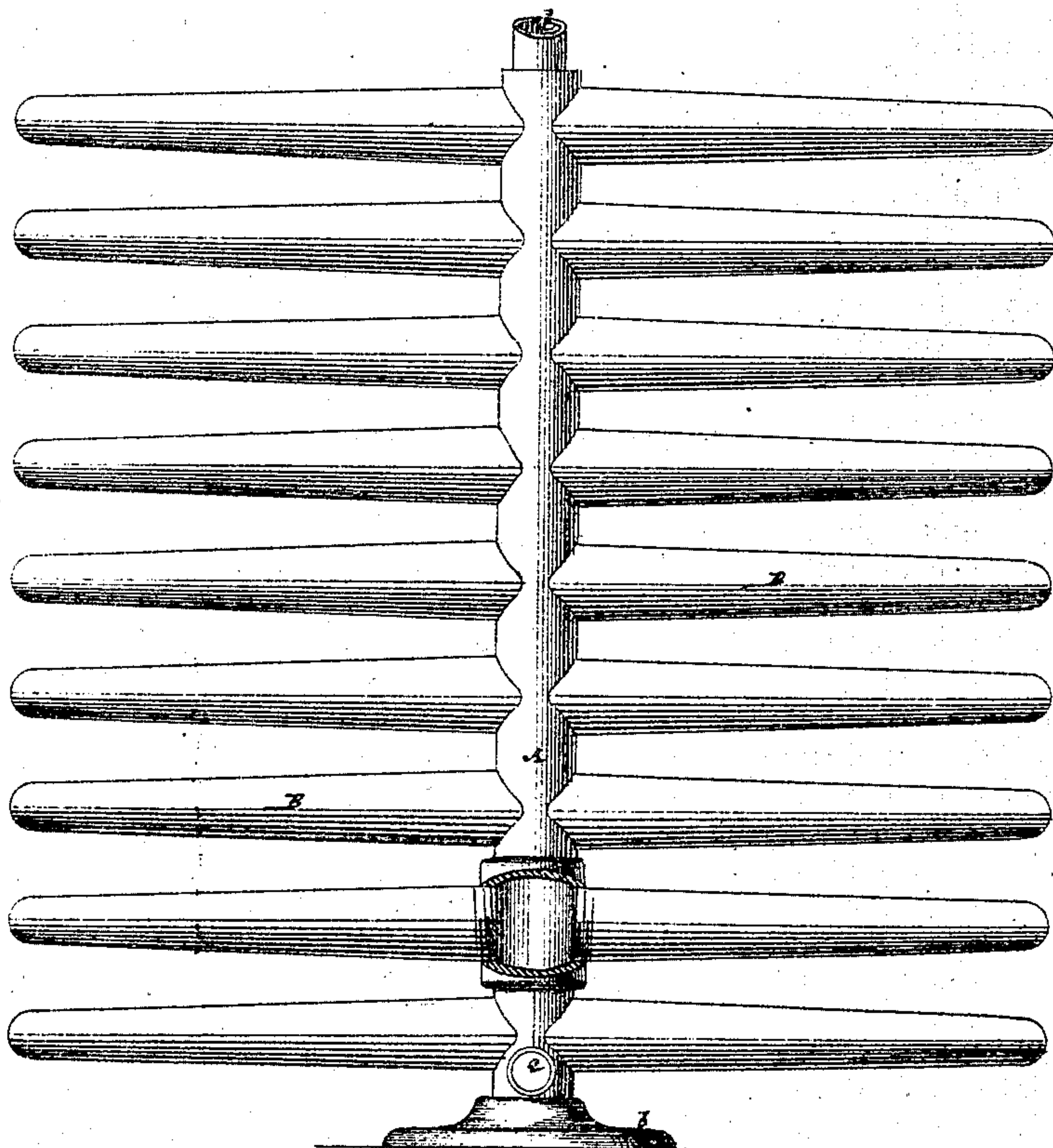


*Benjamin T. Babbitt. Imp<sup>d</sup> Radiator.*

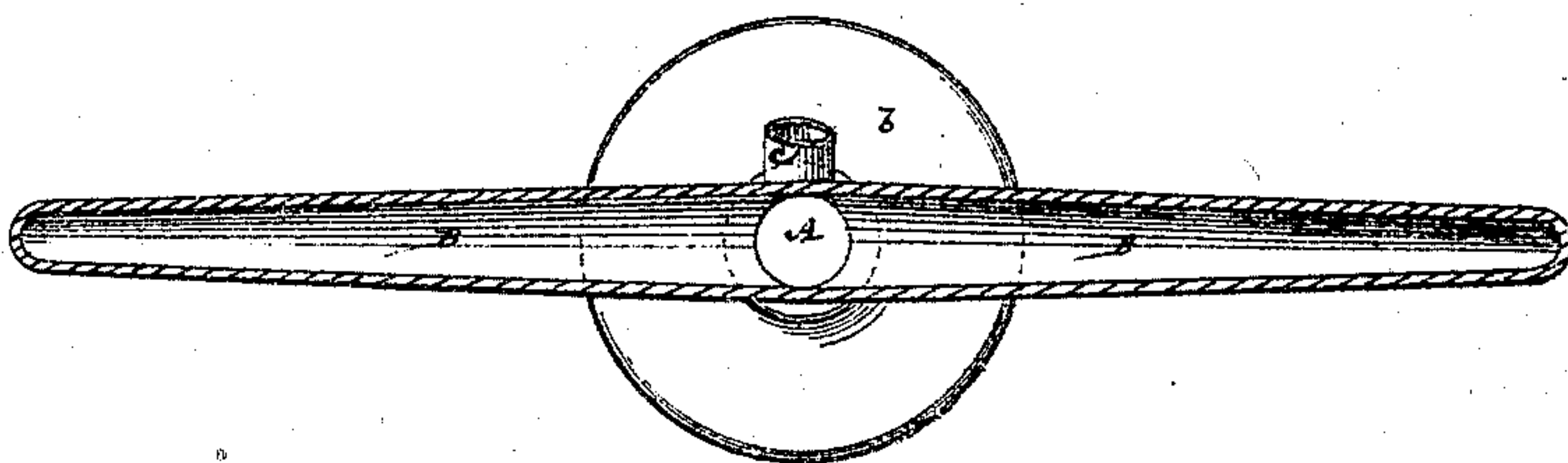
No. 120,479.

Patented Oct. 31, 1871.

*Fig. 1*



*Fig. 2*



*Witnesses*

*C. R. Buckwith*  
*Thos. R. Brown*

*Benjamin T. Babbitt*

# UNITED STATES PATENT OFFICE.

BENJAMIN T. BABBITT, OF NEW YORK, N. Y.

## IMPROVEMENT IN STEAM-HEATERS.

Specification forming part of Letters Patent No. 120,479, dated October 31, 1871.

*To all whom it may concern:*

Be it known that I, BENJAMIN T. BABBITT, of the city, county, and State of New York, have invented a new and useful Improvement in Radiators, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing forming part of this specification, and in which—

Figure 1 represents a face view or elevation of my improved radiator, and Fig. 2 a horizontal section of the same.

Similar letters of reference indicate corresponding parts in both figures.

My invention relates to radiators of a tubular description, through which steam or other heated fluid or vapor is made to circulate; and the invention consists in a hollow upright post or stem, provided with an inlet at or near its one end and an outlet at or near its opposite end, having combined with it a series of hollow radial arms of tapering construction in their longitudinal section for circulation of the heating fluid or vapor through them and the upright stem, and serving by their tapering construction to return to the stem for clearance, as required, by, for instance, blowing through the latter any deposit or water of condensation when steam