(No Model.)

W. S. NICOLSON.

STOVE.

No. 590,162. Patented Sept. 14, 1897.

Fig. 1.

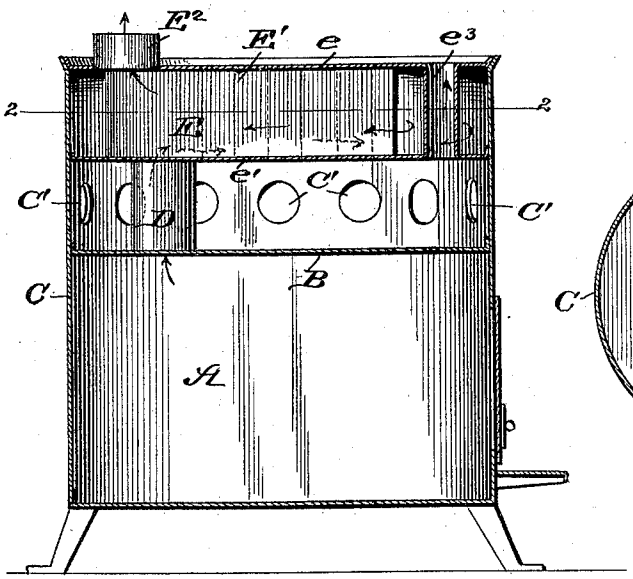


Fig. 2.

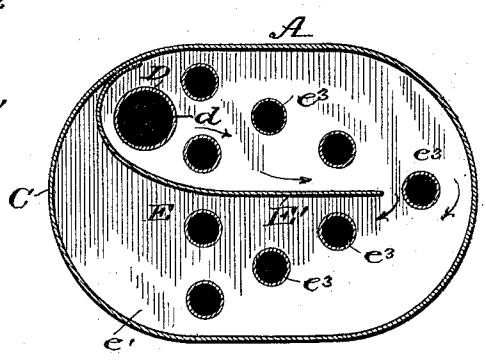


Fig. 3.

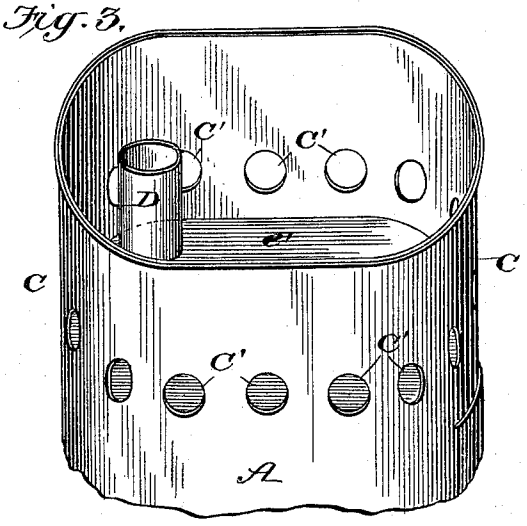
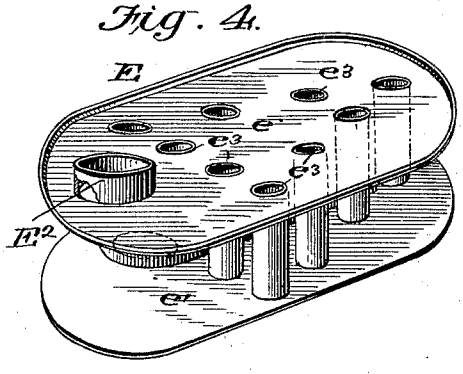


Fig. 4.



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WILLIAM S. NICOLSON, OF SALISBURY, NORTH CAROLINA.

STOVE.

SPECIFICATION forming part of Letters Patent No. 590,162, dated September 14, 1897.

Application filed January 4, 1897. Serial No. 617,922. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. NICOLSON, of Salisbury, in the county of Rowan and State of North Carolina, have invented a new and useful Improvement in Stoves, of which the following is a specification.

My invention is an improvement in stoves, and has for an object to provide means by which to increase the heating capacity of the stove; and it consists in certain novel constructions, combinations, and arrangements of parts, as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a vertical longitudinal section. Fig. 2 is a horizontal section taken on the line 2 2, Fig. 1. Fig. 3 is a detail perspective view of the upper portion of the stove. Fig. 4 is a detail perspective view of the drum-section.

The stove proper, A, may be of any suitable form and construction and has the top B. The side plate C projects above the top B and is provided above said top and near thereto with air-inlet openings C', preferably arranged in a series encircling the stove, as shown, and forming an inlet for air immediately above the stove-top. The projecting portion or plate above the top forms a drum-chamber, and the smoke-flue D projects from the stove upward into the combustion-chamber. In the top of this chamber I fit what I term the "drum-section" E. This section E is shown as composed of the upper plate *e*, lower plate *e'*, air-flues e^3, extending between the said plates *e e'*, the baffle-plate E', and the smoke-flue E^2. The latter is shown as projecting upward from the top plate, but manifestly the flue E^2 may project rearwardly from the drum-section instead of upward, if so desired. The heating-pipes or air-flues e^3 may also be arranged horizontally, if desired.

The baffle-plate E' is arranged at one end at the edge of the drum-section adjacent to the opening *d* for the flue D, curves thence rearwardly around the said opening, and then projects forward toward the opposite end of the section, the outlet-flue E^2 being arranged on the opposite side of the baffle-plate from the opening *d*, so that the smoke will be caused to traverse the space in the drum-section surrounding the air-flues and so tend to further heat the air passing through such tubes.

In operation it will be seen that the air supplied to the drum-section passes thereto directly over the top of the stove, thus getting the very strongest circulation of heated air possible and enabling the heating of a room with the least expenditure of fuel. Manifestly the latter may be wood, coal, or other suitable material.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A stove having a top plate and its casing extended above the same forming a drum-chamber, said casing being provided above said top with air-inlet openings the drum-section fitted in said drum-chamber and formed with upper and lower plates and having a smoke-flue section leading from the top plate of the stove into the space between the upper and lower plates of the drum-section, and the air-flues leading through the drum-chamber and opening at their lower ends into the space between said chamber and the top plate of the stove all substantially as shown and described.

2. In a stove substantially as described the combination of the stove-body having a top and the casing extended above said top forming a drum-chamber and provided with lateral air-inlet openings the drum-section having upper and lower plates and fitted in the drum-chamber with its lower plate above the lateral air-inlets the baffle-plate extended within the drum-section, the air-flues leading through said drum-section and the smoke-flue projecting from the body of the stove upward into the drum-section substantially as shown and described.

WILLIAM S. NICOLSON.

Witnesses:
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