(No Model.) 2 Sheets—Sheet 1.

W. STORM.

STEAM JET BLOWER.

No. 534,087. Patented Feb. 12, 1895.

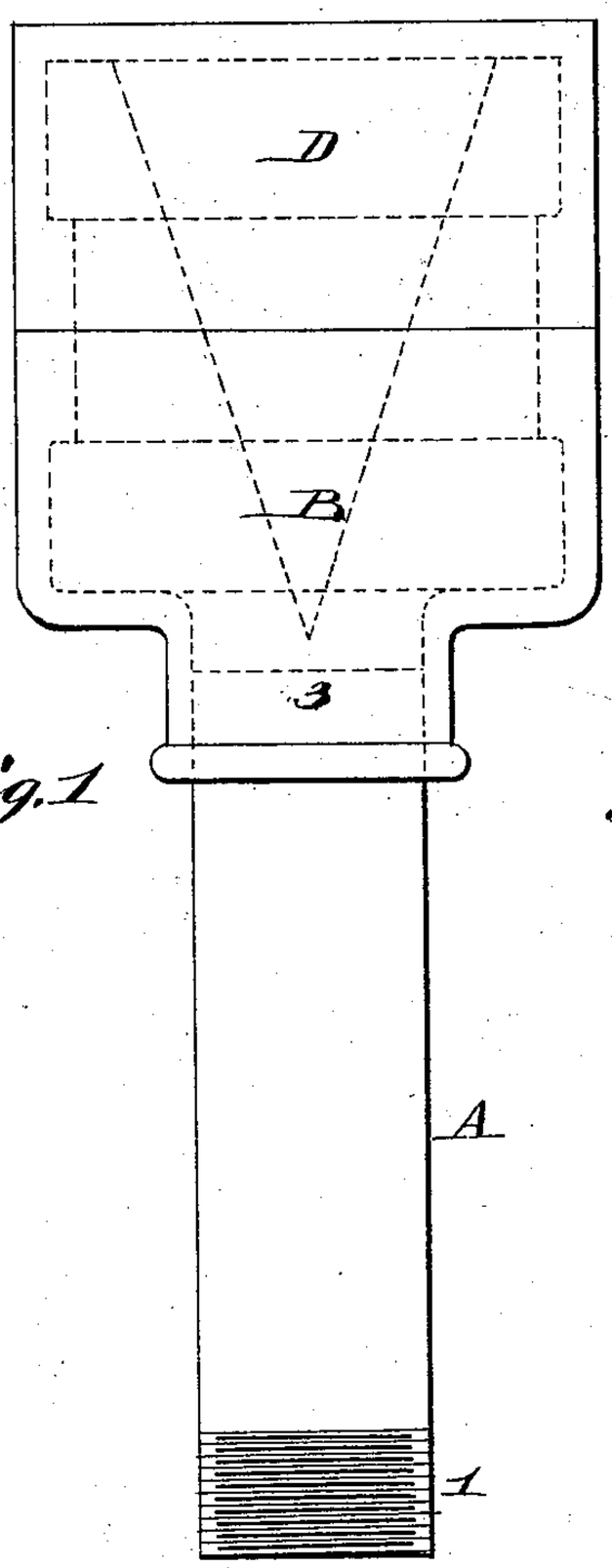


fig. 1

