(No Model.) 2 Sheets—Sheet 1.

O. D. HUNT.

CAMP STOVE.

No. 583,705. Patented June 1, 1897.

Fig. 1

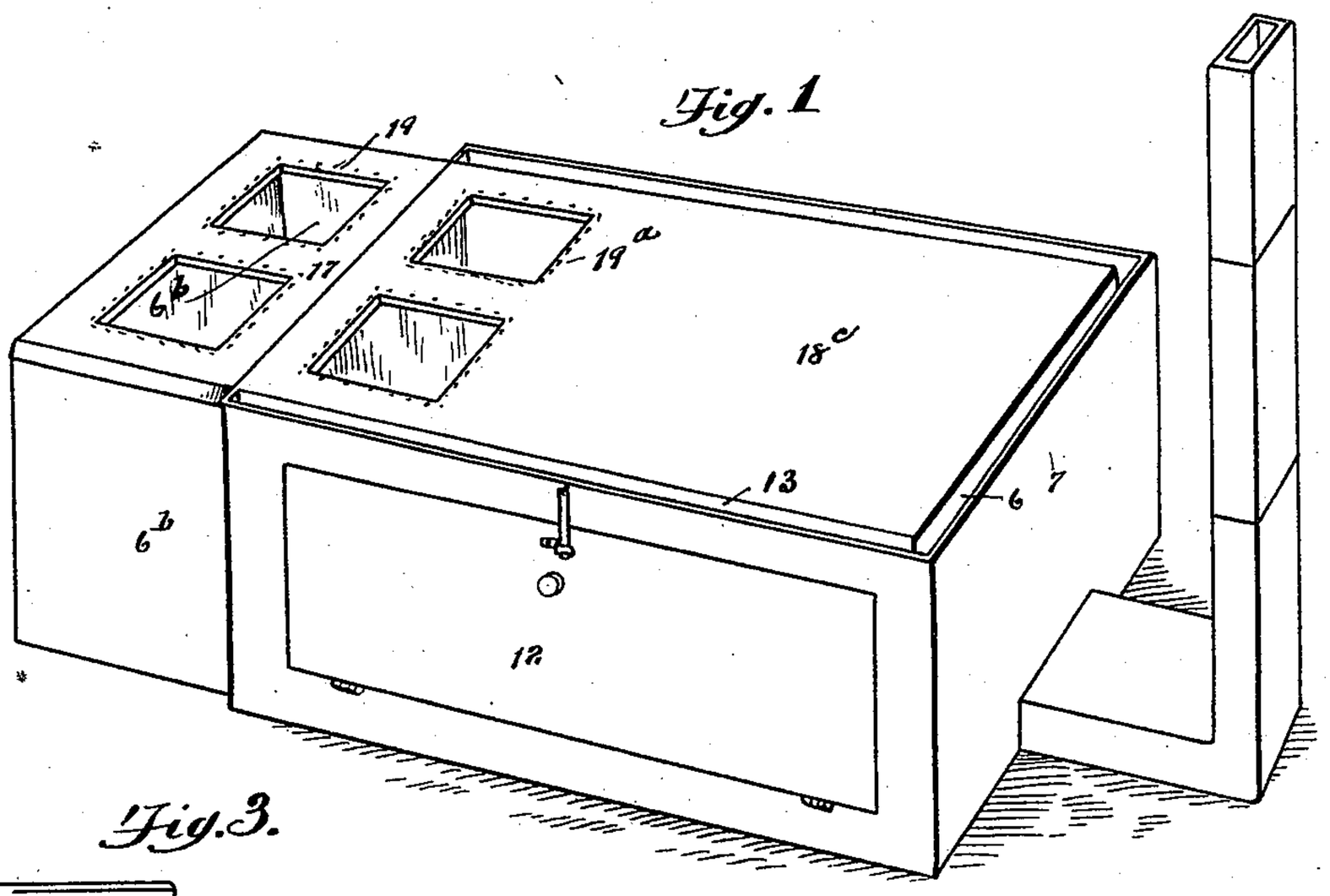


Fig. 3.

