## J. B. WARDWELL.

Bench-Vises.

No.153,026.

Patented July 14, 1874.

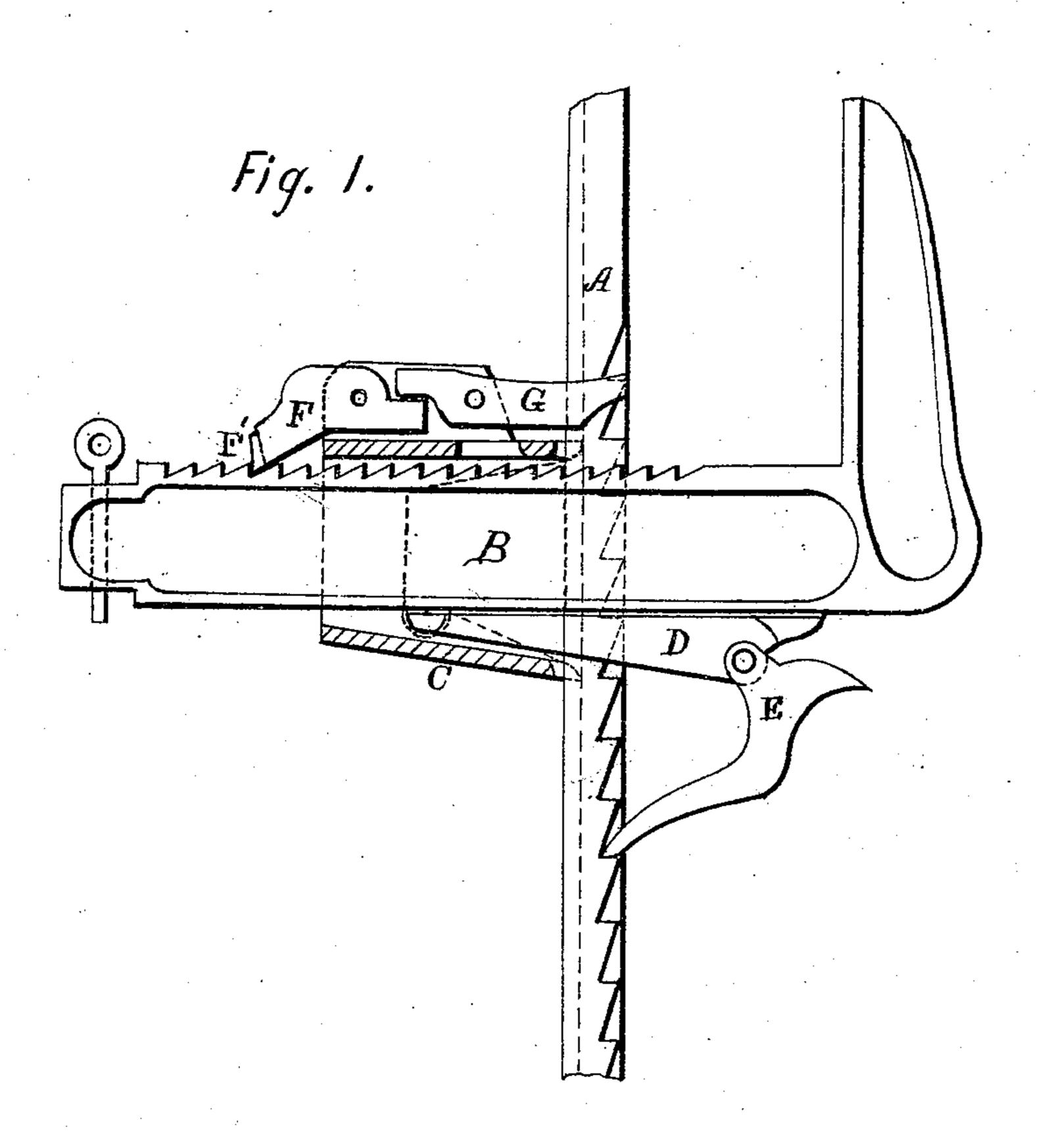
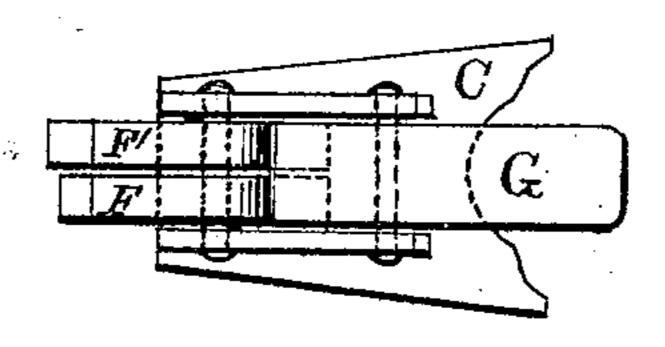


Fig. 2



WITNESSES.

Jesse G. Gould.

Char Dinovie.

INVENTOR.

Jenny B. Frandines

## UNITED STATES PATENT OFFICE.

JEREMY B. WARDWELL, OF METHUEN, MASSACHUSETTS.

## IMPROVEMENT IN BENCH-VISES.

Specification forming part of Letters Patent No. 153.026, dated July 14, 1874; application filed May 29, 1874.

To all whom it may concern:

Be it known that I, Jeremy B. Wardwell, of Methuen, in the county of Essex and Commonwealth of Massachusetts, have invented an Improvement in Bench-Vises, of which

the following is a specification:

The object of my invention is to furnish a double pawl for my improved adjustable benchvise, described in Letters Patent No. 144,934, and dated November 25, A. D. 1873, which shall be simple in construction, and easy and effective in its operation. The invention consists of the double pawls and the lever for lifting the pawl from its seat or hold, attached and pivoted to the lugs of the frame or spider, in combination with each other, as hereinafter fully described.

Figure 1 is a vertical longitudinal section of my improved bench-vise, as described in Letters Patent numbered and dated as above, with my improved pawl attached. Fig. 2 is a top view of the frame or spider, and shows my improved double pawl with the lever for raising the same, and its attachment thereto.

F F', in Fig. 1, are the double pawls, which are pivoted to the lugs which are formed upon the top of the inner end of the frame or spider C, the points or holds of which are set, the one in advance of the other, as shown in Fig. 1,

F F'; the distance between the lead of the points or holds of the pawl being equal to onehalf the space occupied by one of the ratchetteeth formed upon the upper side of the shank of the jaw B, to enable the jaw to be more accurately adjusted to the thickness of the board held. G is the lever, which is also pivoted to the lugs of the frame or spider, and so constructed, in combination with the pawls, that its pivoted or rear end rests upon the inner or forward ends of the double pawl F F' for the purpose of raising it from its seat or hold in the teeth of the shank of the jaw B, which is done by raising the longer and forward arm of the lever, which projects into the slot of the ratchet-bar A, so that the pawls F F' can be conveniently raised thereby, to allow the jaw B to be drawn forward.

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

The combination of the pawls F F'E, lever G, spider C, and rack-bar B, (being an improvement of my patent above referred to,) in a manner and for the purpose herein specified.

JEREMY B. WARDWELL.

Witnesses:

JESSE G. GOULD, CHAS. D. MOORE.