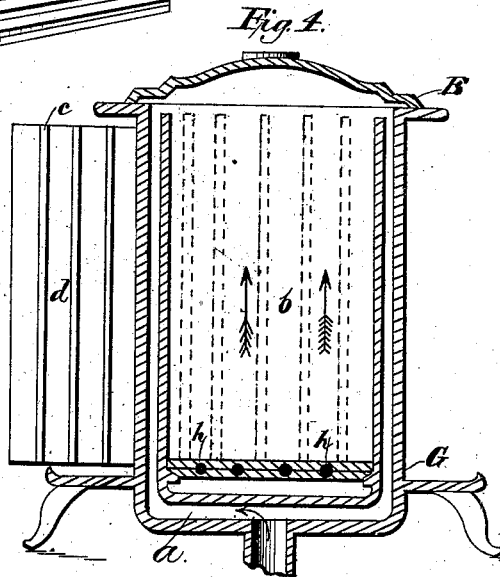
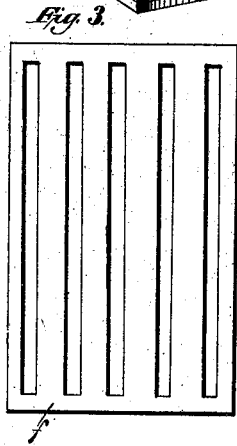
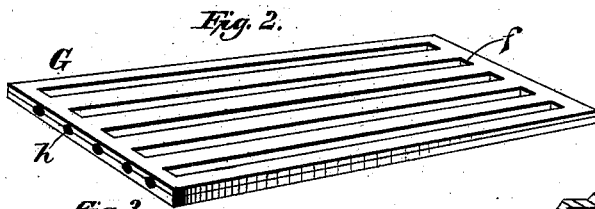
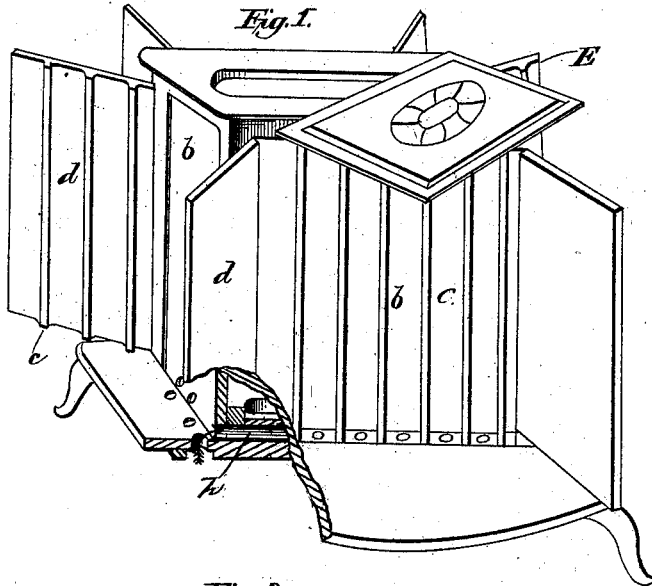


S. N. BETTS.  
Stove.

No. 203,528.

Patented May 14, 1878.



Attest:  
Robert A. Green  
Oscar A. Jones

Inventor:  
Stephen N. Betts.

# UNITED STATES PATENT OFFICE.

STEPHEN N. BETTS, OF HILLSDALE, ASSIGNOR OF ONE-HALF HIS RIGHT  
TO WILLIAM S. SCHERMERHORN, OF READING, MICHIGAN.

## IMPROVEMENT IN STOVES.

Specification forming part of Letters Patent No. **203,528**, dated May 14, 1878; application filed  
November 26, 1877.

*To all whom it may concern:*

Be it known that I, STEPHEN N. BETTS, of Hillsdale, in the county of Hillsdale and State of Michigan, have invented a new and useful Improvement in Stoves, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of my invention is to construct a stove that shall combine all the advantages of a common stove with one that has tubes running up through the fire-box to discharge currents of hot air into the room, and also to make it interchangeable from one to the other, either wholly or in part.

To do this I make either the side plates *b* or the doors *d*, or both, corrugated by means of the ribs *c*. When the doors *d* are closed against the ribs *c* on the plate *b*, tubes or air-passages are formed.

The air passes from the air-box *a* on the under side of the stove, through the holes in the bottom of the stove, into the air-passages formed by *b c d*, and up through the holes in the top of the stove into an upper air-chamber, *E*, where the discharge is regulated by means of dampers. (Not shown.)

The air-chamber *a* is supplied with fresh air by a tube running down from it through the floor, and thence to the outside of the building, and the draft of the stove is supplied with air taken from the extreme portions of the room or adjoining rooms by pipes running under the floor.

I also use a grate in the bottom of the stove, which I make and place in the following manner, viz: I groove the bars *f* of the grate *G*, and put the two grooved sides together, forming tubes. The ends of these tubes in the grate *G* are placed in line with the holes *h* in the plates *b* of the fire-box, and the air is made to pass through them by means of dampers. (Not shown.)

I claim as my invention—

The doors *d* on the outside of the stove with the ribs *c* on the outside of the plates *b* or the inside of the doors *d* with the grate *G*; all of which are made and combined in the way and for the purpose as substantially set forth in the above specification.

STEPHEN N. BETTS.

Witnesses:

OSCAR A. JANES,  
ROBERT A. WEIR.