

J. R. THOMAS.
MODE OF SECURING LIDS TO GAS RETORTS.

No. 28,519.

Patented May 29, 1860.

Fig. 1.

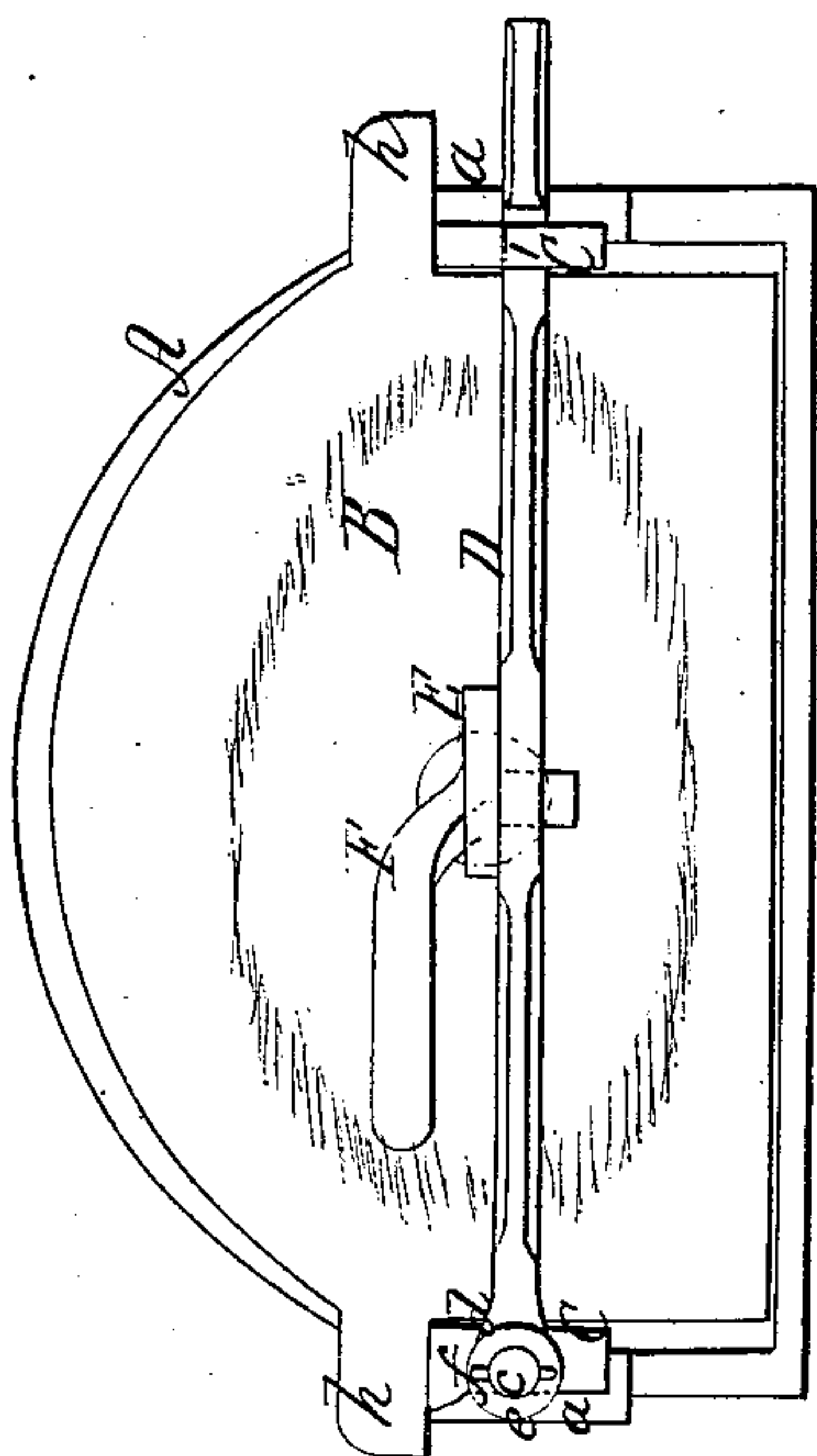


Fig. 2.

