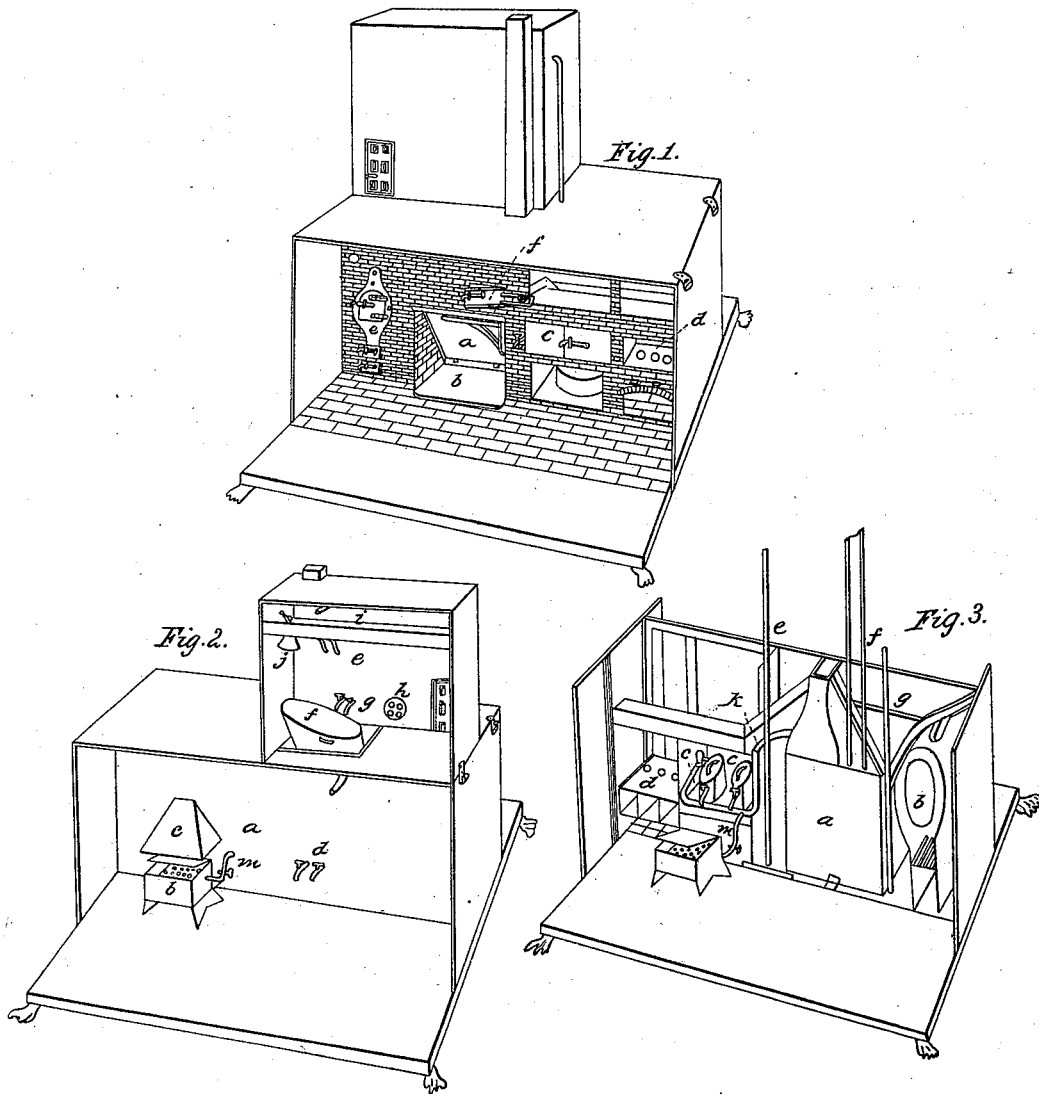


J. BOUIS.

Range.

No. 401.

Patented Sept. 21, 1837.



UNITED STATES PATENT OFFICE.

JOHN BOUIS, OF BALTIMORE, MARYLAND.

APPARATUS FOR GENERATING STEAM FOR COOKING, &c.

Specification of Letters Patent No. 401, dated September 21, 1837.

To all whom it may concern:

Be it known that I, JOHN BOUIS, of the city of Baltimore and State of Maryland, have invented a new and useful improvement in the useful arts, being an apparatus for generating steam for culinary operations, boiling water for bathing, washing clothes, and for other purposes; also, for heating air for warming apartments and for other uses, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1, *a*, represents a boiler made of such iron as steam boilers are generally made of, and in the form of a false back of a fire place, with a perpendicular division in the center, forming two separate boilers; one of which is calculated to produce steam, and constructed with a safety-valve on the top; also with a pipe *h*, Fig. 3, to convey steam to the chamber *c*, where several boilers are attached to it for the purpose of boiling by steam. There is from the principal steam pipe *h*, a branch pipe *m*, to convey the steam to the boiler *b*, Fig. 2, in the wash house *a*, to boil the clothes. The other apartment of the boiler is so constructed as to supply the bath room *g*, Fig. 1, above it with hot water for the purpose of bathing and any other use for which hot water may be wanted.

From the cistern marked *i*, Fig. 2, there is a pipe leading down to within one inch of the bottom of the inside of the boiler *a*, Fig. 3, for the purpose of conveying cold water

from the cistern above into the boiler *a*. From the top of the said boiler there is a pipe leading up to the top of the bath room for the purpose of conveying hot water as it is forced up by the weight of the cold water coming from the cistern above; which pipe also passes off the superabundant steam for the safety of the boiler.

b, Fig. 1, represents a cast-iron hearth placed in the fire-place, the under part of which is hollow, and divided into several flues, one of which flues passes out of doors to convey the cold air through all the flues to travel under this hearth so that it may become heated, and is then conveyed by a pipe *g*, Fig. 3, in a perpendicular direction into the bath room by the valve *h*, Fig. 2, for the purpose of keeping the room warm in cold weather, and the water in the reservoir *i* from freezing.

f, Fig. 1, represents an ordinary smoke jack with a fan inside the chimney which is driven by the heat or draft of the chimney for the purpose of turning said jack. The whole of the heat required for carrying on the whole apparatus in its full extent, is given by one fire, as represented in Fig. 1, letter *b*.

The invention here claimed and desired to be secured by Letters Patent, consists in—

The form and construction of the boiler.
JOHN BOUIS.

Witnesses:

WM. P. ELLIOT,
WM. BISHOP.