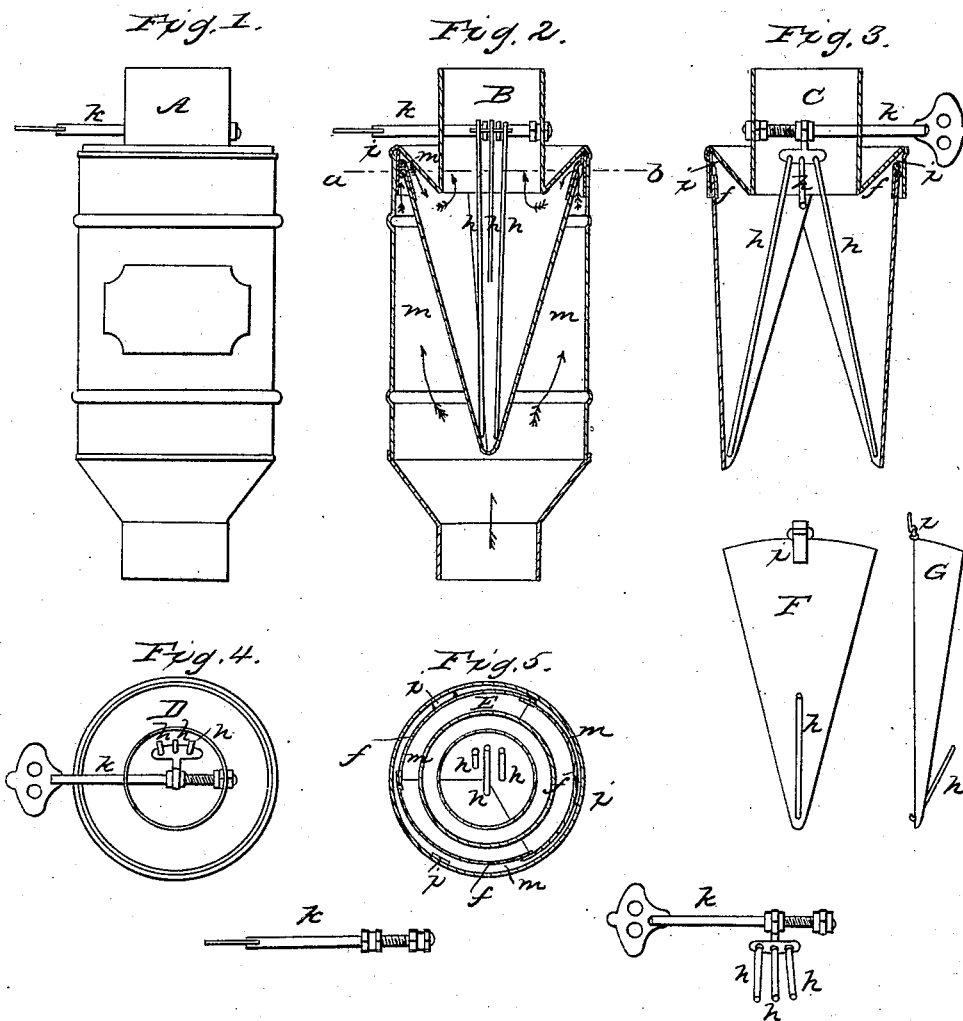


H. RUGEE.  
Heat Radiator.

No. 46,500.

Patented Feb. 21, 1865.



Witnesses:  
G. H. Drygatt  
W. Schickel

Inventor:  
Herman Ruger

# UNITED STATES PATENT OFFICE.

HERMAN RUGEE, OF MILWAUKEE, WISCONSIN.

## IMPROVEMENT IN HEAT-RADIATORS.

Specification forming part of Letters Patent No. **46,500**, dated February 21, 1865.

*To all whom it may concern:*

Be it known that I, HERMAN RUGEE, of the city and county of Milwaukee, State of Wisconsin, have invented a new and useful Improvement for Radiating Heat and Consuming Smoke; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, letter A is the outside case; Fig. 2, B a section showing adjustable wings, (segment form,) links, and crank; Fig. 3, C a section showing wings open; Fig. 4, D a top view of outside case; Fig. 5, E a top section on line from *a* to *b*; F, face of wings; G, side of wings; *h h h h*, links connecting wings with crank; *i i i i*, hinges to wings; *k k k*, crank; *m m m*, hot-air chamber.

The operation of the improvement consists that by the movement of the crank the segment wings are opened and closed, and when closed directs the heat and smoke through the space between the outside case and the wings through the hot air-chamber, and by additional radiation of heat from the wings the smoke is consumed.

I do not claim the outside case, for this is a well known device; but

I claim—

The adjustable segment-wings, forming an inverted cone, in combination with the crank, links, or rods for adjusting the wings, substantially as shown and described.

HERMAN RUGEE.

Witnesses:

G. W. MYGATT,  
A. W. SCHICKLER.