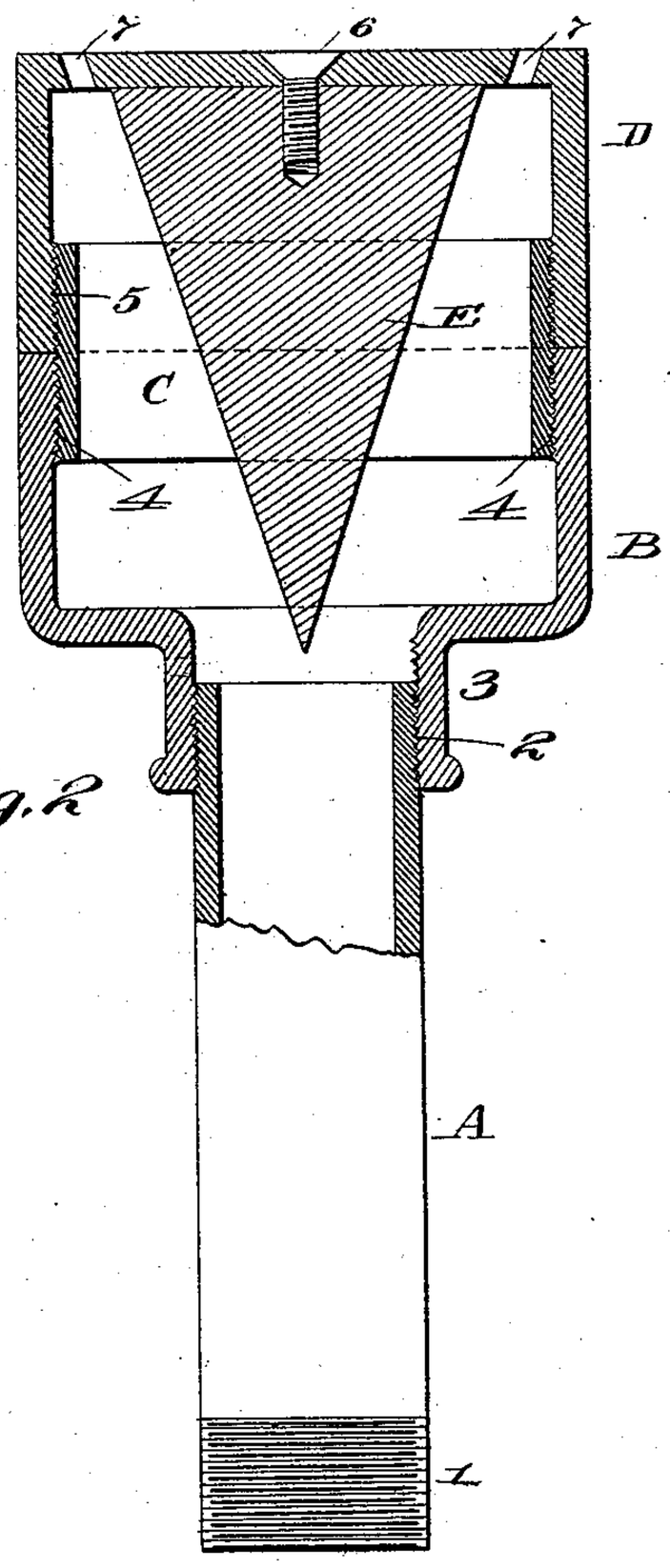


fig. 2

fig. 3

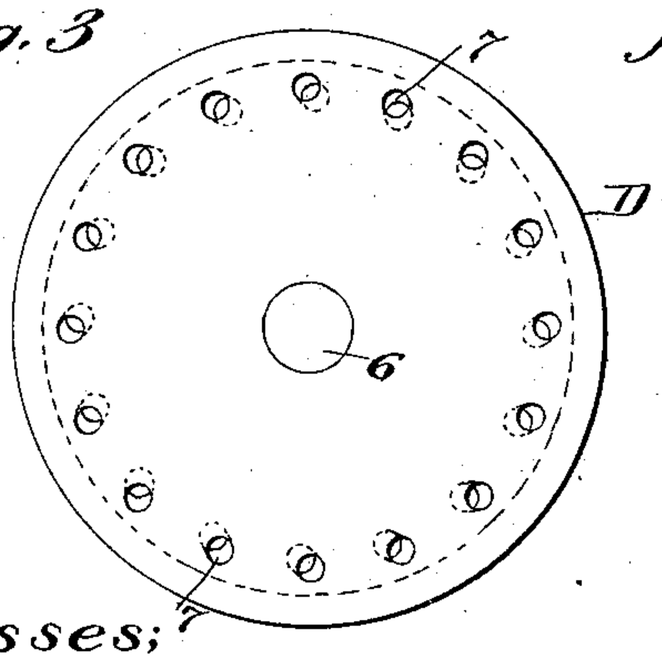
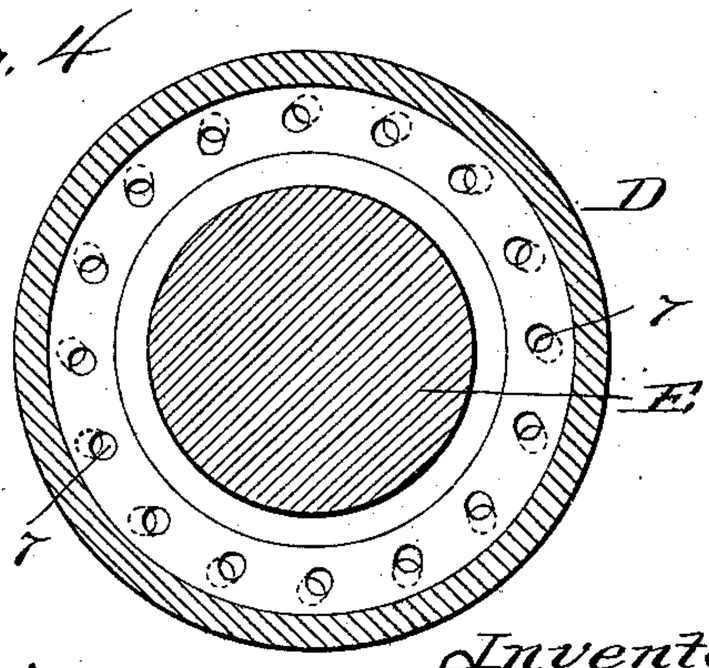


