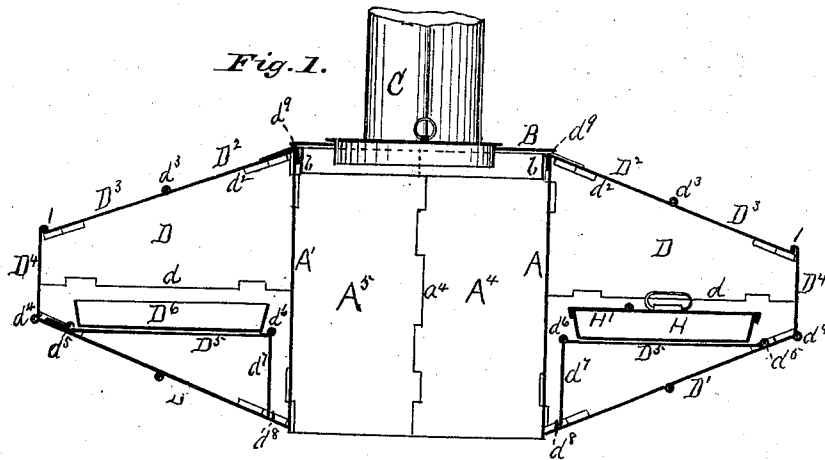
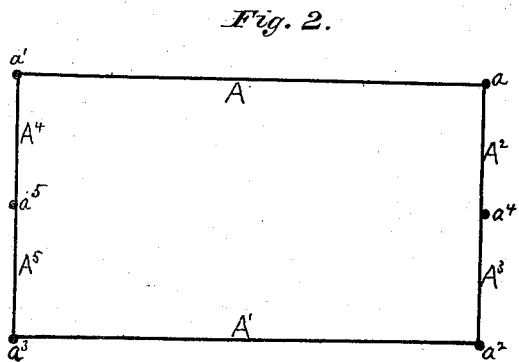
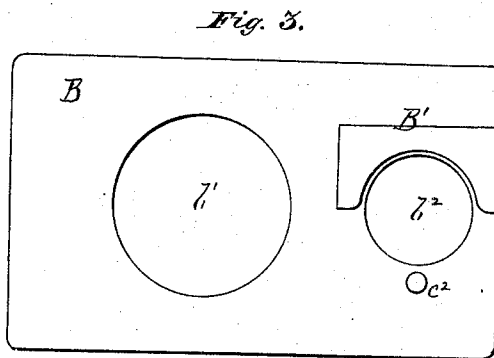
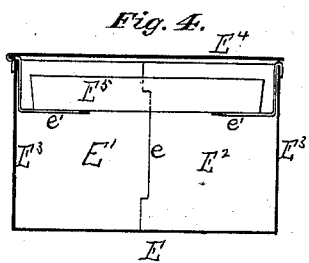
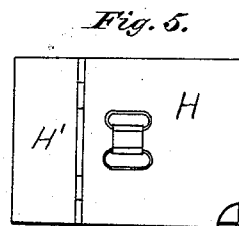
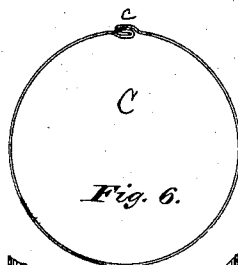


W. CLIFFORD.
Portable Stoves and Ovens.

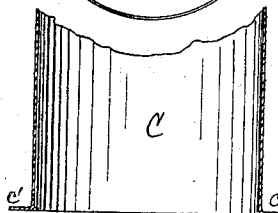
No. 197,963.

Patented Dec. 11, 1877.



Witnesses:

J. C. Brecht,
John A. Jones.



Inventor
Walter Clifford.
per Edwin James.
Attorney.

UNITED STATES PATENT OFFICE.

WALTER CLIFFORD, OF CAMP BAKER, MONTANA TERRITORY, ASSIGNOR TO
H. L. CLIFFORD, OF CHARLEVOIX, MICHIGAN.

IMPROVEMENT IN PORTABLE STOVE AND OVENS.

Specification forming part of Letters Patent No. **197,963**, dated December 11, 1877; application filed
June 25, 1877.

To all whom it may concern:

Be it known that I, WALTER CLIFFORD, of Camp Baker, in the county of Meagher and Territory of Montana, have invented an improved Combined Portable Stove and Ovens, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and the letters of reference marked thereon, making part of this specification, in which—

Figure 1 is a cross-section of the stove and the two side ovens, the latter being in position for baking. Fig. 2 is a cross-section of the stove. Fig. 3 is a top plan view of the top. Fig. 4 is a cross-section of the top oven. Fig. 5 is a top plan view of the coffee or tea boiler. Fig. 6 illustrates detached views of the pipe.

My invention has for its object the construction of a stove and ovens in such manner that they can be easily transported from place to place upon the back of a mule, or other suitable animal, without danger of any of the parts being lost, and is designed to be used principally upon the plains, although it can readily be adapted, and will be of great service to fishing and other parties who are camping out.

