F. W. WILSON.
Retort-Lifter.

No. 203,397. Patented May 7, 1878.

Fig. 1

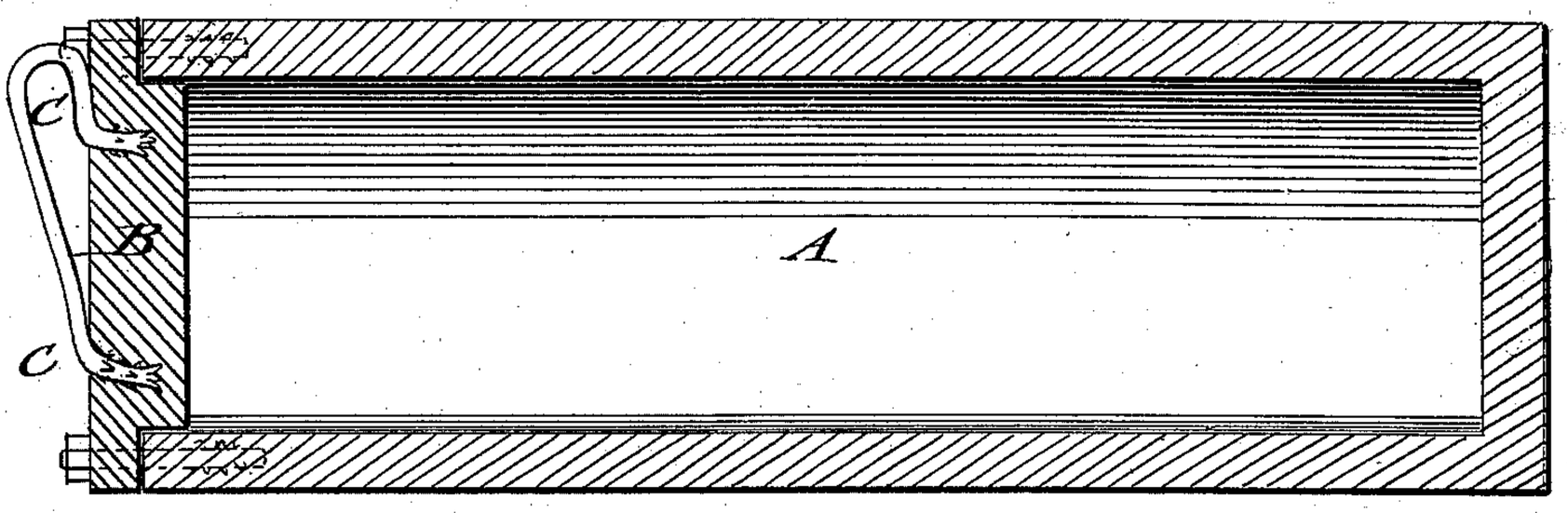
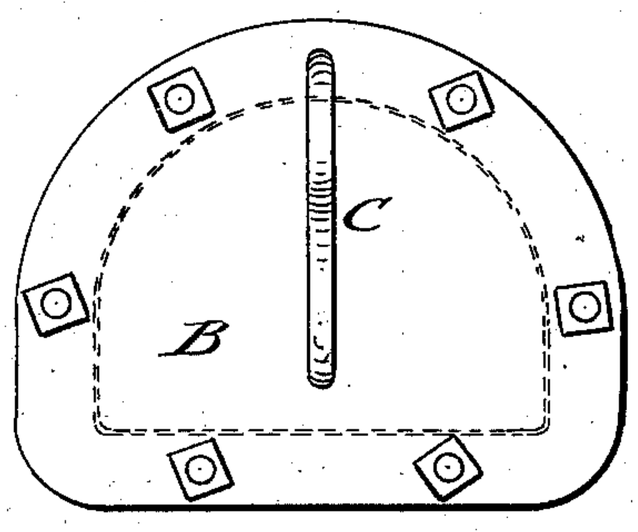


Fig. 2



WITNESSES:

C. Neveux

C. Sedgwick

INVENTOR:

F. W. Wilson

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

FRANK WEBSTER WILSON, OF MANCHESTER, NEW HAMPSHIRE.

IMPROVEMENT IN RETORT-LIFTERS.

Specification forming part of Letters Patent No. **203,397,** dated May 7, 1878; application filed March 27, 1878.

To all whom it may concern:

Be it known that I, FRANK W. WILSON, of Manchester, in the county of Hillsborough and State of New Hampshire, have invented a new and Improved Retort-Lifter, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical longitudinal section of a gas-retort with my improved lifting device, and Fig. 2 is a front view of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to facilitate the operation of setting gas-retorts in position in the bench, and insure the handling of the same with safety, rapidity, and convenience. The lifting device is so constructed that it distributes the strain equally over the whole face of the retort in lifting the same, which, in view of the brittle nature of the material of which retorts are made, is of great advantage to prevent any breaking or injury to the same. The lifting device is of simple and cheap construction, and readily applied to the retort when the same is to be placed in position in the bench.

The invention consists of a lifter that is large enough to cover the whole face of the end of the retort, and fitted by holes onto the bolts at the face of the retort. An interior raised portion or shoulder of the lifter is fitted into the inside of the retort, while an exterior staple or handle serves to attach the hoisting device to the lifter when it is screwed into position on the face of the retort.

Referring to the drawing, A represents a clay gas-retort, of the usual construction, and B the lifting device that is attached to bolts at the face of the retort, and constructed of board or boards, that are cut large enough to cover the whole face of the retort, and correspond to the exterior shape of the same. A second thickness of planking is bolted to the larger board, and fitted to the inside of the retort, so as to form a kind of seat for the same. A staple or handle, C, is rigidly attached to the lifter, and serves for applying the hoisting rope or chain and pulley-block thereto.

The lifter is used by being screwed on the face of the retort, the outer portion being provided with bolt-holes corresponding to the bolts of the retorts, and tightly screwed by means of nuts to the same. The hoisting device may be then applied to the handle or staple, and the retort thereby raised to any desired height by one man in less time and with less labor than by two or three men, that are necessary to lift retorts at present. The lifter forms, also, a most convenient handle by which to push or pull the retort into place in the bench along the rails which are used for guiding it in the bench. The bolt-holes of the lifter also indicate at once whether the bolts are placed properly in position into the sockets of the retort, so as to readily receive the exterior mouth-piece, to which the bolts must conform.

The lifter sustains the weight of the retort in an effective manner, and admits the ready lifting and handling of the same without the danger of breaking the retort by the use of crow-bars and levers, used in the present method of setting gas-retorts in position in the bench.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

A lifting device for gas-retorts made of an outer part, with bolt-holes fitting the bolts on the face of the retort, of an inner shoulder or seat corresponding to the inside shape of the retort, and of an exterior staple or handle, substantially as and for the purpose described.

FRANK W. WILSON.

Witnesses:

CHAS. H. MARSHALL,
ALONZO D. HUNKINS.