fig. 4



Witnesses;

J. R. Coleman

H. J. Hayden

Inventor

William Storm

By S. B. Fitzgerald

Atty.

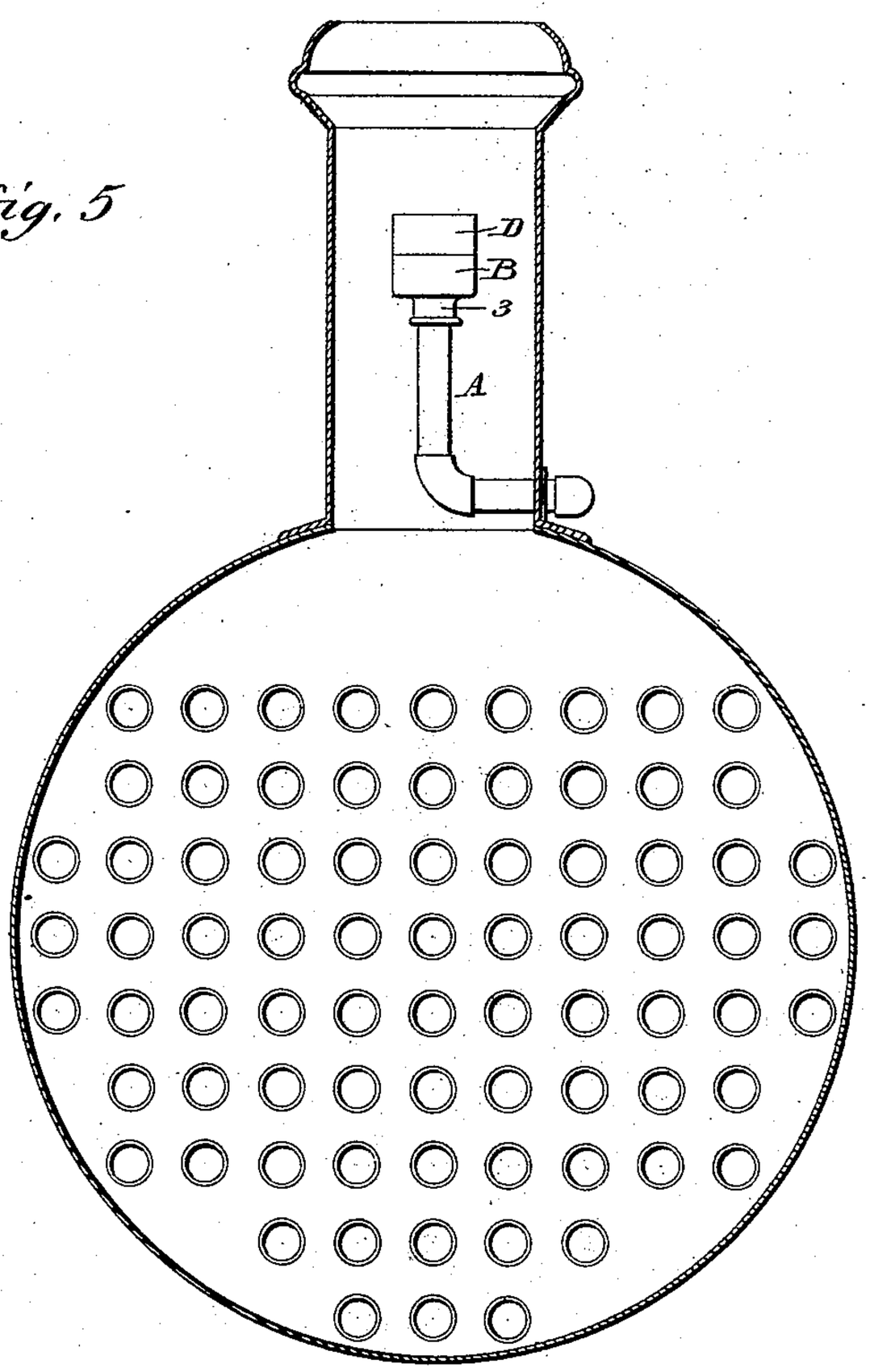
(No Model.) 2 Sheets—Sheet 2.

