No. 752,426. PATENTED FEB. 16, 1904.

W. STEWART & W. J. WILES.

HEATER.

APPLICATION FILED NOV. 20, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

FIG. 1.

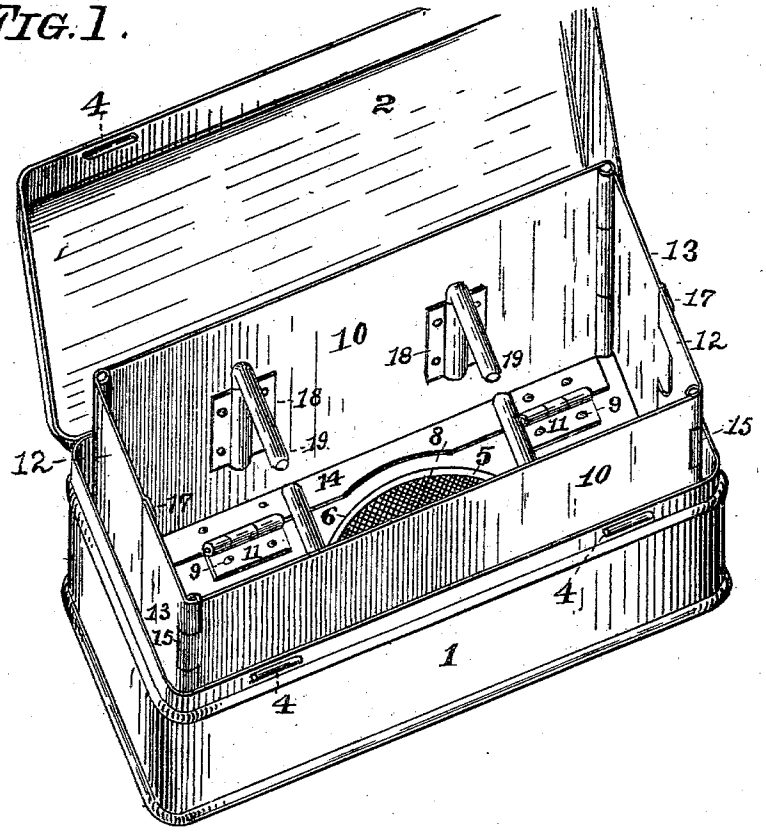
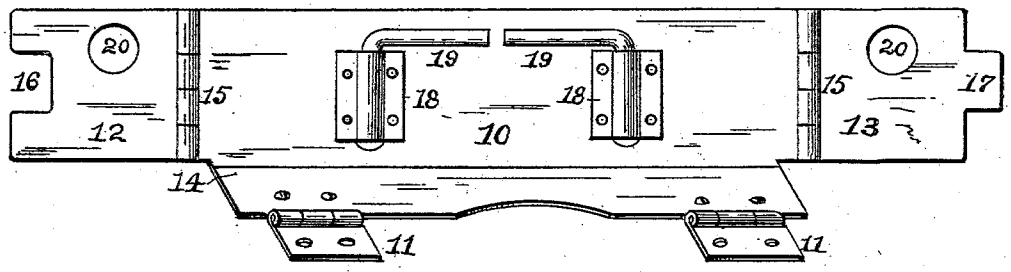


FIG. 2.



Witnesses:

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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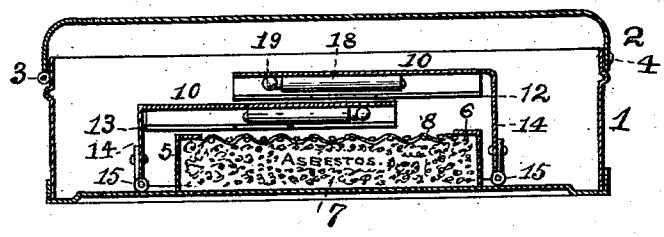
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HEATER.

APPLICATION FILED NOV. 20, 1903.

