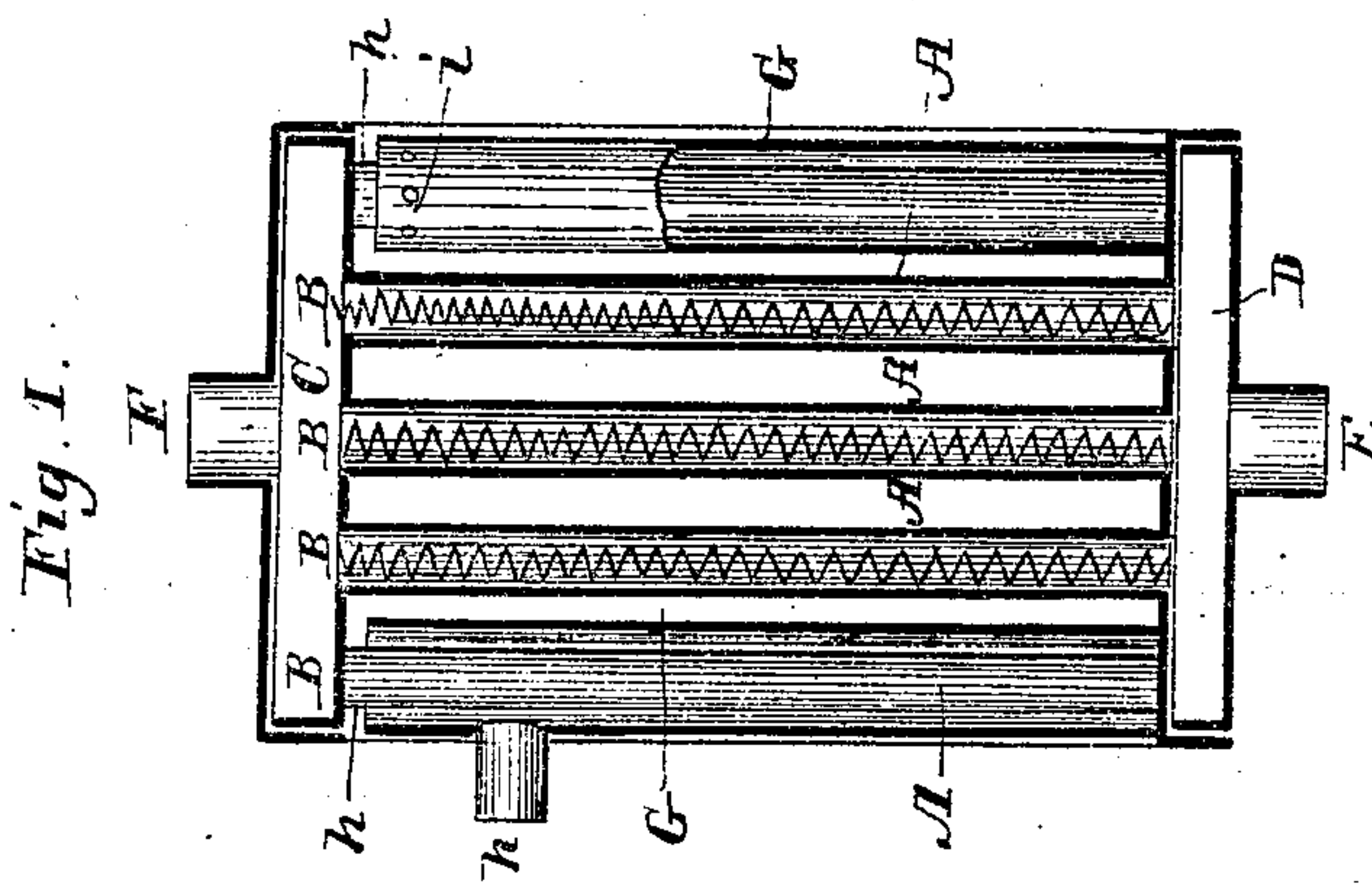
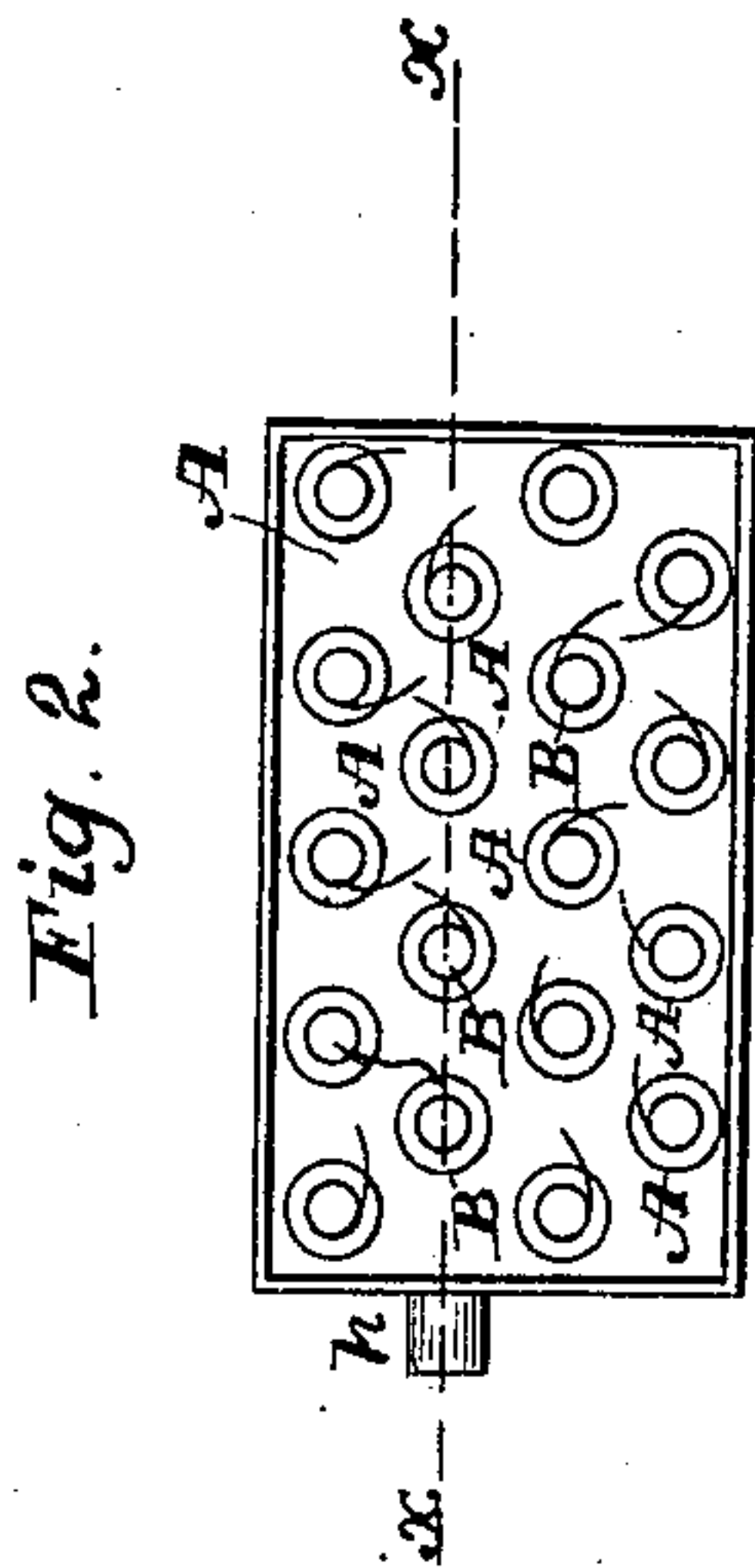