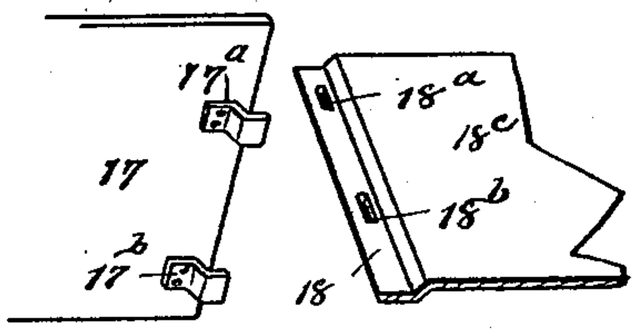
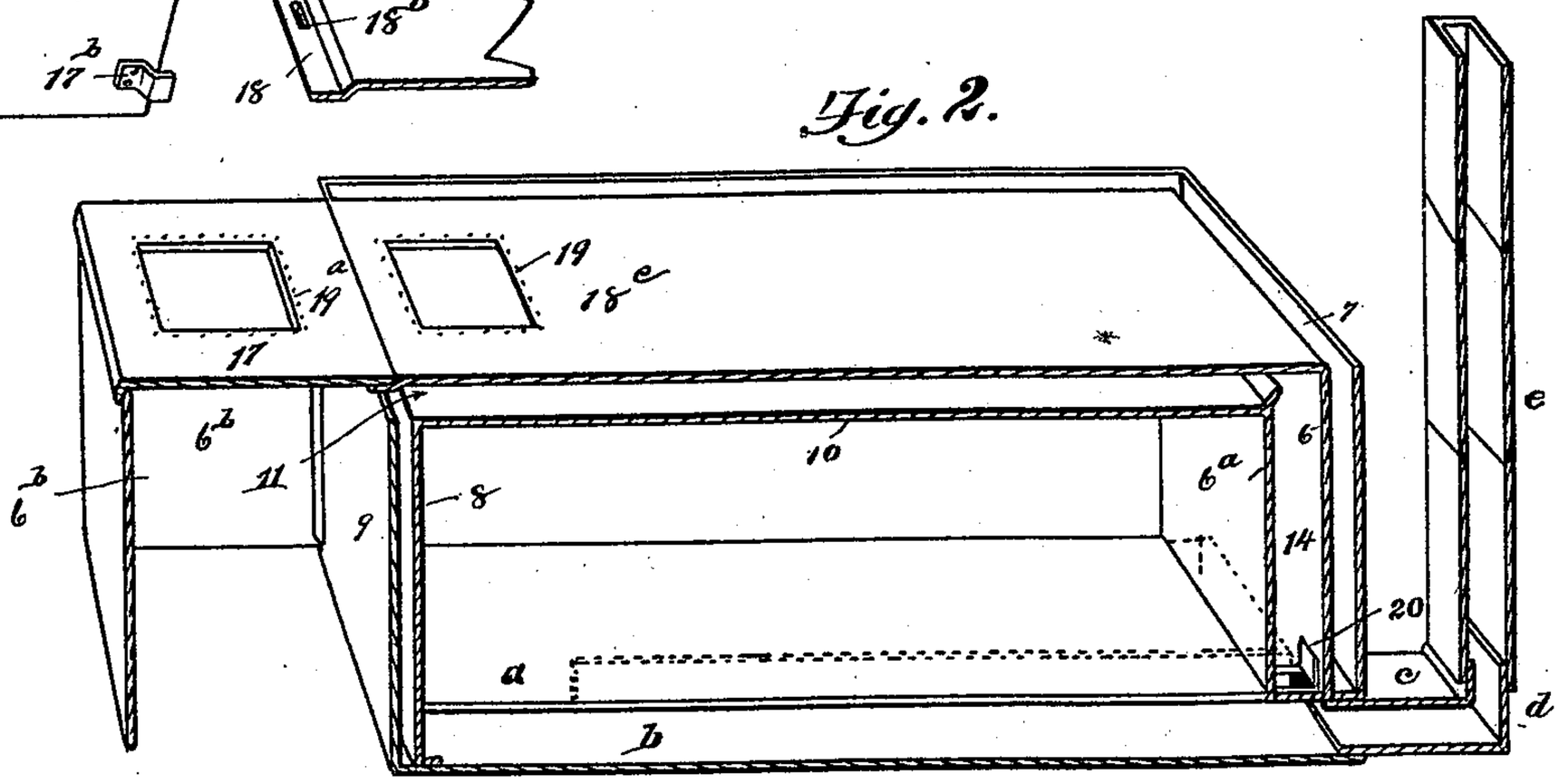


Fig. 2.



