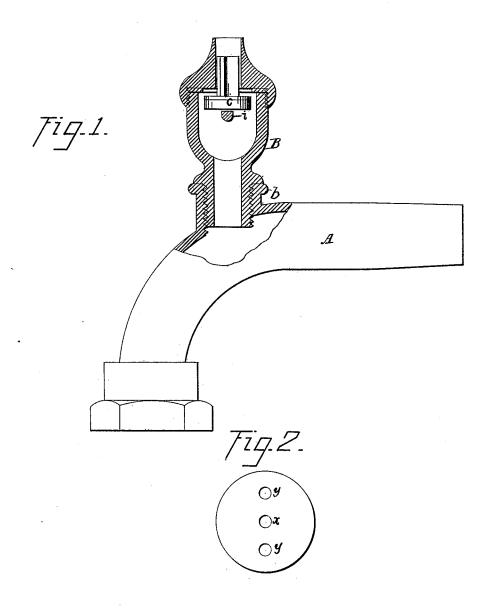
## L. BRANDEIS. Attachment for Kitchen-Boilers.

No. 220,517.

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A11E51-John C. Bekloff Frank Migreen Inventor: L. Brandeis By his attorney Charles E. Fister

## UNITED STATES PATENT OFFICE.

LUDWIG BRANDEIS, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN ATTACHMENTS FOR KITCHEN-BOILERS.

Specification forming part of Letters Patent No. 220,517, dated October 14, 1879; application filed July 15, 1879.

To all whom it may concern:

Be it known that I, LUDWIG BRANDEIS, of Brooklyn, Kings county, State of New York, have invented a new and useful Improvement in Attachments for Kitchen-Boilers, of which the following is a specification.

My invention is an attachment for kitchenboilers constructed, as fully described hereinafter, so as to avoid that weakening of the boiler which results from applying vacuumvalves in the ordinary manner, and facilitate the attaching or detaching of the valve.

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In the drawings forming part of this specification, Figure 1 is a sectional elevation, showing my attachment; Fig. 2, a view showing the end of a kitchen-boiler.

It has been the practice heretofore in applying safety or vacuum valves to boilers to perforate the head of the boiler at x between the points y y, where the inlet and outlet spuds are applied, so as to receive the stem of the valve-casing. This greatly weakens the head of the boiler, even when the latter is specially constructed to facilitate the application of the valve, while its application to boilers already erected is practically impossible.

To overcome these objections I combine the valve with what is technically termed the "coupling"—that is, the cast-metal curved piece A, which is adapted for attachment to the inlet or outlet water-pipe, and is provided with a threaded thimble, C, for connecting with the threaded nipple at the end of the boiler. This coupling is cast with a valve-casing, B, or has a threaded neck, b, for the attachment of the threaded stem of said casing, in which are placed the valve c and stop-bar i for limiting the motion of said valve.

The coupling, with its valve case and valve, constitutes an article of manufacture by means

of which a valve may be applied to any boiler without the slightest change in the construction or arrangement of any of the other attachments, and without the necessity of specially perforating the boiler.

Another important result is the arranging of the valve near the head of the boiler, insuring speedy action.

The threaded neck b is adapted to receive a plug to make a tight joint when, as is sometimes necessary, the casing is removed.

I am aware that valves have been arranged in the pipes leading to the boilers; but this requires special valve-casings adapted to be put in the line of said pipes, which must be detached, cut, and connected at considerable expense.

The main objection, however, is that the valve must be at some distance from the boiler with a long contracted pipe between, preventing the rapid action so necessary to relieve the boiler.

I claim-

1. As a new article of manufacture, the curved cast-metal coupling A, adapted for attachment to the head of a kitchen-boiler and to the pipe leading to or from the same, and provided with a casing, B, and valve, as set forth.

2. The said boiler coupling adapted for connection to the boiler and pipe and for attachment to the valve-casing or plug, as set forth.

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

LUDWIG BRANDEIS.

Witnesses:

LEOPOLD BRANDEIS, EDW. F. KEATING.