is employed to heat the radiator. While not restricting the said radiator to any particular use or place, the same will be found especially advantageous in heating rooms or halls, and may be used either singly or in groups, arranged, for example, one behind the

other. Steam will here be described as the medium employed for heating it.

Referring to the accompanying drawing, A represents the hollow upright post or stem, provided with any suitable base, *b*; also an inlet, *d*, at or near its upper end, and an outlet, *e*, at its bottom; or the position of the inlet and outlet may be reversed. Cast with, screwed into, or otherwise secured to said stem, are a series of opposite radial arms, B, open at their inner ends but closed at their outer ends, and of a conical or tapering shape in their longitudinal section, so that any water of condensation settling in them, caused by circulation of steam through them from the stem, will be immediately returned to the latter for after-clearance by blowing out or tapping, and thus the arms always be left fully available for heating purposes, and the same conjointly with the stem forming a most extensive and efficient radiating surface. A radiator thus constructed is at once cheap, simple, and effective.

What is here claimed, and desired to be secured by Letters Patent, is—

The combination and arrangement of the tapering arms B with the hollow post or stem A provided with an inlet and outlet at or near its opposite ends, substantially as specified.

BENJAMIN T. BABBITT.

Witnesses:

C. R. BECKWITH,  
THOS. R. LEWIS.

(147)