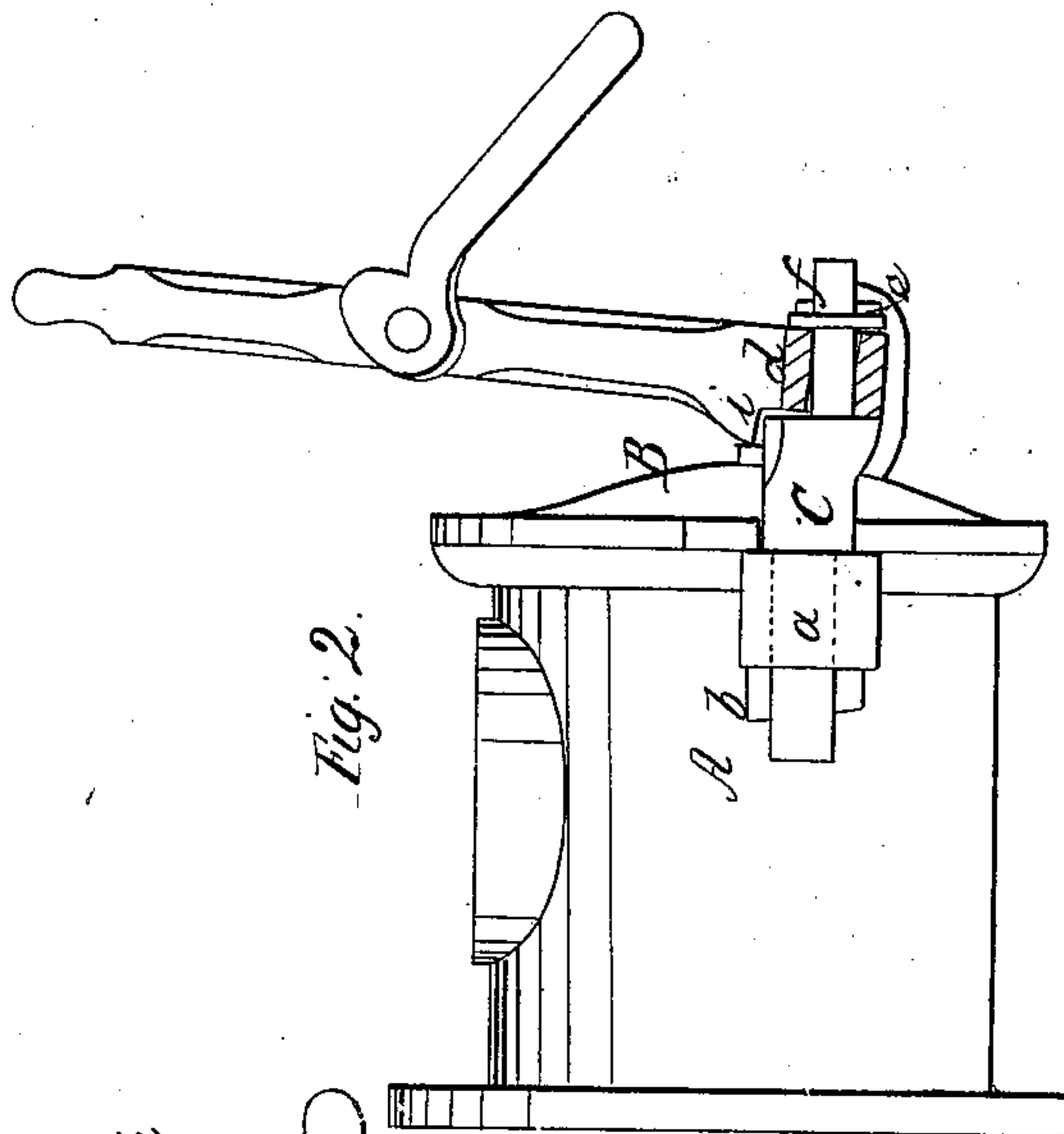
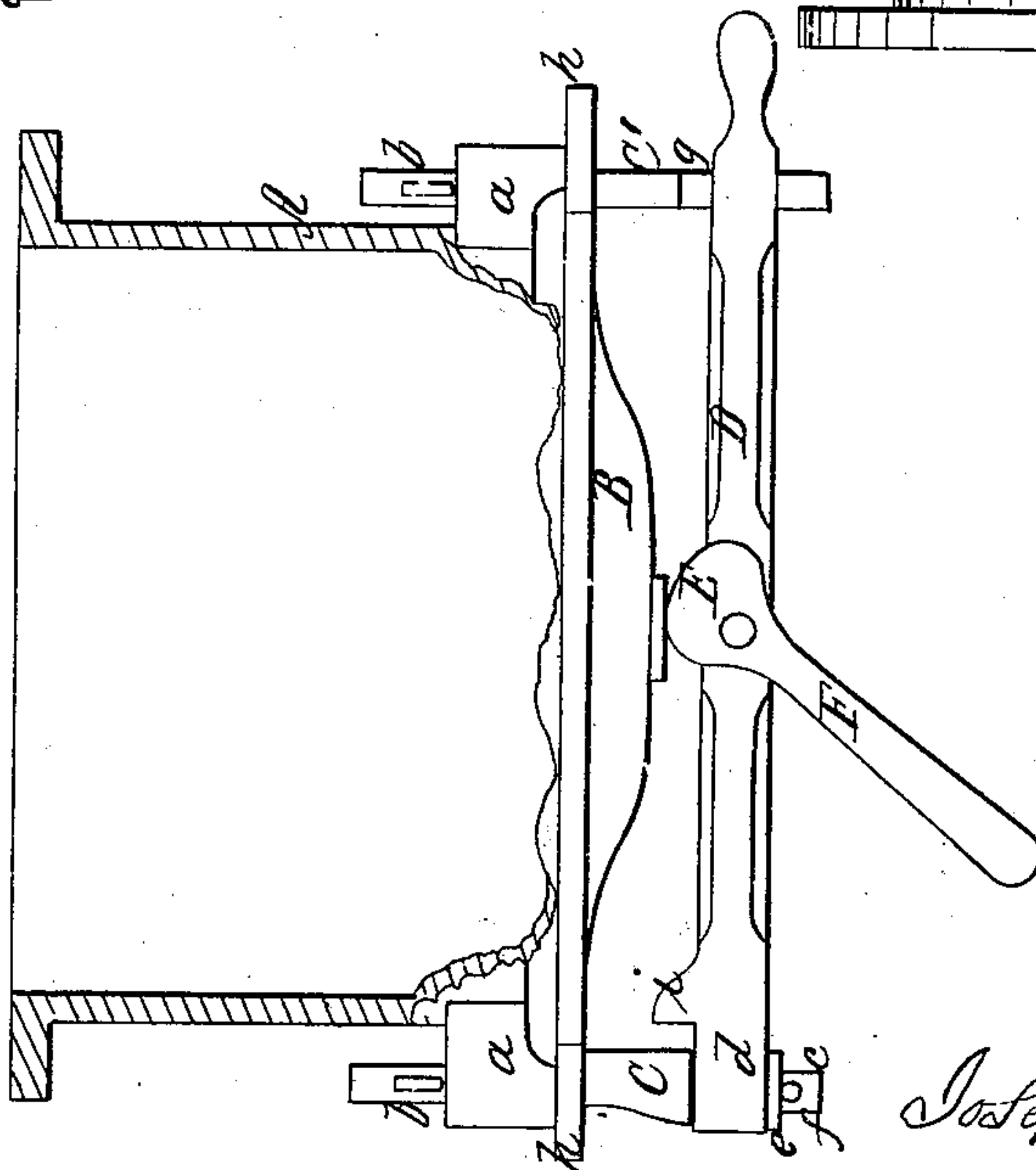


