

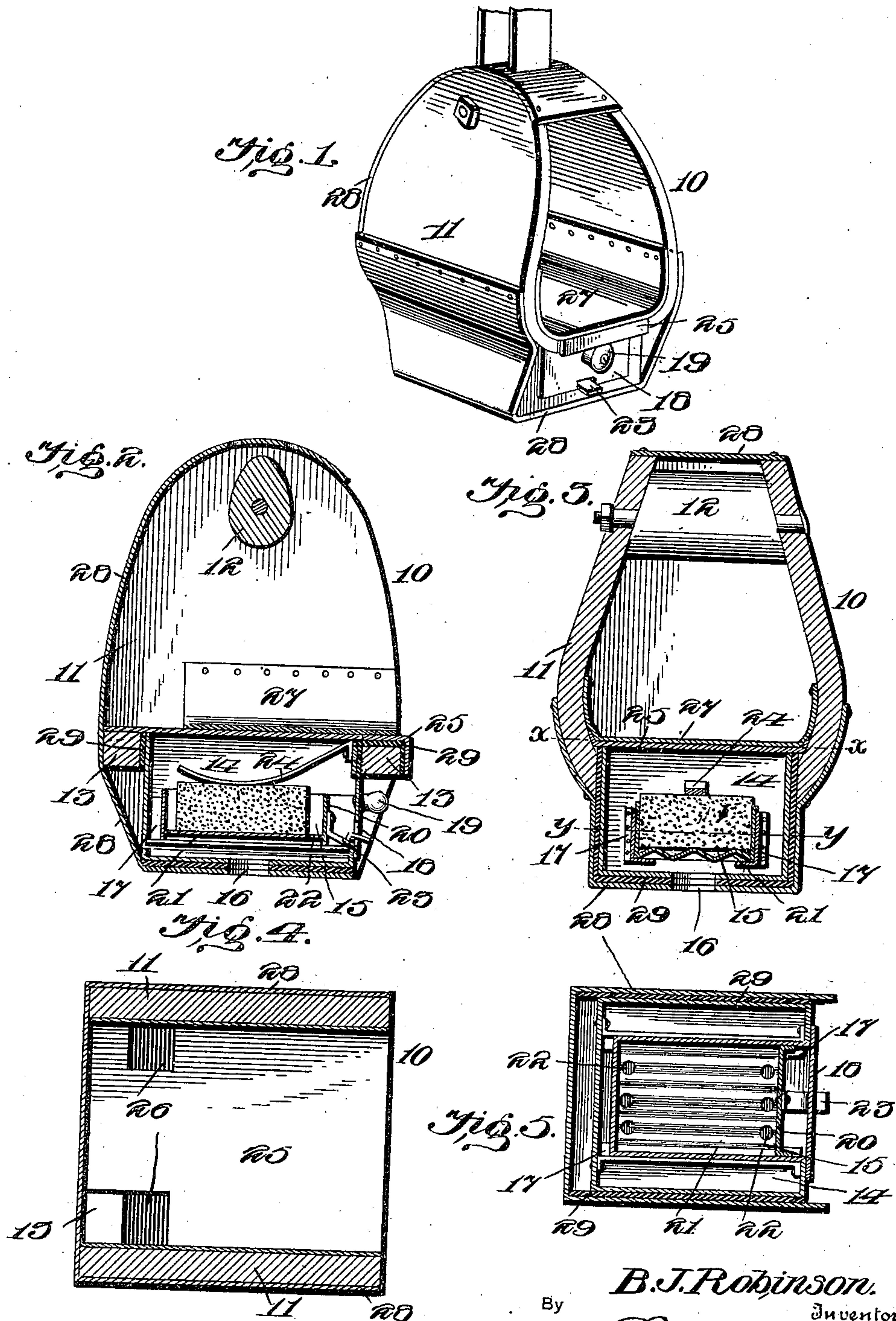
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Patented Mar. 19, 1901.

B. J. ROBINSON.
HEATER FOR RIDING STIRRUPS.

(No Model.)

(Application filed June 21, 1900.)



Witnesses

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UNITED STATES PATENT OFFICE.

BRADBURY J. ROBINSON, OF FARMINGTON, MISSOURI.

HEATER FOR RIDING-STIRRUPS.

SPECIFICATION forming part of Letters Patent No. 670,061, dated March 19, 1901.

Application filed June 21, 1900. Serial No. 21,103. (No model.)

To all whom it may concern:

Be it known that I, BRADBURY J. ROBINSON, a citizen of the United States, residing at Farmington, in the county of St. Francois and State of Missouri, have invented a new and useful Heater for Riding-Stirrups, of which the following is a specification.

The present invention relates to riding-stirrups; and one object thereof is to provide in connection therewith a new and useful heater for keeping the foot of a rider warm.

A further object is to construct the heater so that all the parts are securely locked in operative position and there is no liability of accidental displacement or rattle.

A still further object is to protect the heater from the outer air and the inflammable portions of the stirrup from the heat, thereby making the device practically indestructible.

In order that a complete understanding of the invention may be had, the preferred form of construction is described in the following specification and shown in the accompanying drawings, which form a part of the same, and in which—

Figure 1 is a perspective view. Fig. 2 is a vertical longitudinal section. Fig. 3 is a vertical cross-section. Fig. 4 is a horizontal cross-section on the line xx of Fig. 3. Fig. 5 is a horizontal cross-section on the line yy of Fig. 3.

Similar numerals of reference designate like and corresponding parts in the several figures of the drawings.

In the drawings, 10 designates a stirrup which may be of any construction desired, but, as shown, comprises a casing 11, made of a single strip of wood bent to form the sides and bottom thereof. The ends of this strip are connected by the cross-bar 12, around which the stirrup-strap is passed. The bottom of the casing is cut out to form an opening, leaving the two cross-bars 13. Directly beneath this opening is arranged the heater.

