

G. H. THATCHER.

Foot Warmer.

No. 5,029.

Patented March 20, 1847.

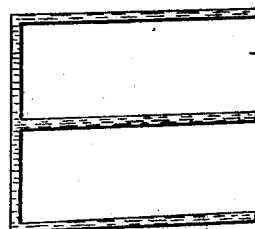
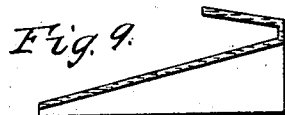
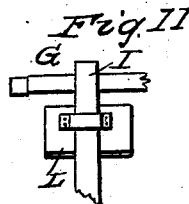
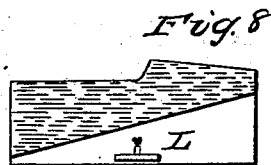
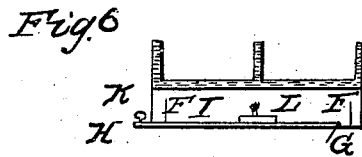
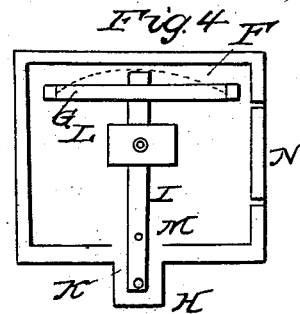
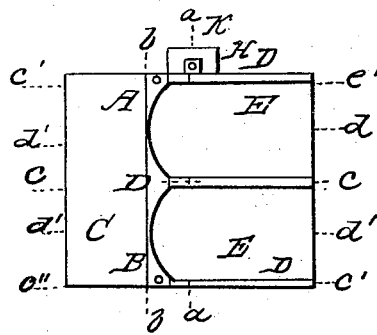
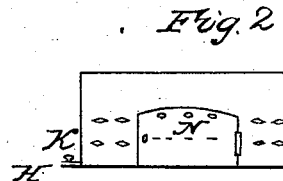
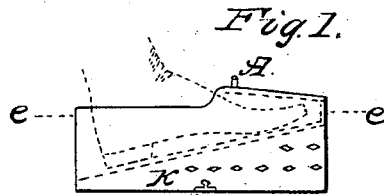
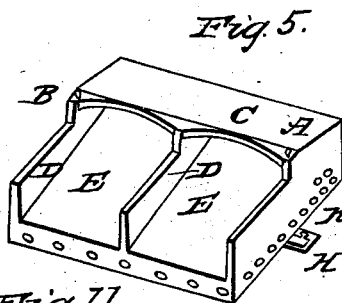


Fig. 10.



UNITED STATES PATENT OFFICE.

GEO. H. THATCHER, OF BALLSTON, NEW YORK.

FOOT-STOVE.

Specification of Letters Patent No. 5,029, dated March 20, 1847.

To all whom it may concern:

Be it known that I, GEORGE H. THATCHER, of the town of Ballston, county of Saratoga, and State of New York, have invented a new and useful Machine or Apparatus for Keeping the Feet Warm, of which the following is a specification.

My object in this invention is to construct an apparatus (which may be called a water foot-stove) by which the feet may be kept warm for a long time without the necessity of replenishing the stove and by which also the degree of warmth may be regulated and the following is an exact description of my invention.

The material of which I make the apparatus (which I call a foot-warmer) may be any sheet metal; but on account of its cheapness and the ease of working it, I prefer sheet tin. Of this then (or of any other sheet metal) I construct a box having two apartments, an upper and a lower, between which there is no communication. The lower apartment contains a lamp for the purpose of keeping a proper temperature in the water contained in the upper apartment, and also the apparatus connected with the lamp for the purpose of moving it. The upper apartment is made water-tight, except that it has two holes in the top of it, fitted with corks or stoppers, by one of which it is filled with water, and the other of which serves as a vent for the escape of the air, while filling it. This upper apartment is so shaped as to surround the soles, the sides and the top (as far back as the instep) of each foot with a thin stratum of water of about one quarter of an inch in thickness, contained between parallel sheets of whatever metal is used in the construction of the stove.

The manner in which this foot-warmer is constructed will be better understood by reference to the drawings annexed to and forming part of this specification.

The warmer may of course be of different sizes, and the dimension following are for one of medium or rather large size. It is evidently not necessary to the warmer that it should be of precisely the same shape figured in the drawings, yet I have found that shape to be the most convenient.

