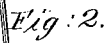
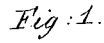


Bath,

Patented Dec. 16, 1845.



UNITED STATES PATENT OFFICE.

W. G. YOUNG, OF BALTIMORE, MARYLAND, ASSIGNOR TO A. H. REIP.

IMPROVEMENT IN BATHING APPARATUS.

Specification forming part of Letters Patent No. 4,309, dated December 16, 1843.

To all whom it may concern:

Be it known that I, W. G. YOUNG, of the city and county of Baltimore, and State of Maryland, have invented a new and useful Improvement in Bathing Apparatus; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my apparatus. Fig. 2 is a section thereof.

The nature of my invention consists in the construction and arrangement of the flue and boiler, which is combined with the bathing apparatus for economizing heat, and the connection therewith of the showering apparatus, by which a warm or cold shower can be obtained at the option of the bather.

To construct my improvement, I form a bathing-tub of ordinary pattern, as designated by letter A in the drawings. This tub is a little longer than usual, and at the foot it has a partition across it at *b*, through which are a number of holes. The tub is supported on four legs, and under the forward end there is a box, *c*, the sides of which are double, as shown in Fig. 2, leaving a space between them, which is filled with water, and communicates with the tub above at *d*, Fig. 2, and also by means of a pipe, *e*, that leads from the tub down to the bottom of the box outside, and there enters the space above named. Thus a boiler is formed having a large space in it surrounded by water. Into this square space or compartment a drawer, *f*, fits. (Shown in Fig.

1, partly drawn out.) This forms a furnace, it being furnished with a grate, *g*, and opening *h* in front for air. The smoke-pipe *i* ascends through the top of the boiler and bottom of the tub, passing out through compartment at the foot of the tub formed by the partition *b*. The flue ascends nearly to the top, descends to the bottom again. It then returns upward to its termination. This arrangement imparts all the heat from the fuel to the water, and economizes it to the greatest extent, a large tub of water being heated with the smallest amount of coal. From the head of the tub standards *k* project up, that serve to support a reservoir, *l*, in the bottom of which there is a valve, *m*, and a rose or perforated chamber, *n*, for the purpose of showering. A curtain, *o*, surrounds the space inside the standards from the reservoir to the tub. At the head of the tub outside is affixed a forcing-pump, *p*, with a pipe, *q*, leading up into the reservoir *l*. The pump communicates with the tub from which the reservoir is supplied.

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

A boiler surrounding a furnace as herein described, in combination with a flue ascending and returning in an apartment at the foot of the bath, as above set forth.

WM. G. YOUNG.

Witnesses:

ALFRED H. REIP,
JOHN L. SPANGLER.