The heater comprises a combustion-chamber 14, within which is slidably mounted a fuel-box 15. The combustion-chamber preferably consists of a sheet-metal angular boxing fastened in the bottom opening of the stirrup and provided with a central draft-opening 16 through the bottom thereof. The front portion of the boxing is also provided

with an opening through which the fuel-box 15 is introduced. Extending longitudinally through the boxing and alined with the lower corners of the front opening are the angular guideways 17, which are fastened to the end walls. As clearly shown in Figs. 2 and 3, these guideways are spaced from the walls of the boxing on all sides, so as to leave a clear air-space around the fuel-box when in place. A metallic drawer 15 is arranged to slide upon the guideways 17 and is provided with a flat face-plate 18, which closes the front opening of the boxing and is provided with a suitable handle 19. Spaced from the front face-plate is a vertical wall 20, and a corrugated bottom 21 is arranged between this wall and the inner or back end, said bottom being provided at its ends with rows of draft-openings 22. This forms a receptacle for charcoal or other similar fuel.

The fuel-box 15 is shorter than the combustion-chamber 14, so that when in place an air-space is left entirely around the fuel-box, whereby a comparatively great area of heating-surface is provided. In order to hold the drawer in place, the spring-latch 23 is secured upon the wall 20 and has a shoulder designed to engage the inner edge of the front wall of the boxing. A flat metal spring 24 is arranged to press upon the upper face of the charcoal block or other fuel and hold it in place in the fuel-box and also prevent its rattling.

Secured on the inner side of the bottom of the stirrup and closing the opening therein is the flat metal plate 25, which is cut away at its inner ends to provide the draft-openings 26, which afford direct heat communication between the heater and the stirrup. Arranged over this metal plate is a sheet of flexible textile material 27, forming a heat-guard, which is attached solely at its ends to the inner sides of the stirrup and normally loosely rests upon the plate 25 and conforms to the shape of the bottom of the stirrup, but is so arranged that it may be raised thereabout to allow the foot of the rider to be inserted between the same and the plate 25.

Covering the entire heater and extending partly over the front of the stirrup is a leather covering 28, which thus forms an inclosed foot-pocket, and interposed between the heater and covering and between the heater and the stir-

rup is provided a casing 29, preferably of asbestos, which prevents the stirrup and leather from being charred and also serves to retain the heat within the casing.

5 In operation if burning charcoal or similar fuel is placed in the fuel-box the heat will be radiated in all directions and the heated air will rise through the openings 26 and into the stirrup. At the same time the ashes will sift
10 down and escape through the draft-opening 16 in the bottom of the casing. By placing the foot under the textile material 27 it will come in direct contact with the heated plate 26, and consequently more heat will be applied
15 to the foot.

From the above description it will be seen that an efficient stirrup-heater is provided in which the several parts are securely held in position, the heater is entirely protected from
20 the outer air, and the heat is conducted directly into the stirrup.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be ap-
25 parent to those skilled in the art without further description, and it will be understood that changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacri-
30 ficing any of the advantages of the invention.

Having thus described the invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a box-stirrup hav-
35 ing an inclosed foot-pocket, of a combustion-chamber arranged beneath the pocket and having its draft-exhaust communicating solely with the same, said combustion-chamber being provided with a lower draft-open-
40 ing, a heating device removably mounted within the combustion-chamber and spaced from the walls thereof on all sides, leaving a free open heating-space whereby the air will pass about the fire-box and will be discharged
45 solely into the foot-pocket.

2. The combination with a riding-stirrup, of a heater arranged beneath the stirrup, and a heat-guard secured within the stirrup and adapted to be placed over or under the rider's
50 foot.

3. The combination with a stirrup, of a heater arranged beneath the stirrup, and a strip of flexible material secured at its ends to the inner walls of the stirrup and normally
55 resting upon the bottom of the same, but

adapted to be raised to permit the insertion of the rider's foot between the same and the bottom of the stirrup.

4. The combination with a box-stirrup hav-
ing an inclosed foot-pocket, of a combustion- 60 chamber arranged beneath the stirrup, and having its draft-exit communicating solely with the foot-pocket, said combustion-chamber being provided with a lower draft-open-
ing, a fuel-box slidably mounted within the 65 combustion-chamber and spaced from the walls thereof on all sides leaving a free open heating-space, whereby the air will pass about the fire-box and will be discharged solely into the foot-pocket. 70

5. The combination with a box riding-stirrup, of a combustion-chamber arranged be-
neath the stirrup and having open heat com-
munication solely with said stirrup, said 75 chamber being also provided with a lower draft-opening, constituting an ash-discharge, a pair of guideways arranged within said combustion-chamber and spaced from the side walls thereof, and a heating device slidably
80 mounted upon the guideways, and spaced from the end walls thereof.

6. The combination with a box-stirrup pro-
vided with an inclosed foot-pocket and hav-
ing an opening through the bottom thereof, of a combustion-chamber arranged directly 85 beneath said opening and having its only draft-exit discharging directly through said opening into the foot-pocket, a heating device mounted within the combustion-chamber and spaced from all the walls thereof, a casing 90 covering one end of the stirrup and extending around and covering the combustion-chamber, and a layer of non-combustible material surrounding said combustion-chamber and interposed between the latter and the cas- 95 ing.

7. The combination with a stirrup having a heater arranged beneath the same, a metal plate forming the top of the heater and the bottom of the stirrup-casing, and a covering 100 loosely arranged within the stirrup over said plate whereby a person's foot may be inserted between said covering and plate.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 105 the presence of two witnesses.

BRADBURY J. ROBINSON.

Witnesses:

FRANK L. KEITH,
J. P. COYCE.