WITNESSES

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(No Model.) 2 Sheets—Sheet 2.

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CAMP STOVE.

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Fig. 4.

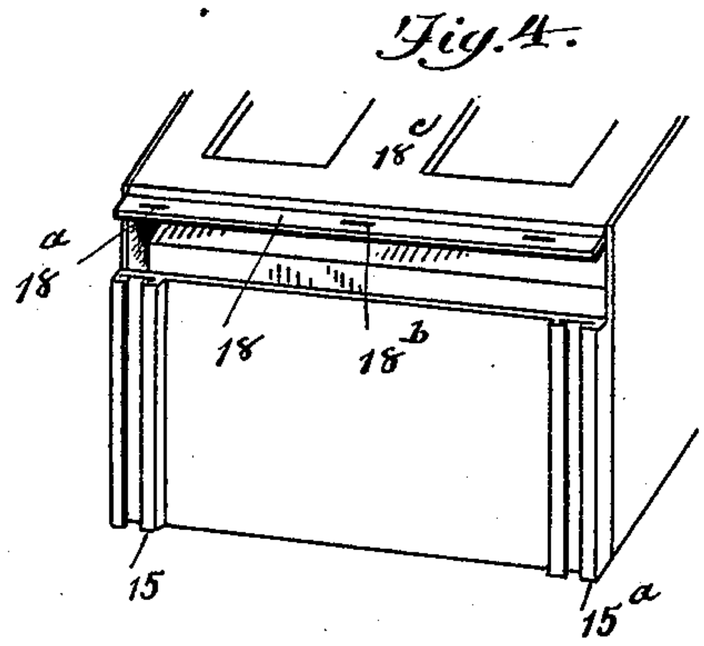


Fig 5.

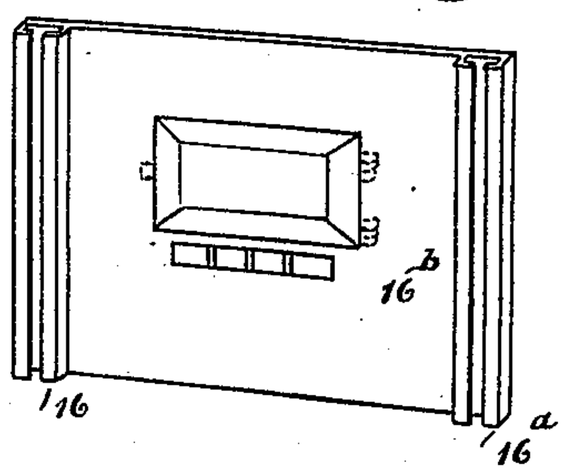


Fig. 6.

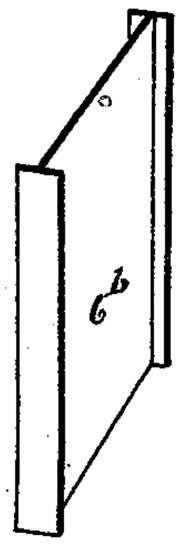


Fig. 8.