NO MODEL. 2 SHEETS—SHEET 2.

FIG. 3.



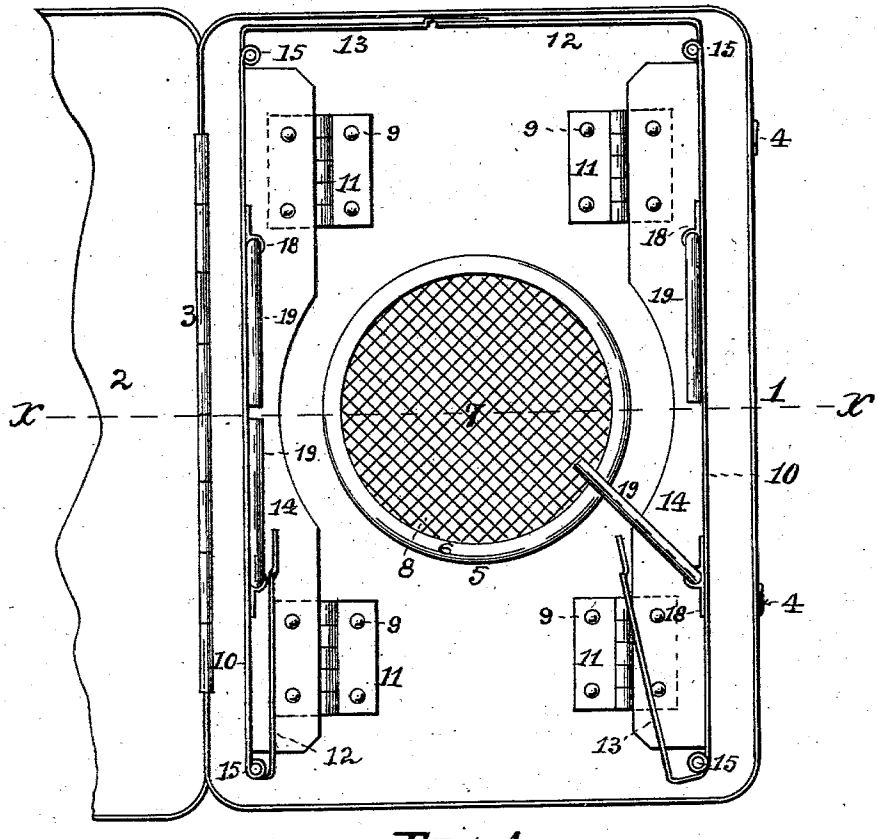


FIG. 4.

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No. 752,426. Patented February 16, 1904.

UNITED STATES PATENT OFFICE.

WALLACE STEWART AND WILLIAM J. WILES, OF BUFFALO, NEW YORK.

HEATER.

SPECIFICATION forming part of Letters Patent No. 752,426, dated February 16, 1904.

Application filed November 20, 1903. Serial No. 182,007. (No model.)

To all whom it may concern:

Be it known that we, WALLACE STEWART and WILLIAM J. WILES, citizens of the United States, and residents of Buffalo, in the county of Erie and State of New York, have jointly invented certain new and useful Improvements in Heaters; and we do hereby declare that the following is a full, clear, and exact specification of our said invention.

This invention has general reference to improvements in pocket-heaters; and it consists, essentially, in the novel and peculiar combination of parts and details of construction, as hereinafter first fully set forth and described, and then pointed out in the claims.

In the accompanying sheets of drawings, which serve to illustrate this invention more fully and which form a part of this specification, Figure 1 is a perspective view of the pocket-heater, showing the same open and ready for use. Fig. 2 is a perspective view of one of the longitudinal supports detached. Fig. 3 is a transverse sectional elevation in line *x x* of Fig. 4. Fig. 4 is a plan.

Like parts are designated by corresponding symbols of reference in all the figures.

