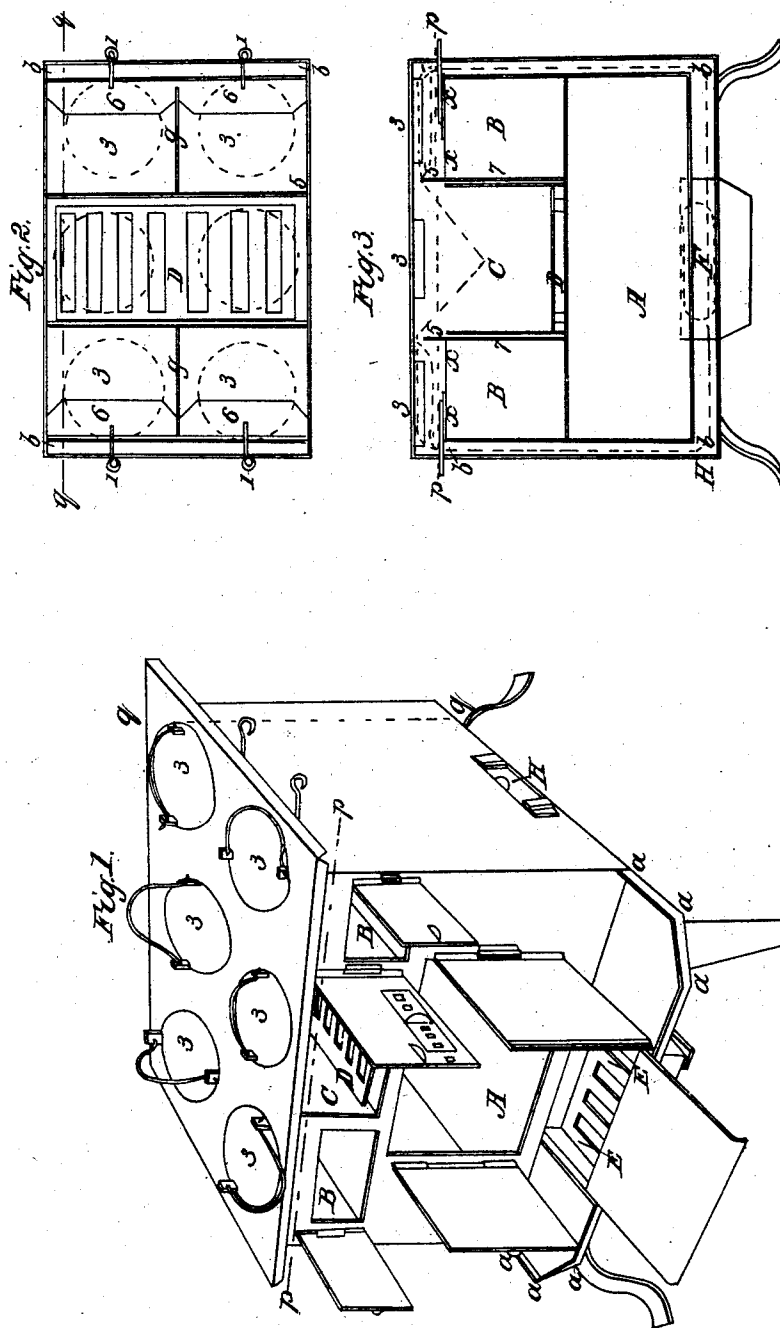


D. TISDALE.  
Cooking Stove.

No. 1,006.

Patented Nov. 12, 1838.



# UNITED STATES PATENT OFFICE.

DANIEL TISDALE, OF CANTON, MASSACHUSETTS.

## MODE OF CONSTRUCTING COOKING-STOVES.

Specification of Letters Patent No. 1,006, dated November 12, 1838.

*To all whom it may concern:*

Be it known that I, DANIEL TISDALE, of Canton, in the county of Norfolk and State of Massachusetts, pattern-maker, have invented a new and useful Improvement in the Mode of Constructing Cooking-Stoves, called "Tisdale's Improved Cooking-Stoves," of which the following is a full and exact description.

Figure 1 is a perspective view. Fig. 2 is a horizontal section through line *p p*. Fig. 3 is a vertical section through line *q q*.

I first describe my stove as improved by me, and after completing the description shall proceed to specify my improvements, every part of the stove except my improvements so specified being in common use.

