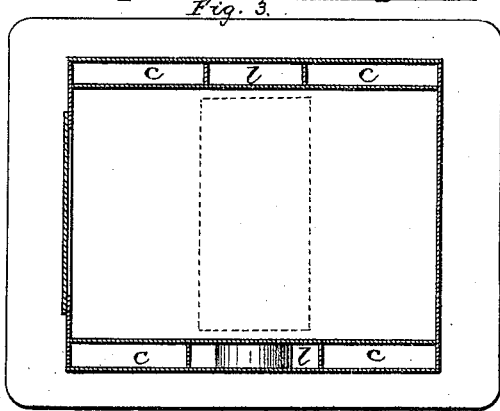
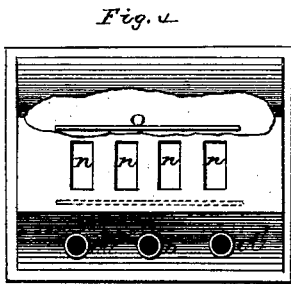
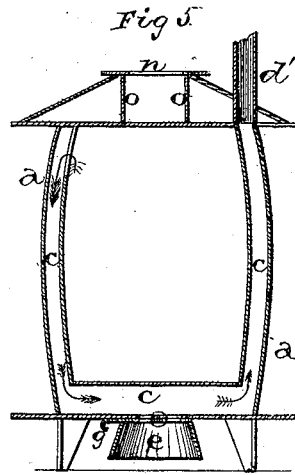
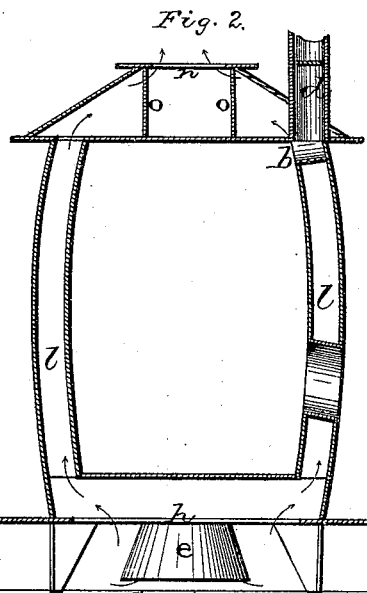
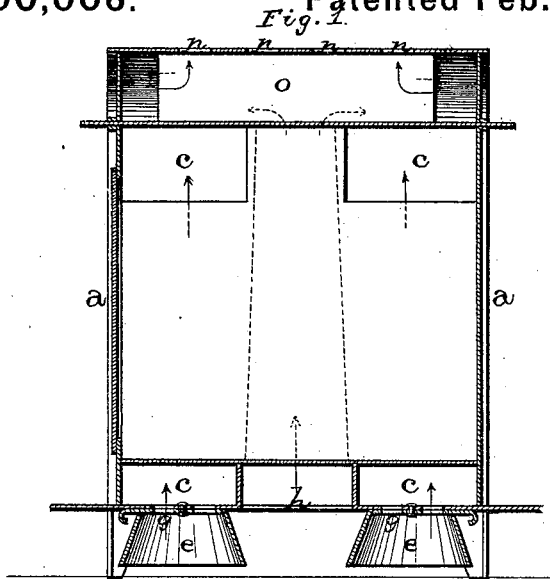


J. M. SYCKS.  
Heating-Stoves.

No. 200,006.

Patented Feb. 5, 1878.



WITNESSES

*J. W. Garner*  
*Albert J. de Joffe*

INVENTOR

*J. M. Sycks*  
*per*  
*F. A. Lehmann*  
*atty.*

# UNITED STATES PATENT OFFICE.

JOHN M. SYCKS, OF DELAWARE, OHIO, ASSIGNOR TO MATTIE C. SYCKS,  
OF SAME PLACE.

## IMPROVEMENT IN HEATING-STOVES.

Specification forming part of Letters Patent No. **200,006**, dated February 5, 1878; application filed  
May 8, 1877.

*To all whom it may concern:*

Be it known that I, JOHN M. SYCKS, of Delaware, in the county of Delaware and State of Ohio, have invented certain new and useful Improvements in Heating-Stoves; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in heating-stoves; and it consists in the arrangement and combination of flues and hot-air passages that will be more fully described hereinafter, whereby a much greater amount of heat can be obtained from the same amount of fuel.

Figure 1 is a longitudinal vertical section of my stove. Fig. 2 is a vertical cross-section of the same. Fig. 3 is a horizontal longitudinal section. Fig. 4 is a plan view, part being broken away. Fig. 5 is a vertical section through the flues *c*.

*a* represents the body of the stove, which may be of any size, shape, or construction desired, and which has a chimney-hole, *b*, for connection with the stove-pipe, so that the products of combustion may pass directly up the chimney when it is so desired. When it is wished to throw the heat out into the room, the damper in the pipe *d* is closed, when the heat and smoke at once pass down through the two flues *c*, under the bottom of the fire-chamber, and up the other side out of the holes *d'*, thus making the heated products of combustion pass over a large amount of heating-surface, and correspondingly heating the room. On the under side of the stove are the two funnels *e*, which reach down to near the floor, and open into the flues *c*. By opening the valves or registers *g* the foul air in the bottom

of the room is sucked up by the draft of the products of combustion, and carried off up the chimney. These valves may also be used to regulate the heat.

Through the bottom of the stove is made a large opening, *h*, between the two flues *c*, and from this opening lead the two hot-air passages *l*, one up each side of the stove to the top. In the top of the stove are a number of openings, *n*, for the escape of the heat into the room; but in order to make the heated air, as it escapes from the two passages *l*, pass over a still greater amount of heating-surface, the partitions *o* are placed between the openings and the passages, so as to make the air pass along over the top of the stove to each end, and then down the center.

Thus it will be seen that the entire body of the stove, except at the two ends, is inclosed in a surrounding jacket, which serves to heat the air of the room to a greater extent than can be done in any other way by the same amount of fuel.

The draft of the stove will be arranged at the back, instead of the front, as the coldest place about a stove is around the draft, and thus more heat will be thrown out into the room.

Having thus described my invention, I claim—

In a heating-stove, the combination of the air-flues *l*, the smoke-flues *c*, and the upper chamber provided with partitions *o* and openings *n*, substantially as shown.

In testimony that I claim the foregoing I have hereunto set my hand this 30th day of April, 1877.

JOHN M. SYCKS.

Witnesses:

MORENUS A. NICHOLSON,  
JAMES NICHOLSON.