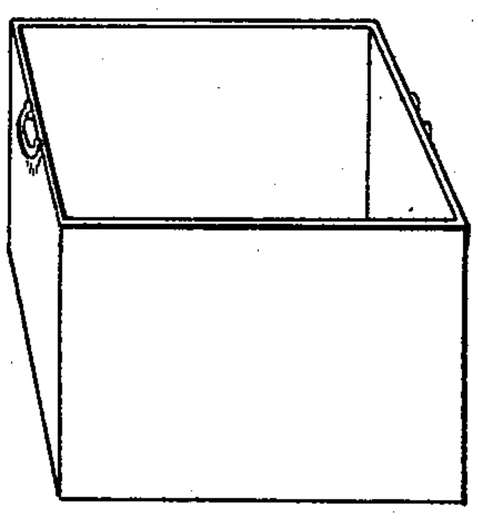
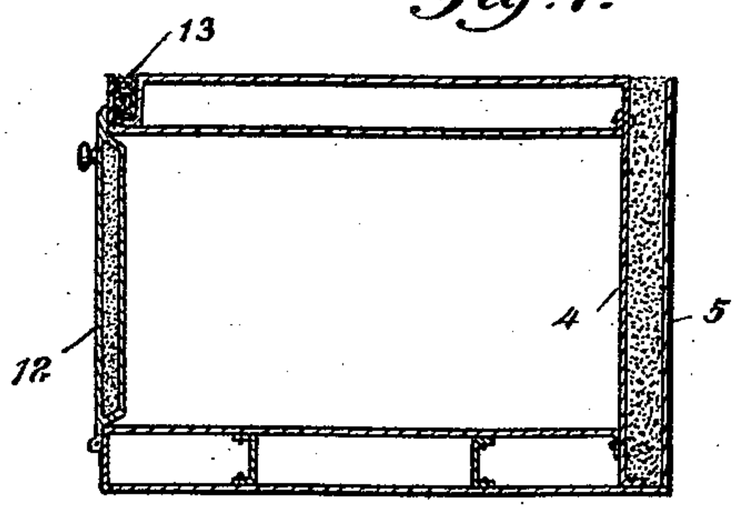


Fig. 7.



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UNITED STATES PATENT OFFICE.

OLIVER D. HUNT, OF DETROIT, MICHIGAN, ASSIGNOR OF ONE-FOURTH TO CHARLOTTE A. O'LOAN, OF SAME PLACE.

CAMP-STOVE.

SPECIFICATION forming part of Letters Patent No. 583,705, dated June 1, 1897.

Application filed March 18, 1896. Serial No. 583,684. (No model.)

To all whom it may concern:

Be it known that I, OLIVER D. HUNT, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Camp-Stoves; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to camp-stoves, and has for its object an improvement in that class of stoves which are intended to be made light for transportation, and compact, so as to occupy little space when packed for transportation and which are made either wholly or in part in knockdown form. Stoves of this class are of necessity used in exposed places, either in the open air or under such inadequate protection that cold drafts of air readily interfere with their proper action in cooking, especially in baking; and this is particularly so, because, in order that they may be light, they are made of thin light material.

In my invention I retain the thin light material, but so arrange the stove, and especially the oven part of the stove, that when in use a mass of earth or sand or other similar non-conducting or slow conducting material surrounds the oven or surrounds those parts of it which are more particularly exposed, and thus produce an even and constant heat in that part of the stove where the baking is being conducted. At the same time I make the stove in such shape and form that it and its furniture are arranged in very compact form for transportation.

In the drawings, Figure 1 shows the stove in perspective. Fig. 2 is a vertical section taken midway through the stove from front to rear. Fig. 3 is a detail indicating the manner in which the top of the fire-box is attached to the top of the oven-casing. Fig. 4 is a front view of the oven-casing, indicating the means by which the fire-box is attached to the oven-casing. Fig. 5 is a rear view of the front plate of the fire-box. Fig. 6 is a perspective of the end plate of the fire-box. Fig. 7 is a section across the oven. Fig. 8 shows a boiler, and is introduced for the purpose of showing the style of furniture employed with the stove.

The oven part of the stove is employed as a packing-case within which to pack the knockdown fire-box, the stovepipe, and the furniture. It is not itself made so as to be reduced in size by taking it to pieces.

The oven part of the stove is made in a rectangular prism with double walls. The space between the bottom walls *a* and *b* is divided into three flues by partitions that extend lengthwise of the stove, and in the center of these three flues projects the lower end of the pipe *c*, which is arranged to telescope therein up to the elbow *d*. When in use, the pipe *c* is drawn out to the position shown in Figs. 1 and 2 and the upright part *e* of the pipe secured to the horizontal part *c* by means of the elbow *d*. The upright *e* is made in several pieces, so as to secure a sufficient draft to the stove and also so as to carry the products of combustion high enough to prevent their setting fire to the inclosing tent, which is arranged to pass over the protruding end of the horizontal part *c* of the pipe, and the wall of the tent rises between the end of the oven and the pipe. The two ends and the back of the oven part of the stove are made double, and there is an opening into the space between the double walls at the top of them.