The object of this invention is the production of a simple, convenient, efficient, and comparatively cheap portable pocket-heater, capable of being folded up and closed and readily carried in a person's pocket for instant use in heating a dinner contained in a dinner-pail, for boiling, &c. To attain these results, we construct this heater of a metallic, preferably sheet metal, box 1, having a lid or cover 2, hinged to the box 1 by the usual hinges 3 and when closed held in such closed condition by the usual catches 4, stamped near the upper edges of the box and its lid, as clearly indicated in Fig. 1.

Centrally within the box 1 we provide a circular ring 5, properly secured to the bottom of the box in any desirable manner not affected by heat, said ring having an inwardly-turned flange 6 to retain in position an asbestos fiber filling 7, covered by a wire screen 8, this filling 7 serving to retain alcohol or other suitable liquid fuel, and the screen preventing the filling from being displaced or disturbed. To the bottom of the box 1 there are secured by rivets 9 two longitudial supports constructed of sheet-metal strips 10 of proper width and length and having formed on both of its ends hinges 15, by means of which wings 12 and 13 are secured to the longitudinal supports, said wings forming end supports, as will hereinafter more fully appear. The longitudinal supports 10 are formed with offsets or right-angled bends 14, to which hinges 11 are riveted, as clearly illustrated in Fig. 2, one leaf of each of these hinges being secured to the longitudinal supports and the other to the bottom of the box 1. The ends of these wings are notched at 16 and tongued at 17, so that when the device is in an operative position, as shown in Fig. 1, these will engage one with the other and retain the wings in proper position. These notches and tongues may, however, be dispensed with, if desired, without materially affecting the efficience of the device.

To the face of the longitudinal supports 10 there are secured cleats 18, within which are swiveled L-shaped rods 19, which rods when turned into the position shown in Fig. 1 serve as a griddle for supporting a cup or other vessel smaller in diameter than the distance between the two longitudinal supports 10 when in an erect position. These L-shaped rods may be folded close upon the face of the supports 10 and then the wings 12 and 13 also folded upon these supports 10, after which the longitudinal supports may be folded one upon the other, as shown in Fig. 3, in which condition the lid 2 can be closed upon the box 1 and the whole device placed into a person's pocket, thus producing a most convenient, serviceable, and efficient heater.

In the wings 12 and 13 there are openings 20, through which the gases of combustion may escape when a dinner-pail or other vessel sufficiently large to cover the entire space above these supports and wings is placed thereon.

As fuel, alcohol, gasolene, or other suitable liquid fuel is poured into the asbestos filling, which, when ignited, produces sufficient heat for the purpose intended.

Constructed as described, this apparatus can be produced at a low cost, and it will be found an admirable adjunct to a dinner-pail.

Having thus fully described this invention,

we claim as new and desire to secure by Letters Patent of the United States—

1. As an improved article of manufacture, a pocket-heater consisting, essentially, of an oblong metallic box having a hinged cover, two longitudinal plates hinged to the bottom of said box and adapted to be raised into a vertical position to form longitudinal supports, wings hinged to said plates at their ends and adapted to form transverse supports, cleats on said longitudinal plates, L-shaped rods swiveled in said cleats and adapted to lie close to said plates and when extended to form a griddle, and a circular burner centrally in said box and adapted to burn liquid fuel, the said supports and rods when folded up being all within the box so that the cover may be closed, as specified.

2. A pocket-heater, consisting of a metallic box having a hinged cover, longitudinal supports hinged to said box and adapted to be raised into a vertical position, wings hinged to said longitudinal supports and adapted to be raised into a vertical position to form transverse supports, and a receptacle centrally in said box suitable to receive liquid fuel for consumption, as set forth.

In testimony that we claim the foregoing as our joint invention we have hereunto set our hands in the presence of two subscribing witnesses.

WALLACE STEWART.
WILLIAM J. WILES.

Attest:
GEORGE RIEXINGER,
PETER BECKER.