

(No Model.)

J. C. TREIBER.
FIREPLACE HEATER.

No. 513,842.

Patented Jan. 30, 1894.

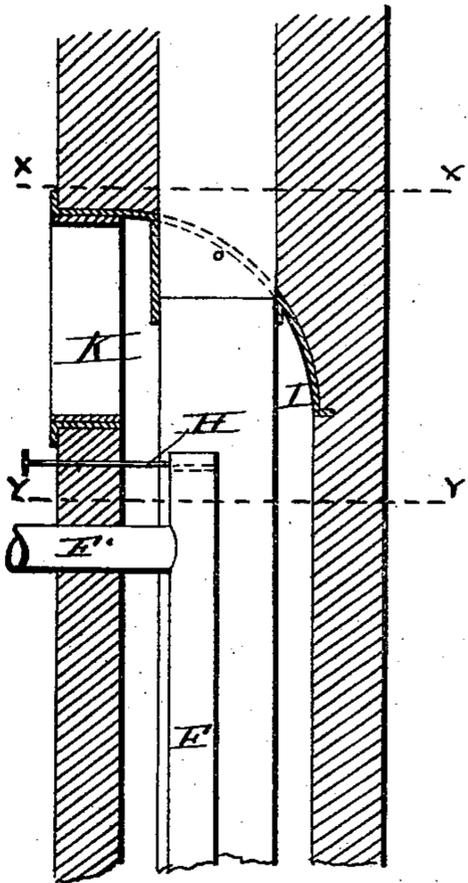


Fig. 1

Fig. 3

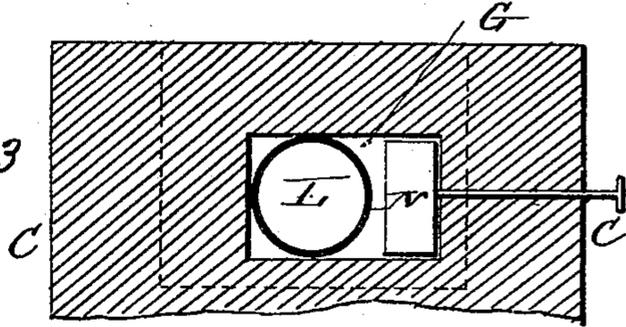


Fig. 5

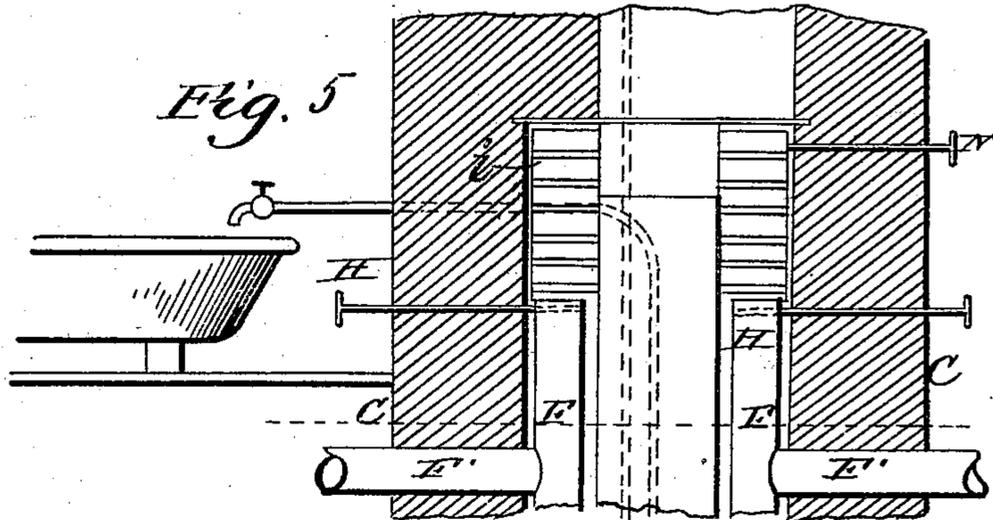


Fig. 2

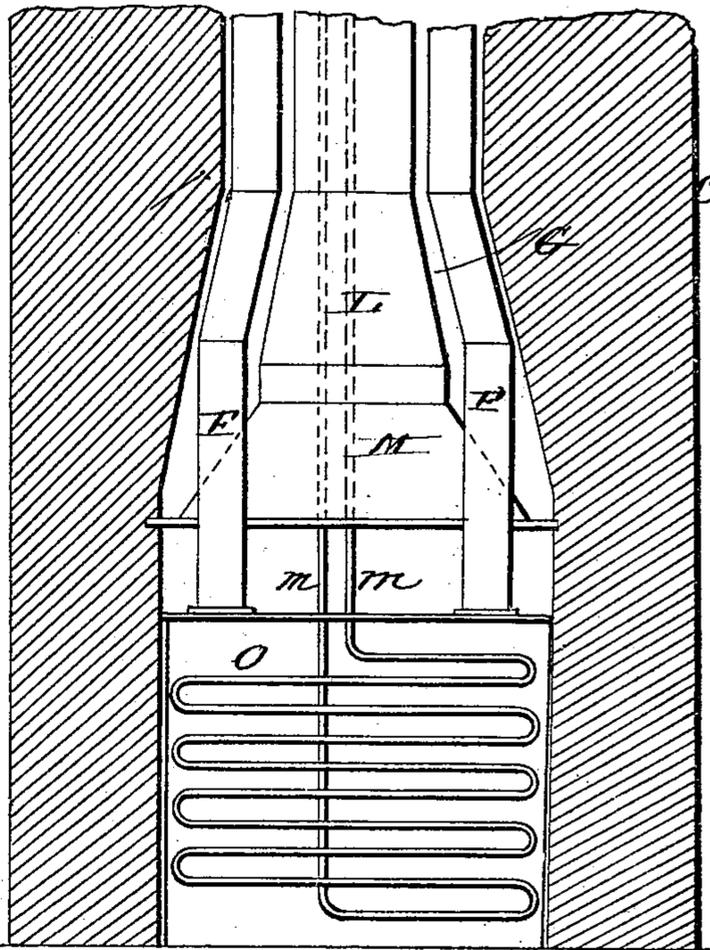
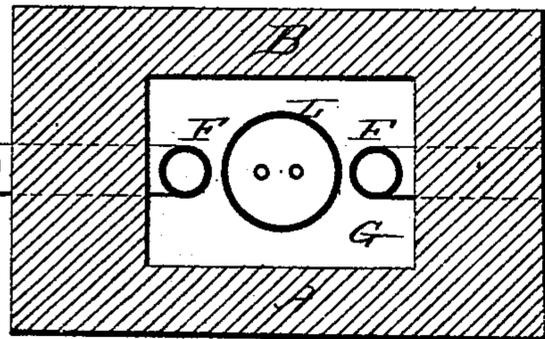