TURLEY & BAYLISS.

Heating Drum.

No. 92,404.

Patented July 6, 1869.



Witnesses:  
*John Becker*  
*John H. Brooks*

Inventors:  
*M. Turley*  
*J. D. Bayliss*  
 For *Miner & Co.*  
 Attorneys.

# United States Patent Office.

MARSHALL TURLY AND J. D. BAYLISS, OF COUNCIL BLUFFS, IOWA.

*Letters Patent No. 92,404, dated July 6, 1869.*

## STOVE-DRUM.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that we, MARSHALL TURLY and J. D. BAYLISS, of Council Bluffs, in the county of Pottawatomie, and State of Iowa, have invented a new and improved Stove-Drum; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and useful improvement in drums for radiating heat generated in stoves; and consists in the arrangement of radiating-tubes, chambers, and jackets, and in placing in the tubes wire spirals, for retarding the heated products of combustion.

In the accompanying sheet of drawings—

Figure 1 represents a vertical section of a drum, constructed according to our invention, the section being through the line *xx* of fig. 2.

Figure 2 is a top view, with the upper section of the upper chamber off.

Similar letters of reference indicate corresponding parts.

A represents the tubes which may be more or less in number, and which connect the upper and the lower chambers C D, as seen in the drawing.

E is the neck, which is placed over the collar of the stove, or connects with the pipe thereof.

F is the tube through which the smoke is discharged.

Within the tubes A, I place spiral wires B, extending the whole length of the tubes, placed in loosely,

and suspended from the top by extending the ends of the wire, as seen in the drawings.

These spiral wires retard the flow of the heated gases and products of combustion, thereby retaining the heat, and allowing it to radiate from the tubes and be utilized.

Around a portion, or all of the tubes A, there are jackets or outer tubes G, as seen in fig. 1, of sufficient diameter to form annular spaces between them and the tubes A, with suitable apertures for the admission of air.

The chambers C and D are, it will be seen, made in two parts, each so that they may be readily taken apart for cleaning, transportation, or other purposes.

*h* represents a tube for admitting air into the annular space between the vertical tubes A and G.

The orifices at *i* are for the same purpose.

The heated air is discharged at the upper ends of the outer tubes, as seen at *k*.

Having thus described our invention,

We claim as new, and desire to secure by Letters Patent—

The stove-drum, constructed as described, of the chambers C D, connected by the tubes A, which contain the spiral wires B, and are surrounded by the tubes G, in such a manner as to form annular air passages, all arranged as described, for the purpose specified.

MARSHALL TURLY.  
J. D. BAYLISS.

Witnesses:

F. A. BURKE,  
WM. A. MYNSTER.