The walls 4 and 5 at the back of the stove are provided with this opening near the upper surface and at the outside of the stove, and the walls 6 and 7 at the chimney end of the stove are also provided with this opening at the outside and near the surface of the stove-oven. The walls 8 and 9, which are next to the fire-box, are provided with this opening near the surface of the lower wall 10 of the top of the stove, so that there is an opening 11 from the fire-box into the flue over the oven-top, and this opening is above the top of the wall 9.

On the front side of the oven there is a door 12, which is preferably made hollow and packed with some non-conducting substance like asbestos or mineral wool, and above the door-frame there is preferably a pocket 13, similar to the pocket at the rear between the walls 4 and 5, except that it only extends

down to the top of the oven. These pockets are adapted to be, and are intended to be, when the stove is in use, filled with sand or earth or some similar material of slow conducting power, so as to substantially surround the oven with a sand-filled double wall. At the rear, where a double wall is required to provide for the diving-flues 14, the sand-pocket is not absolutely essential, but is frequently desirable. Between the wall 10 above the oven and the wall 6^a at the rear of the oven is a flange projecting upward, which serves as an abutment to prevent sand from dropping into the flue 14 when, as is sometimes the case, it is found necessary to spread a thin covering of sand over the sheet 10 above the oven.

In front of the oven and near each vertical corner is a grooved strip 15 15^a, into which slides the dovetailed end of the end wall 6^b. The forward edge of the end piece 6^b is also provided with a cross bar or head, onto which slides a grooved strip 16 or 16^a of the fire-box. The end 16^b is provided with a feed-door, through which fuel is fed into the fire-box, and with a regulating-damper.

Above the box, of which the side walls are formed from the piece 16^b, the front end of the oven, and two pieces 6^b, is the top plate 17. This top plate is secured to the oven-top by means of two lugs 17^a and 17^b, that lock in holes 18^a and 18^b on a flange 18, projecting from the front of the oven-top 18^c. The bottom of the fire-box is left open, and in use it is intended that the fire-box shall be filled to a proper depth with sand or earth, thus enabling the user to regulate the size of the fire-box in proportion to the character of the fuel he can have, and also enabling him by the use of the heavy filling of earth to secure the otherwise light stove to its place on the earth.

The furniture is made square in form or rectangular in form and made to nest, so that two or three boilers like that shown in Fig. 8 and two or three bake-pans may all be packed in a nest and may all be placed in the oven for transportation. The sides, ends, and top of the fire-box are also placed in the oven for transportation and the upright part and elbow part of the smoke-pipe. The cooking-holes in the top of the fire-box and the top of the crown-sheet of the oven are preferably rectangular, provided with rectangular lids, and stiffened with strips of heavier metal, as indicated at 19 19^a. When in use, especially if in position where a stove is exposed to cold blasts of air from any direction, pockets are filled with sand or earth, and a steady constant heat can be produced even with the light and quickly-burning fuel that it is sometimes necessary to use.

A damper 20 in the horizontal part of the smoke-pipe *c* is arranged to give the stove a direct draft without any opportunity of the products of combustion passing under the oven, or to force the products of combustion under the oven on their way out through the pipe, as may be desired.

What I claim as novel, and desire to have secured to me by Letters Patent, is—

1. In combination with a stove-oven provided with surrounding flues and with open-topped pockets adapted to be filled with sand or similar material, a bottomless fire-box adapted to be partly filled with earth, whereby the heating capacity of the fire-box may be regulated to accord with the quality of fuel to be employed, substantially as described.

2. In a stove the combination of an oven, a fireplace, fire-flues over and under said oven, communications between said flues, a smoke-exit leading from the bottom flue, and open-topped sand-pockets, substantially as described.

3. In combination with an oven, a fireplace, flues above and below said oven, a smoke-pipe having a long horizontal section adapted to telescope into and to be drawn out from the under flue, thereby providing a pipe adapted to pass to the outside of an inclosure beneath the wall thereof, substantially as described.

4. In a stove, the combination of the oven, flues above, a flue below divided into three parts, one of which leads to the exit, a pipe adapted to telescope into the exit-flue and to be drawn therefrom, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

OLIVER D. HUNT.

Witnesses:
CHARLES F. BURTON,
F. CLOUGH.