

G.W. BOOKWALTER'S

IMPROVED STILL BOILER

71270

Fig 1

PATENTED
NOV 26 1867

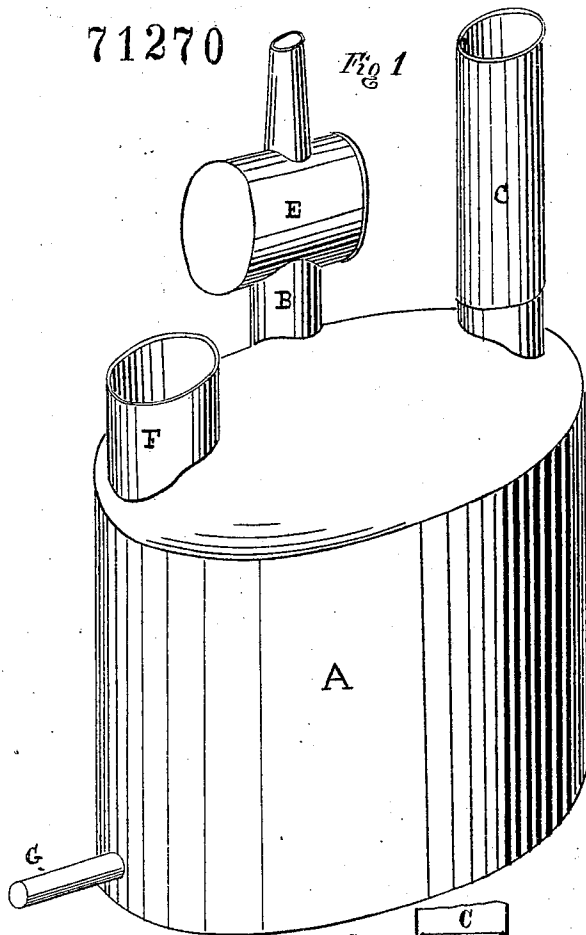
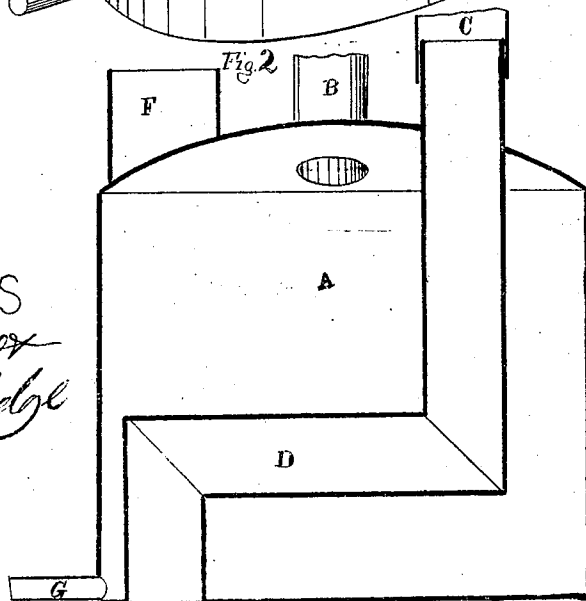


Fig 2



WITNESSES

Geo. Ruhlau
Dr. Ambridge

INVENTOR

G. W. Bookwalter
by his attorney
Thos. S. Sprague

United States Patent Office.

GEORGE W. BOOKWALTER, OF ROANOKE, OHIO.

Letters Patent No. 71,270, dated November 26, 1867.

IMPROVED STILL.

The Schedule referred to in these Letters Patent and making part of the same.

TO WHOM IT MAY CONCERN:

Be it known that I, GEORGE W. BOOKWALTER, of Roanoke, in the county of Putnam, and State of Ohio, have invented a new and useful Improvement in Still-Boilers; and I do declare that the following is a just, true, and accurate description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

Figure 1 is a perspective view of my boiler, showing the attachment of the drum.

Figure 2 is a sectional view of the same, showing the arrangement of the flue.

The same letters refer to similar parts in each figure.

The object of my invention is to save fuel and produce a more rapid evaporation, which is done by carrying a flue from the rear end of the fire-arch, through the bottom of the boiler, thence with an elbow, carrying it above the bottom of the boiler to the front thereof, and thence with another elbow into the smoke-stack. By this arrangement I present nearly twice the amount of the fluid to be boiled to the heating surface of the fire. Should the heat be so great as to produce too rapid boiling, so that there is danger of the fluid being forced into the condenser before it is converted into steam, it is prevented from so doing by the drum in the conduit-pipe, which must become perfectly full before such an accident could happen.

Having thus described the object, I will now describe the manufacture of my boiler, so that those skilled in the art can manufacture them, special reference being had to the accompanying drawings.

A is a boiler of the ordinary form; B is the conduit-pipe, to convey the steam from the boiler A to the condenser; C is the smoke-stack; D is the flue, extending from near the rear to near the front of the boiler A, and there connecting with the smoke-stack C; E is the drum, into the bottom and out of the top of which the steam is conducted by the conduit-pipe B; F is the ordinary funnel for filling the boiler A; and G an ordinary pipe for drawing off the contents of the boiler A when desired.

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

1. The flue D, arranged substantially as described for the purpose designed.
2. The drum E upon the pipe that conveys the steam to the condenser, or any similar device for the purpose described.
3. The combination and arrangement of the still-boiler A, the conduit-pipe B, the smoke-stack C, with the flue D and the drum E, all arranged substantially as described for the purpose designed.

G. W. BOOKWALTER.

Witnesses:

GEO. RUHLANDT,

W. AMBRIDGE.