Fig. 4

Witnesses:

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UNITED STATES PATENT OFFICE

JACOB C. TREIBER, OF BEAVER, PENNSYLVANIA.

FIREPLACE-HEATER.

SPECIFICATION forming part of Letters Patent No. 513,842, dated January 30, 1894.

Application filed April 12, 1893. Serial No. 470,092. (No model.)

To all whom it may concern:

Be it known that I, JACOB C. TREIBER, a citizen of the United States, residing at Beaver, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Fireplace-Heaters; 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 appertains to make and use the same.

This invention has relation to fire-place heaters and has for its object the novel construction of apparatus whereby an ordinary fire-place, containing a grate or burner, and adapted for the use of solid, gaseous or liquid fuel may be utilized for heating several stories or apartments and may also be utilized for heating water for bath tubs, wash stands and for other purposes.

My invention consists in the novel construction, combination, and arrangement of parts as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a vertical transverse section of a brick fire-place and chimney provided with my improvements. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is a horizontal section on line X—X of Fig. 1. Fig. 4 is a similar section on line Y—Y of Fig. 1. Fig. 5 is a detail section.

A. designates the front wall, B. the back wall, C. the side walls of a brick chimney and fire-place structure, built in the usual manner.

D. designates the fire-place having the grate *d* which may be used for burning coal or which may be supplied with gas burning appliances of any approved type.

E. designates a hot air box located at and forming the back of the fire-place. This box is a metallic structure, preferably cast iron and of such shape that its front will deflect and radiate the heat from the fire into the room in which the fire-place is located.

The box E, at its base and back part communicates with the open air through an air port *e*, in the back wall of the chimney and through this opening the supply of air is taken for the flues leading from the hot air box to the different rooms above. The top of the hot air box is below the top of the fire-place and has connected to it the metallic hot

air flues or pipes F F which lead upward through the chimney space G and are branched above the second floor as shown at F' so as to lead to distant rooms, one or more. On the upper end of each pipe or flue, F, is a valve H, which may be opened more or less when it is desired to cool the rooms to which the branches lead; the hot air in such case being admitted to the chimney space.

The chimney space, at a suitable point above the second floor is provided with a curved metallic hood I, opposite which a register opening K is formed in the front wall of the chimney and a register *i* set therein.

The chimney space which is preferably lined with terra cotta pipe, constitutes a hot air flue, supplied with fresh air through a port *k* in the back wall of the chimney.

The smoke and products of combustion from the fire are conducted off through a separate metal pipe L arranged centrally within the chimney space, and terminating at its lower end in a bell or hood M, the mouth of which fills the top of the fire-place.

The hood or deflector I in the chimney space above the second floor is provided with a valve N, which may be opened when the apartment, heated through the register *i* requires cooling, the heat then passing upward and out of the chimney.

a designates an opening in the front wall of the chimney above the hood M, designed for the admission of a water vessel, which is supported on the hood and used to moisten the air in the chimney space.

For the purpose of heating water to be supplied to a bath room or wash stand, I arrange a coil of pipe O in the hot air box and close to the front wall thereof, and connect said coil by pipes *m m* running up through the chimney space to a source of water supply such as a tank, and to the bath or wash stand fittings. The heat from the fire being sufficient to heat the water within the coil, a supply of hot water is conveniently and economically obtainable whenever desired.

The heating system above described is efficient and economical. The brick work is simple, and easily constructed, there being but one opening or flue space built therein, such space serving in part as a hot air flue itself

and as a receptacle for the other hot air flues together with the smoke flue.

Having described my invention, I claim as new—

5 1. In a fire-place heater, the combination with the fire-place D and the chimney structure surmounting and inclosing the same, of the hot air box E at the back of said fire-
 10 place, the smoke flue L located in the chimney space and terminating in the hood M, the hot air flues F rising from the box E through the chimney space and having lateral branch
 15 flues F and valves H, the arched hood or deflector I in the upper part of the chimney space having the valve N, and the register *i*, substantially as described.

2. In a fire place heater, the combination

with the fire place D, hot air box E located in the rear thereof, smoke flue L located in the chimney space and the hot air flues F com- 20
 municating with the hot air box E, of the water heating apparatus, comprising the coil O, located within the fire box adjacent to the front wall thereof, the pipes *m m* leading to
 25 and from said coil and connecting respectively with a source of supply and with the bath or wash stand, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JACOB C. TREIBER.

Witnesses:

W. D. TALLON,
 WINFIELD S. MOORE.