W. STORM.

STEAM JET BLOWER.

No. 534,087. Patented Feb. 12, 1895.

fig. 5



Witnesses;

J. F. Coleman

E. C. Featherstonhaugh

Inventor

William Storm

By S. G. Fitzgerald

Att'y.

UNITED STATES PATENT OFFICE.

WILLIAM STORM, OF POTTSVILLE, PENNSYLVANIA.

STEAM-JET BLOWER.

SPECIFICATION forming part of Letters Patent No. 534,087, dated February 12, 1895.

Application filed January 18, 1894. Serial No. 497,269. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM STORM, a citizen of the United States, residing at Pottsville, in the county of Schuylkill and State of Pennsylvania, have invented certain new and useful Improvements in Steam-Jet Blowers; 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.

My invention relates to an improvement in steam jet blowers.

The invention will first be described in connection with the accompanying drawings, and then particularly pointed out in the claim.

In the drawings—Figure 1 is an elevation of a blower embodying my invention. Fig. 2 is a longitudinal central section of the same. Fig. 3 is a plan view of the head. Fig. 4 is a transverse section through the cone deflector. Fig. 5 is a cross section of a locomotive smoke box.

Referring to the drawings, A is a tubular shank threaded at each end, as at 1 and 2, the end 2 being screwed into a body portion B, which has a contracted inlet 3 and an enlarged upper portion which is internally threaded as at 4. Inside the portion 4 is screwed an intermediate ring C which is screwed into the lower internally-threaded end 5 of a cap D., this intermediate ring thereby serving as a union to connect the cap D and the cup B.

To the under side of the cap is secured a downwardly-extending conical deflector E whose apex just enters the contracted inlet 3 of the body portion. For the purpose of attaching the conical deflector to the cap D, the latter is provided with a countersunk screw hole into which is inserted a screw 6 which is threaded into the conical deflector thereby securing it in place. The diameter of the base of the conical deflector is less than the interior diameter of the cap D but is greater than the interior diameter of the orifice.

The top of the cap D is provided with a series of jet-openings 7 at equal distance from the center of the top of the cap D, these jet-holes sloping not only from the center of the cap, outward, but also in a sinistral direction. This will be better understood from Figs. 2 and 3, the former showing the outward slant of said jet holes, while the latter shows both the outward and the sinistral slope, the circles in dotted lines representing the location of the openings of the jets on the inner surface of the cap, while the full lines, of course represent the exterior openings.

The operation of my device is as follows: The steam enters the tubular shank, A, and is deflected by the conical deflector so as to pass out through the jet holes 7 and escape into the chimney, the outward and sinistral slope of the jet holes 7 serving to spread the steam and, at the same time, give to it a rotary movement, so that, by this means, all the gases of the chimney are drawn along by these jets of steam.

It will be observed that in my construction the cap and deflector may be removed readily to clean the inlet orifice 3, or to remove and replace the conical deflector or cap when destroyed.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

In a jet blower, the combination with the body portion, B, provided with a contracted inlet 3, internally screw threaded and an enlarged upper portion also internally screw threaded, of the cap D, provided with the downwardly projecting conical deflector, E, and a series of jet-holes in the top of the cap surrounding the base of the deflector, the said holes inclined from the center of the cap outward and also in a sinistral direction, whereby, the steam as it passes out through the holes is caused to spread and is also given a rotary motion, and a ring C, screw threaded on its periphery, uniting the body portion B, and cap D, all substantially as described and shown.

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

WILLIAM STORM.

Witnesses:
FRANCIS OSCAR WERTHER,
FRANK LITTLE.