(No Model.)

## C. G. SHEPARD & P. ADAMS, Jr. REMOVABLE HANDLE.

Patented Sept. 9, 1884. No. 304,963. Fig.1. Fig.3. Fig. 5. Fig.6. Fig.7. Fig.8. Inventors: Chas 4. Shepard Witnesses: Peter adams fr. Geo E. Pitman chas flouchhick By Wilhelm & Hounes Attorneys.

## UNITED STATES PATENT OFFICE.

CHARLES G. SHEPARD AND PETER ADAMS, JR., OF BUFFALO, NEW YORK; SAID ADAMS ASSIGNOR TO WALTER J. SHEPARD, OF SAME PLACE.

## REMOVABLE HANDLE.

SPECIFICATION forming part of Letters Patent No. 304,963, dated September 9, 1884.

Application filed September 20, 1883. (No model.)

To all whom it may concern:

Be it known that we, CHARLES G. SHEPARD and PETER ADAMS, Jr., both of the city of Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Removable Handles, of which the following is a specification.

This invention relates to an improvement in that class of handles which are designed to be readily attached to and removed from vessels which are not provided with permanent handles, thereby facilitating the handling of such vessels

The object of our invention is to produce a 15 handle which can be cheaply manufactured, and which can be easily and securely attached to a vessel.

Our invention consists of the novel construction of the handle, which will be herein20 after fully set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 represents a side elevation, Fig. 2 a longitudinal section, and Fig. 3 a top plan view, of our improved handle. Fig. 4 is a cross-section in line x x, Fig. 2. Fig. 5 is a perspective view of the fixed jaw and the part of the casing cast on the same. Fig. 6 is a perspective view of the part of the casing which is attached to the fixed jaw. Fig. 7 is a perspective view of the movable jaw. Fig. 8 is a perspective view of the lever whereby the movable jaw is actuated.

Like letters of reference refer to like parts in 35 the several figures.

A represents the stationary jaw, B one side piece of the casing, and C the handle, all cast in one piece. D represents the other side piece of the casing, secured to the side piece B, so as to leave a chamber or space between both side pieces.

E represents the movable jaw, arranged on the inner side of the stationary jaw A, and provided on its rear side with a flat shank or 45 bar, G, which projects between the side pieces, B and D, of the casing.

H represents the lever, whereby the movable jaw is actuated. This lever is pivoted between the side pieces, B and D, by a rivet, h, 50 which is secured in said side pieces and ex-

tends transversely through the space between these side pieces. i is an eccentric or cam, formed at the lower or inner end of the lever H on one side thereof, and k is an opening formed in the bar or shank G, in which the 55 cam i engages in such manner that by turning the lever H on its pivot the jaw E receives a sliding movement toward or from the stationary jaw A.

l is a thumb-piece formed at the upper or 60 outer end of the lever H.

m is a top plate, formed on the inner and upper side of the side plate B, and n is a bottom plate formed on the lower and inner side of the side plate D. The inner edge of the bottom 65 plate, n, projects into a recess, n', formed along the lower edge of the side plate B on its inner side. The rear end, o, of the side plate D rests in a notch or depression, o', formed in the handle C. The upper end of the side plate D 70 fits in an angular recess, p, formed in the top plate, m, of the side plate B. The rivet h does not only serve as a pivot for the lever H, but also secures the side plates, B and D, the lever H, and the movable jaw E together. The rivet 75 h passes through the opening k of the shank G. which opening is large enough to permit of the requisite movement of the movable jaw. The upper portion of the side plate D is arranged at a short distance from the top plate, m, of the 80 side plate, leaving between both parts a longitudinal opening, q, through which the upper portion of the lever H plays. The stationary jaw A, with the side plate B and handle C, the side piece D, the lever H, and the movable 85 jaw E, with its shank G, are each readily constructed of cast-iron, and the parts are all attached together by the single rivet h. The casing formed by the side plates, B and D, and the top and bottom plates, m and n, form a 90 guide, in which the shank G slides. Upon raising the thumb-piece l, the movable jaw E is moved away from the stationary jaw A. By placing the two jaws in this position on opposite sides of the wall of a dish or vessel and 95 depressing the thumb-piece l, the jaws are closed against the dish or vessel, as represented in Fig. 1, and the handle is firmly secured to the vessel. The cam i holds the movable jaw firmly in position until the lever is released. 100 By a reverse movement of the thumb-piece *l* the jaws are separated and the handle is detached from the dish or vessel.

We claim as our invention—

5 1. In a detachable handle for culinary vessels, the combination of a fixed jaw, A, plate B, and handle, all cast in one piece, a movable jaw, E, sliding on the plate B, and an actuating-lever, H, pivoted to the plate B and engaging with the movable jaw, substantially as set forth.

2. In a detachable handle for culinary vessels, the combination, with the fixed jaw A, having a suitable shank and handle, of the 15 sliding jaw E, having a shank provided with an opening, k, and an actuating-lever, H, pivoted to the shank of the fixed jaw, and provided with a cam, i, which engages in the opening, k, substantially as set forth.

3. In a detachable handle for culinary vessels, the combination, with the fixed jaw A, plate B, having a top plate, m, and handle C, cast in one piece, of the plate D, having a bottom plate, n, sliding jaw E, having a shank, G, lever H, and pivot h, substantially as set forth. 25

4. In a detachable handle for culinary vessels, the combination, with the fixed jaw A, plates B m, having a notch, p, and handle C, having a notch, o', of the plate D, sliding jaw E, and lever H, substantially as set forth.

Witness our hands this 8th day of Septem-

ber, 1883.

CHARLES G. SHEPARD. PETER ADAMS, JR.

Witnesses:

JNO. J. BONNER, CARL F. GEYER.