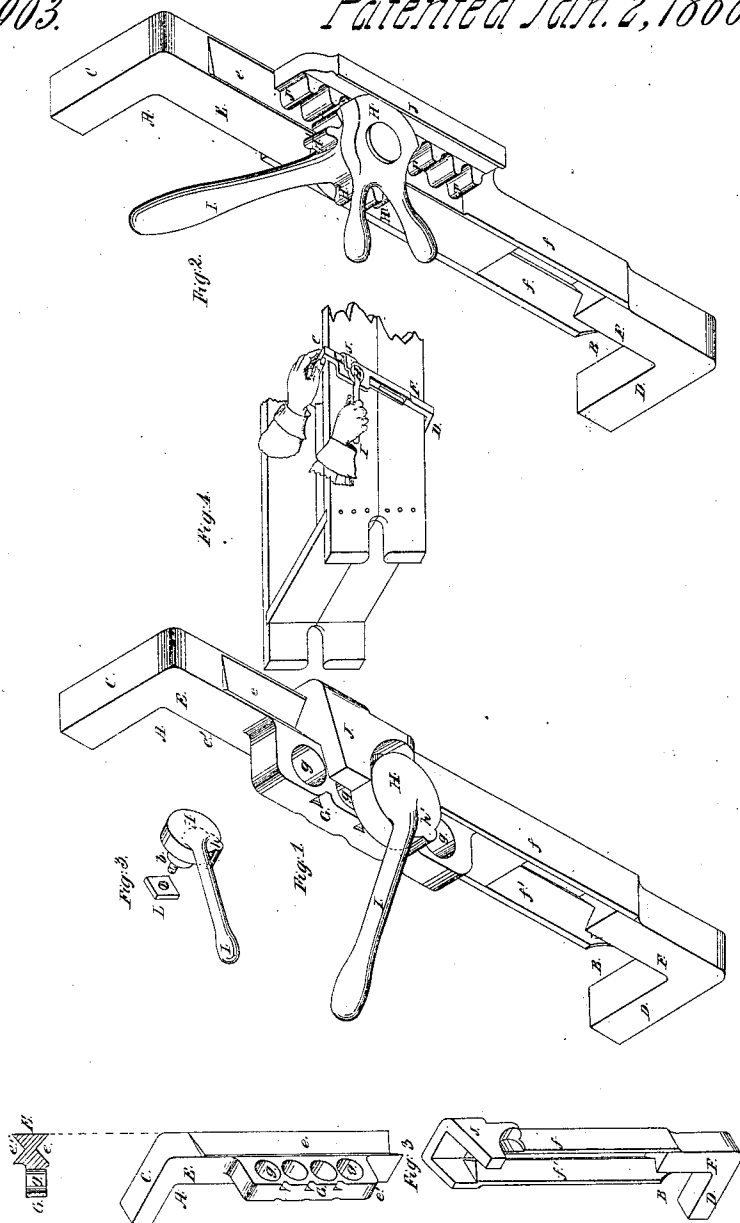


C. Truesdale,

Clamp for Molders' Flasks.

No. 51,903.

Patented Jan. 2, 1866.



Witnesses:
Geo. B. Nicholson,
James H. Layman

Inventor:
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UNITED STATES PATENT OFFICE.

CHARLES TRUESDALE, OF CINCINNATI, OHIO, ASSIGNOR TO HIMSELF AND WILLIAM BESOR & CO.

IMPROVEMENT IN MOLDERS' CLAMPS.

Specification forming part of Letters Patent No. 51,903, dated January 2, 1866.

To all whom it may concern:

Be it known that I, CHARLES TRUESDALE, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Clamp for the use of Molders, Pattern-Makers, Cabinet-Makers, Veneerers, &c.; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

My invention relates, chiefly, to an arrangement of two jaws or hooks whose shanks are capable of being slid out or in, so as to increase or diminish the distances between their bearing-surfaces, by the action of a simple lever. It also includes a simple form of interlocking and sliding shanks, and a provision for the ready adaptation of the instrument to various sizes of objects.

Figure 1 represents the preferred type of my invention. Fig. 2 shows a modification of the same. Fig. 3 shows the two jaws or limbs of my clamp separated from each other. Fig. 4 represents the manner of applying my clamp to a molder's flask.

A and B represent, respectively, the two jaws or members of my clamp, each jaw comprising a head or hook, C and D, and a shank or stem, E and F. The shank F branches into a pair of V-formed prongs, d and d' , which fit snugly but easily two corresponding V-formed grooves or channels, e and e' , on opposite sides of the stem E.

G is a lug projecting from the shank E, and perforated with a series of holes, g , for the pivot h of a cam-headed lever, H I.

J is a shoulder on the shank F, against which the cam H presses so as to cause a contraction or approximation of the heads by a depression of the cam-handle I. A stop, h' , on the cam H limits the stroke of the latter. The pivot h of the cam H is screw-threaded near its end to receive a nut, L, by means of which the cam is retained to its place.

Operation: The instrument is adapted to a larger or smaller object by securing the pivot h in the appropriate aperture g . The handle or lever I is then presented upward or toward the operator and the clamp applied to the

flask or other object, the handle I and head C being placed on the side next the operator, which head is then drawn or pushed along the object until brought to a proper point for due bearing and operation of the cam, which is then tightened by depressing of the lever I so as to cause the two heads to compress the flask between them.

The instrument is complete in itself, and is applicable at once and without preparation to any customary flask or other object, and this enables the preliminary shifting and adjustment of the head to be made on the nearer and most accessible side of the object. Moreover, my clamp, being adapted to bear without injury upon the naked flask, can be applied to any part of it which most requires compression.

The entire instrument can be made in the very foundry where it is used.

In the modification shown in Fig. 2 the single cam is replaced by a series of small cams or cogs, H' , acting against a series of other cogs or shoulders, J' . This arrangement not being self-locking, the lock is effected by a supplementary cam, H'' .

I am aware that eccentrics and segment-racks have long been employed in various forms of presses, and therefore disclaim the exclusive use of such mechanical devices in this connection.

I claim herein as new and of my invention—

1. The construction of the jaws A and B, substantially as described, and their adaptation to slide upon each other and to be drawn and locked together by the action of a cam-headed lever, H I, or its equivalent.

2. In the described combination, with the sliding jaws A and B, cam-headed lever H I, and shoulder J, or their described equivalents, the provision of the perforated lug G g , for adapting a single clamp to a variety of sizes, as explained.

In testimony of which invention I hereunto set my hand.

CHARLES TRUESDALE.

Witnesses:

GEO. H. KNIGHT,
JAMES H. LAYMAN.