

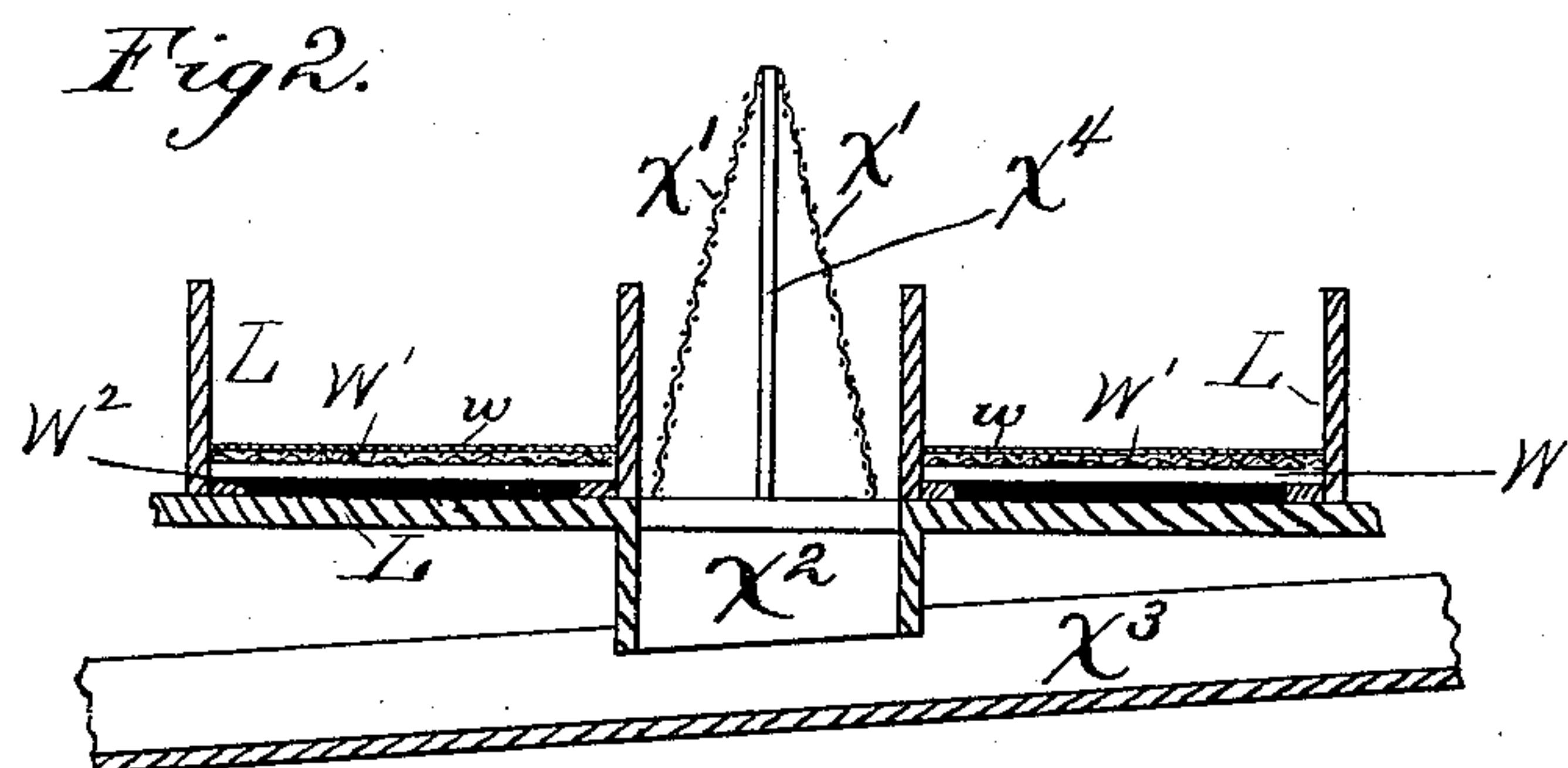
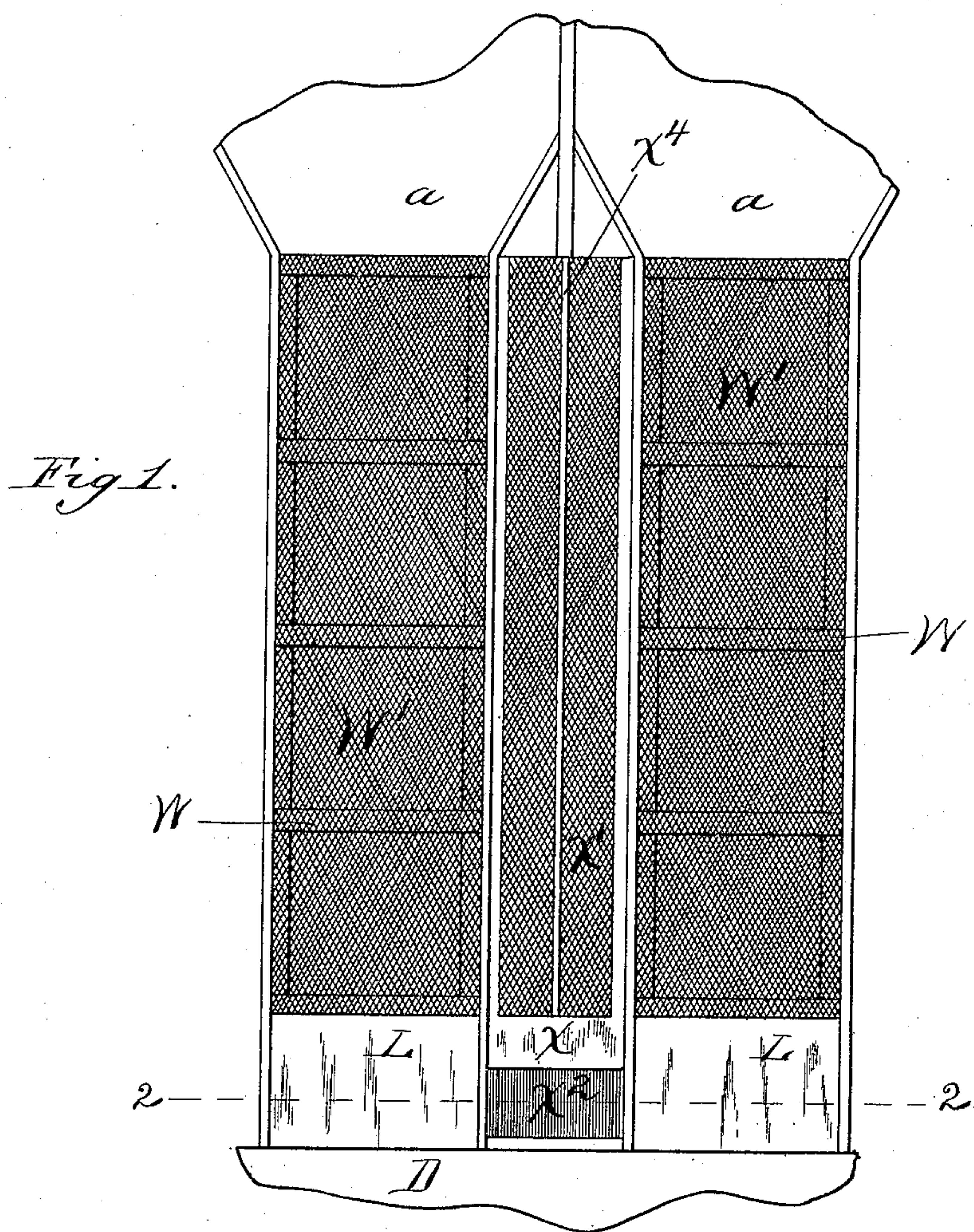
(No Model.)