The nature of my invention consists in constructing the stove, as well as the ovens, in sections, and permanently hinging said sections together in such manner that they can be folded up so as to occupy but little space, while, at the same time, there can be no danger of any portion of the stove or of the ovens being lost or mislaid by becoming detached.

The construction and operation of my invention are as follows: The stove is composed of six sections, A A¹ A² A³ A⁴ A⁵. The sides A A¹ are formed of one piece each, but the front A² A³ and back A⁴ A⁵ are formed in two pieces, as clearly shown in Fig. 2. The side A is permanently hinged at *a* to the section A² of the front of the stove, and at *a*¹ to the section A⁴ of the back of the stove, while the side A¹ is permanently hinged, at *a*², to the section A³ of the front of the stove, and, at *a*³, to the section A⁵ of the back of the stove. The front sections A² A³ are permanently hinged together at *a*⁴, and the back sections A⁴ A⁵ at *a*⁵, as clearly shown in Fig. 2. The top B is con-

structed in one piece, having a flange, *b*, extending down around it of the same contour. This flange *b* fits inside of the stove when the top is on, retaining its sections in position when in use. This top is provided with the usual opening *b*¹ for the reception of a pot for boiling purposes, and has also secured to it a collar, B¹, partly surrounding the hole *b*² over which fits the pipe, said collar being so constructed as to leave a groove between it and the top of the stove, in which fits the flange *c*¹ of the pipe C. When the stove is to be prepared for transportation, the top and pipe being removed, the sections A² A³ are folded inwardly against each other, and likewise the sections A⁴ A⁵. This allows the sides A A¹ to be pressed together. The side ovens are V-shaped in formation. The ends, which are counterparts of each other, consist of two sections, D D¹, and are hinged together at *d*, Fig. 1. The section D¹ is hinged at *d*¹ to the bottom of the oven, while the section D is hinged at *d*² to the section D² of the top. The top of the oven is formed of two sections, D² D³, which are permanently hinged at *d*³, the section D³ acting as a part of the door of the oven. D⁴ is the door of the oven, and is hinged at *d*⁴ to the bottom of the oven. To the bottom of the oven is hinged, at *d*⁵, the baking-pan rest D⁵, to the outer end of which is hinged, at *d*⁶, a short arm, *d*⁷. When in position the lower end of this arm *d*⁷ rests against a pin, *d*⁸. D⁶ is the baking-pan, of the usual form and construction. *d*⁹ are hooks secured to the section D², which are designed to fasten the oven to the stove, as shown in Fig. 1. When the ovens are to be packed for transportation, the baking-pan D⁶ is removed, and the arm *d*⁷ of the pan-rest D⁵ folded over against the rest, causing the same to lie down on the bottom of the oven. The hook 1 of the door D⁴ is then unfastened, and the door folded back against the bottom. The sections D D¹ are then folded inwardly, and the top and bottom brought together. The top oven E is composed of five sections. The sides E³ and top E⁴ are each constructed in one piece. The ends, which are counterparts of each other, are formed of two sections, E¹ E², and are permanently hinged together at *e*, Fig. 4. The

sections E¹ are permanently hinged to one side of the oven, while the sections E² are permanently hinged to the other side. The top E⁴ is permanently hinged to one of the sides. This oven is provided with elbow-shaped rests e¹, upon which rests the baking-pan E⁵. These rests hook over the sides and ends of the oven, as shown in Fig. 4. When in use, this oven E is placed on top of the stove, and is folded for transportation in a similar manner to the stove and side ovens. In Fig. 5 is illustrated a coffee or tea boiler, H, having a door, H', for the insertion of the article to be boiled. This boiler is of such dimensions that it easily rests in the baking-pan D⁶ when in use. C is the pipe, which is lapped, as shown at c, Fig. 6. The lower section of this pipe is provided with a flange, c¹, which is pushed into the groove under the collar B¹ on the top of the stove, and by means of which it is fastened thereto, being held in position by the button c². When desired to be transported, the sections of the pipe C are unlapped and slipped over the lower section.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. As a new article of manufacture, a portable stove, consisting of the sections A A¹ A² A³ A⁴ A⁵, permanently hinged together, top B, collar B¹, and pipe C, the whole constructed and arranged substantially as described.

2. As a new article of manufacture, an oven, consisting of the sections D D¹ D² D³ D⁴ and bottom, permanently hinged together, pan-rest D⁵, arm d⁷, and pin d⁸, the whole constructed and arranged substantially as described.

3. As a new article of manufacture, an oven, consisting of the sections E¹ E² E³ E⁴, permanently hinged together, and elbow-shaped rests e¹, the whole constructed and arranged substantially as described.

In testimony whereof I have hereunto signed my name to this specification in the presence of two subscribing witnesses.

WALTER CLIFFORD.

Witnesses:

GEO. S. YOUNG,
R. M. WHITEFOOT.