Figure 1 represents a vertical central section through my improved attachment; Fig. 2, a bottom view or plan of the same. Fig. 3 represents a vertical central section through my improved attachment as applied to an oil-stove.

In the drawings, A represents the base of 40 my improved attachment adapted to be applied to an ordinary oil or gas stove, having a central opening through which pass the heat and flame from the stove B', and B my improved heating drum attachment as applied thereto. The drum is made double-coniform shape, the lower inverted - coniform - shaped base portion, C, being provided with a series of openings, c, through it around its circumference for admitting cold air from the room to the interior of the drum. Arranged directly over the inverted or base portion C is an in-

terior cold-air conductor, D, (shaped and located as shown,) for deflecting the cold air entering through the openings c of the base portion C directly onto and in the heat and 55 flame from the oil or gasstove, and from which the air is deflected outward all around the upper portion, E, of the shell or drum by a downwardly - projecting inverted - cone - shaped or other form of spreader, F, suspended or other- 60 wise secured in the shell or drum above the coldair conductor D, thus giving the air an even radiation out around the interior wall of the upper portion of the shell or drum, which is provided with a series of holes, e, through its 65 sides near the upper end, and also through the top plate, f, for producing the necessary upward draft through the drum or shell, and discharging the heated air into the room.

By the above-described construction of drum 70 it is adapted to add a hundred per cent. or more to the volume of the heat, as the cold air from the room is being constantly taken in the drum and discharged from the upper sides and at the top back into the room in a pure and 75 heated state, as the air from the room, with all its impurities, is taken into the drum and deflected or discharged directly in and over the intense heat of the flame, which will burn or destroy the impurities, (and any smoke that 80 may come from the burning oil, when oil is used,) and discharge it back into the room in a pure and heated state, as above described.

The top plate and spreader are adapted to be removed for the purpose of permitting the 85 interior of the drum to be wiped or cleaned out. Other forms of spreaders common to heating-drums may be used, if desired, and in some

drums may be used, if desired, and in some cases the spreader may be dispensed with without materially affecting the operation of 90 heating the air.

I am aware of Reissued Patent No. 968, dated May 29, 1860, in which air enters through openings in the side of the casing of the stove, and passes up through the surrounding space of 95 the tube in which the flame and heated air pass out, and such I do not wish to be understood as claiming as of my invention.

openings, c, through it around its circumference for admitting cold air from the room to the interior of the drum. Arranged directly over the inverted or base portion C is an in-

heated air from the stove, whereby I am enabled to apply my attachment to most of the oil and gas stoves.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

The combination, with an oil or gas stove, of the hot-air attachment consisting of a drum or shell having openings through the upper portion thereof, and inverted-coniform-shaped base portion C, having a series of cold-air inlets, c, a coniform shaped conductor, D, arranged directly over said base portion C, a

spreader, F, arranged above said conductor, and the base A, having a central opening 15 through which pass the heat and flame from the stove B', substantially in the manner as and for the purpose herein shown and described.

In testimony whereof I affix my signature in 20 presence of two witnesses.

JULIUS S. GILMAN.

Witnesses:
T. FRANCIS GIBBONS,
DAVID GILLIS.