A. D. CLARKE.

# APPARATUS FOR CLEANING FILTERS OF ORE CONCENTRATORS.

No. 323,790.

Patented Aug. 4, 1885.



Witnesses:  
Taylor E. Brown.  
Lew. C. Curtis.

Inventor  
Alexander D. Clarke  
By Munday Evans & Adcock  
his Attorneys.



# UNITED STATES PATENT OFFICE.

ALEXANDER D. CLARKE, OF NEW YORK, N. Y.

## APPARATUS FOR CLEANING FILTERS OF ORE-CONCENTRATORS.

SPECIFICATION forming part of Letters Patent No. 323,790, dated August 4, 1885.

Application filed November 10, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, ALEXANDER D. CLARKE, a citizen of the United States, residing in New York, in the county of New York and State of New York, have invented a new and useful Improvement in Apparatus for Cleaning Filters of Ore-Concentrators, of which the following is a specification.

This invention is designed to afford facilities for washing the filtering-blankets in ore-concentrators used in placer mines containing float-gold. Its nature is fully set forth in the subjoined description and accompanying drawings, wherein—

Figure 1 is a plan view of a portion of an ore-concentrator embodying my invention. Fig. 2 is a transverse vertical section of the same on line 2 2 of Fig. 1.

In said drawings, L represents longitudinally-inclined tables or chutes, upon which filter-frames W, covered by wire-cloth W', are laid. The filtering-blankets, w, or other permeable material used as filters, are spread upon the wire-cloth, and the water containing the floating gold is caused to flow over the same from the upper end, a, the gold being taken out as the water percolates through the filter into the channel W<sup>2</sup>, formed beneath the filter upon the table L. The water thus entering the channel W<sup>2</sup> falls therefrom into a tank, D, or some suitable sluiceway or reservoir. These parts are more fully explained and shown in a companion application (Serial No. 147,558) to be filed herewith, and are not claimed herein.

To remove the filters from the filter-frames W and carry them away from off the machine for the purpose of washing them off in tubs or other vessels would be a work of very considerable labor. To obviate this the space X is left between the blanket-tables L. In the

center of this space longitudinally is placed a board or other solid partition, X<sup>4</sup>, as high as the blanket-table L is wide. At or near the lower end of the space X is placed the chute X<sup>2</sup>. From the top of the partition X<sup>4</sup>, on each side, is placed a screen of stout wire-cloth, x'. The lower sides of this screen of wire-cloth are securely fastened to the bottom of the space or chute X, an inch or two distant from the sides of the chute X. The chute X has a fall or incline, as do the tables L. When it is necessary to wash the filters or filter-frames W, they are taken up and hung with the sides which were uppermost as they lay on the filter-frames W next to the screens x'. Water is then sprayed on the filters as they hang on the screens x'. The sides of the filters on which the fine particles of gold, &c., are lodged being next the partition X<sup>4</sup>, the sprayed water washes these fine particles out of the filter, and, with the water pouring through the filter, they fall into the space, chute, or sluice X, and flow through it to the chute X<sup>2</sup>, and thence into sluice or chute X<sup>3</sup>, by which they are conveyed to some suitable storage tank or reservoir placed in some convenient position. Suitable pins in the top of partition X<sup>4</sup> and corresponding tags with holes in them on the sides of the filters may be provided for convenience in hanging up.

I claim—

The combination, with the tables L and the filters thereon, of the space or sluice X and the supports in said sluice or space for the filters, substantially as specified.

ALEXANDER D. CLARKE.

Witnesses:

CHARLES E. TEETS,  
N. S. RAUS.