No. 1, in the drawings represents a side view the side being 12 in. long 4 in. high in front and continuing of the same height for half the distance back. Thence it rises

to 5 in. and then slopes down until at the back it is $4\frac{1}{2}$ in. in height. This is in order that the top of the foot-warmer may accommodate the foot. The lower one of the two parallel and diagonal dotted lines represents the position and direction of the partition separating the two apartments. This partition is soldered firmly to the sides the front and the back of the foot-warmer. The remaining dotted lines show in part the shape of the upper apartment containing the water. The large dots below this partition, and the similar dots in Nos. 2 and 5, are perforations to admit the air freely to the lamp. In this drawing is also represented in dotted lines the position of the foot when in the warmer. A is the opening for filling the upper apartment with water; K is a knob the use of which is explained in Fig. No. 4.

No. 2, represents the back of the stove 10 in. long by $4\frac{1}{2}$ in. high; with a door, N, opening into the lower apartment for the purpose of taking out and filling the lamp.

No. 3, is a bird's eye view of the foot-warmer, E, E being the parts on which the feet rest; and D, D, D and C being parts filled with water and surrounding the sides and the top of the feet; as seen more plainly in—

No. 5, the perspective view. E, E are parallel to the partition between the apartments and about one quarter of an inch distant therefrom, the intermediate space (like D, D, D,) being filled with water.

No. 4, represents the upper side of the bottom of the foot-warmer 10 in. by 12 in., the upper apartment being supposed to be removed, and the view being a birdseye view. The lower apartment is seen to be furnished with double sides and double ends represented by the outer lines and the lines F, F, F, and a double door at N. This is to prevent any danger of fire from the lamp, L. I is a strip of tin or other metal, moving on a pivot, M, projecting out at the side of the warmer and turned horizontally by means of the knob, K. H is a projecting part of the bottom of the foot-warmer, for the purpose of protecting that part of I, which is outside of the warmer. G is a strip of tin fastened at its ends to the bottom of the warmer so as to allow the lever I to move and yet keep it in its place.

No. 11, represents the under side of the lamp L, which is fastened to I, by means of

a strap of tin soldered to the bottom of the lamp, through which I runs; so that the lamp can be easily removed from I and filled.

5 Nos. 6, 7, 8 and 9 are perpendicular sections of the foot-warmer at the lines *a, a*; *b, b*; *c, c*; and *d, d* or *d', d'* in Fig. No 3, respectively.

10 No. 10, a horizontal section at the line *e, e* in No. 1. The dark parts in the sections (except the lamp) represent parts filled with water. The same appearance (excepting the lamp) would be exhibited by a perpendicular section at the lines *c', c'* or *c'', c''* as in
15 Fig. No. 3, as is seen in No. 8, the section at *c, c*.

The same letters are used in the several drawings to designate the same parts of the foot-warmer.

20 It will be seen in No. 4 that by the knob, K, projecting at the side of the warmer, the lamp, L, may be moved nearer to or farther from the front; and this as will be seen on observing Nos. 8; 9 and 1 will bring the
25 flame nearer to or remove it farther from the water contained in the upper apartment; the separating partition being lower in front than in the rear. In this way I regulate the temperature of the water.

30 In using the foot-warmer the lamp is to be filled with alcohol, or some other liquid

used in lamps, and the upper apartment is to be filled with hot water through the orifice A, the vent B being at the same time left open for the escape of air. After filling the
35 upper apartment, both openings should be closed tightly and the lamp lighted. The warmer might be used without the lamp, but the water would soon cool.

For greater nicety I cover the parts E, E, 40 and the other parts which come in contact with the boot or shoe, with cloth or baize or some such material; or arrange and fit cushions to those parts of the foot-warmer so as to surround the feet. 45

I do not claim as my invention the use of hot water contained in a closed vessel for warming the feet; nor do I claim as my invention the heating of water or keeping it hot by a lamp but 50

I do claim—

1. The peculiar construction of the apparatus for surrounding the feet with a thin stratum of heated water as above described.

2. And I claim the combination therewith 55 of the adjustable heater arranged and operated in the manner and for the purpose above set forth.

GEORGE H. THATCHER.

Witnesses:

WM. P. ELLIOT,

ALBERT E. H. JOHNSON.