Fig. 3.



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MODE OF SECURING LIDS ON GAS-RETORTS.

Specification of Letters Patent No. 28,519, dated May 29, 1860.

To all whom it may concern:

Be it known that I, JOSEPH R. THOMAS, of Williamsburg, in the county of Kings and State of New York, have invented a new and Improved Mode of Securing Lids to Gas-Retorts; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a front view of a retort with a lid secured to it according to my invention. Fig. 2, a side view of the same. Fig. 3, a plan or top view of the same.

Similar letters of reference indicate corresponding parts in the several figures.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A, represents a gas retort, and B, its lid. The retort may be of the usual form, and to each side of its front end there is a socket *a*. In each of these sockets there is secured by a key *b*, an arm, said arms being designated by C, C'.

The arm C, has its outer end terminating in a pintle *c*, on which a socket *d*, of a bar D is fitted. The socket *d*, internally is of taper form as shown in Fig. 2, to admit of a certain degree of lateral play or movement of the bar D. The socket *d*, is secured on the pintle *c*, by a washer *e*, and pin *f*. The opposite end of the bar D, is fitted in a notch *g*, in the arm C'.

To the bar D, at its center there is attached an eccentric E, said eccentric being provided with a handle F, for the purpose of readily adjusting or turning it. The lid B, is secured to the retort by the bar or hold-fast D, and the eccentric E, the latter when adjusted for the purpose, bearing against the center of the lid as shown clearly in Fig. 3.

The lid B, is provided with ears or lugs *h*, at its sides, and these ears or lugs rest on the arms C, C', when the lid is adjusted to the retort. When the retort is to be removed the eccentric is turned from right to left so as to be free from the lid and the bar or hold fast D, is turned upward to a vertical position, a shoulder *i*, on the bar or hold fast retaining it, or preventing its turning entirely over on the pintle, said shoulder *i*, resting on the upper surface of arm C.

The lateral play allowed the bar or hold fast D, in consequence of the taper socket *d*, admits of said bar being inclined outward as it is turned upward so as to not interfere with the fastenings of the retort above it. This is an important feature for as the retorts (generally five) are placed in a "bank" or furnace quite near each other one bar or hold-fast, would as it is turned come in contact with those of other retorts. My invention fully obviates this difficulty. Another advantage of the invention, is, that the bars or hold fasts are always convenient and in proper place, and as they are never wholly detached from the retort they are not liable to be misplaced or broken by being thrown down upon the ground.

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

Providing one end of the bar D, with a double taper socket *d*, and pivoting said end upon a pintle *c*, so that said bar may be swung horizontally and also vertically upon the pintle, and for the purpose herein shown the pintle, as, and for the purpose herein shown and described.

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Witnesses:

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