The bottom plate of my improved stove projects in front as stoves usually do as appears by the letters *a a a a a* Fig. 1 of the annexed drawings, to which I refer as a part of this my specification. Below this projection is a sunken hearth or cavity in which a grate *EE* on legs is placed on which to build a fire with charcoal so as to heat irons or by the use of a gridiron placed over said grate to broil meat. Said grate may be made in two parts and divided by a partition so as to use one or both as occasion may require. That part of the hearth which covers the grate slides on and off at pleasure as the drawing Fig. 1 shows. The charcoal is ignited and kept on fire by a draft of air passing through holes in the front part of the bottom of the sunk hearth after having put burning coals there, and the smoke and vapor passes off through holes in that part of the bottom of the hearth plate which projects over the sunken cavity into the flue which is under the whole of the large oven. The sunken hearth may be made narrow for one grate only instead of being divided into two as above suggested.

Figs. 1 and 3 letter *A* is the large oven which is about eight inches from the top to the bottom which occupies the whole of the stove below the fire room, except the small space under the oven throughout occupied by the flue and the small space at each end occupied by a flue. Above the large oven are two small ovens *BB* Figs. 1 and 3 and between them is the fire room *C*, all three passing from the front to the back of the stove, as the large oven below, there being no flues in front or in the backside of the

stove. The ovens *BB* do not extend to the top of the stove but as will be illustrated by reference to Fig. 3 of the annexed drawings, which is a backside view of the stove, with the back plate taken off, arise no higher than *x x, x x* which are the tops of the said ovens. Fig. 3 also represents the flue *b b* between the bottom plate of the oven and the bottom plate of the stove and the flues *b b, b b* between the ends of the stove and the ends of the ovens.

In Fig. 2 which is a top view of the stove with the top plate taken off *b b, b b, b b, b b* represent the end flues which pass down between the ends of the stove and the ends of the ovens, and communicate with the flue which extends over the whole surface between the bottom plate of the stove and the bottom plate of the large oven. Fig. 2 *1 1 1 1* are the handles of the dampers *6 6, 6 6, 6 6, 6 6* by which the end flues or either of them may be closed at pleasure. There is a small hole communicating with one of the end flues in each of the small ovens to let off steam arising from articles baked therein. In the fire room is placed the grate *D* Fig. 1 of which *D* Fig. 3 is a backside view and *D* Fig. 2 is a side view. On this grate the charcoal is placed or wood. A draft of air to ignite and keep up the fire passes through the holes *2 2 2 2 2 2 2 2 2 2* Fig. 1 in the door of the fire room and the smoke and flame rises up, see Fig. 3, from *C* the fire room and pursuing the course of the red dotted lines passes over the wind walls *5, 5* which are a mere continuation of *7 7, 7 7* the partitions between the two side ovens and the fire room, and which are so continued for the purpose of increasing the draft of air, and throwing the flame up so that it may act more strongly on the boiler as it passes over the tops *x x, x x* of the small ovens on toward the flues *b, b*.

Figs. 2 and 3 *5 5, 5 5* is a view of the wind walls from the top end *7 7, 7 7* are views of the partition of which *5 5, 5 5* are a continuation. From the flues *b, b* Fig. 3, end views of *b b, b b, b b, b b* Fig. 2, the smoke and flame passes down into the flue *b b*, following the course of the red dotted lines, between the bottom of the stove and the bottom of the large oven and thence out at *F*, the receiver of the pipe represented by dotted lines.

Figs. 1 and 2 *3, 3, 3 3 3* are the boiler

holes and Fig. 3 3, 3 3 represent the spaces filled by the three back boilers when inserted.

Fig. 2 8 8, 8 8 are views from top of pieces of loose iron fitted in to increase the distance and thickness between the fire room and the side ovens so as to prevent the heat from acting too violently on the ovens and Fig. 3 8 8, 8 8 are back and end views of the same pieces.

The stove contains six boilers, on two of which over the fire room the heat acts directly, and on the four other boilers over the small ovens the fire acts on its passage to the flues over the windwalls which do not rise to the top of the stove, leaving sufficient space between their tops and the top plate of the stove for the flame to escape.

Fig. 2, 9, 9 is the top view of partitions between the boilers toward the ends, which partitions reach from the ends of the side ovens to the windwalls and extend upward to the top plate of the stove.

Fig. 3 A is a back view of the large oven

and B B are back views of the small side ovens. H Figs. 1 and 3 door over which access is had to the flue under the oven for cleaning it. There are apertures in the rear side of the fire chamber similar to those in front marked 2 for increasing the draft.

What I claim as my invention and desire to secure by Letters Patent is—

The general construction and arrangement of the stove as above set forth, that is to say, a stove having a large oven covering the whole of the bottom plate, with the exception of the flue spaces, in combination with the fire chamber and two side ovens placed above it; and with the respective flues and their appendages conducting the draft in the manner above described, or with such variations only, as will leave the structure substantially the same.

DANIEL TISDALE.

Witnesses:

ELLIS AMES,

ANDREW LOPEZ.