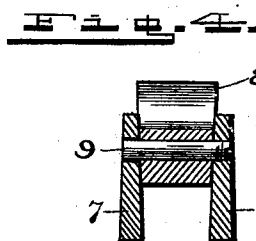
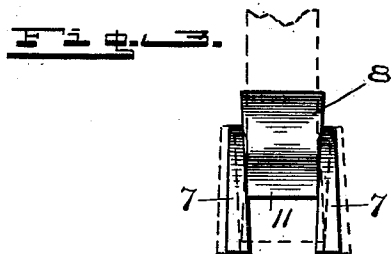
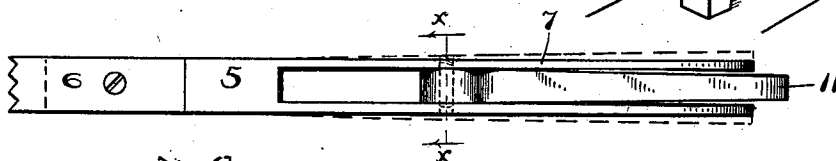
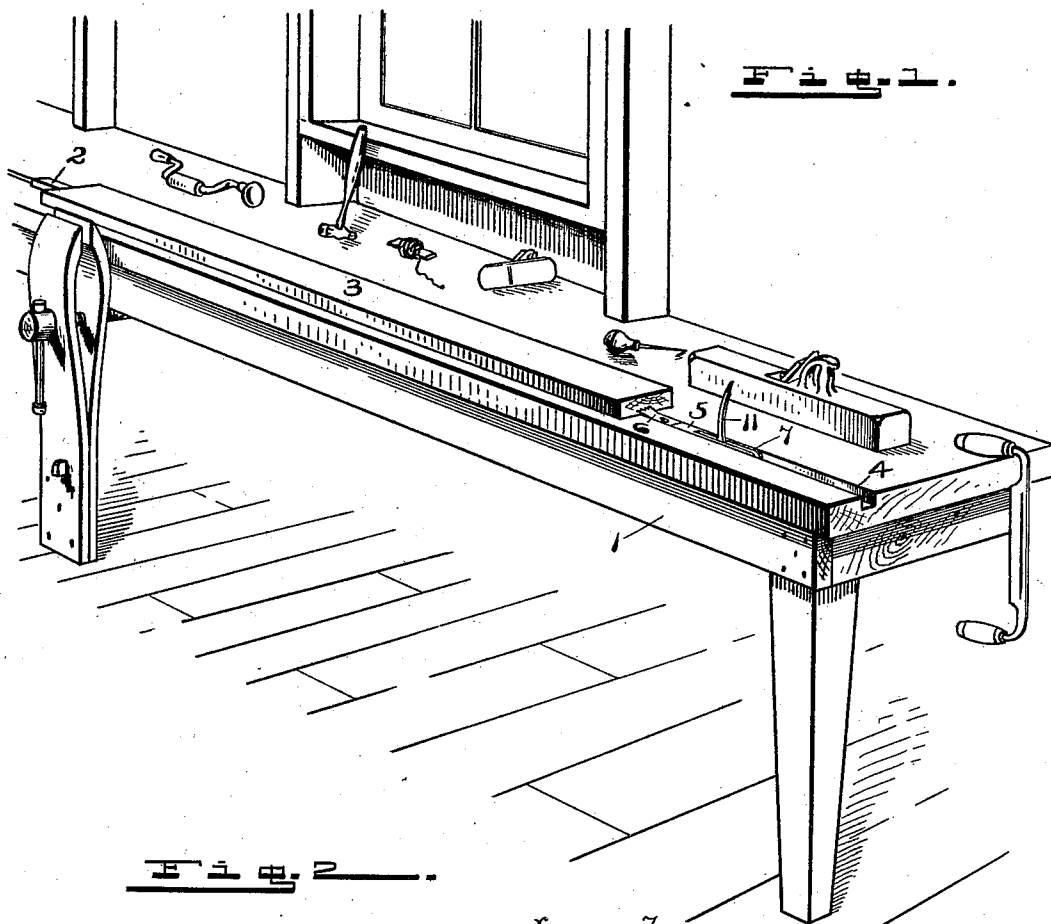


(No Model.)

H. H. BROCKSMITH.
ADJUSTABLE BENCH DOG.

No. 591,618.

Patented Oct. 12, 1897.



WITNESSES:

F. W. Koerner.
Julia Green.

IN WITNESS WHEREOF,

Herman H. Brocksmith
By V. H. Lockwood
His ATTORNEY.

UNITED STATES PATENT OFFICE.

HERMANN H. BROCKSMITH, OF VINCENNES, INDIANA.

ADJUSTABLE BENCH-DOG.

SPECIFICATION forming part of Letters Patent No. 591,618, dated October 12, 1897.

Application filed December 21, 1896. Serial No. 616,373. (No model.)

To all whom it may concern:

Be it known that I, HERMANN H. BROCKSMITH, of Vincennes, county of Knox, and State of Indiana, have invented a certain new and useful Adjustable Bench-Dog; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like figures refer to like parts.

My invention relates to an adjustable bench-dog for holding one end of a board on a carpenter's bench or other device where such adjustable dog might be of service. A stationary dog or spur holds what may be called the "forward" end of the board, and since the boards are of varying length if one desires to hold the rear end of the board it is necessary to employ an adjustable dog of some kind.

My invention to accomplish that object is a very cheap, simple, and efficient device, as will appear from the accompanying drawings and the description and claim following.

In the drawings, Figure 1 is a perspective of a carpenter's bench with a board in place and held by my device. Fig. 2 is a plan view of the bench-dog by itself. Fig. 3 is an end view of Fig. 2, with the position of the parts when the cam-lever is elevated shown in dotted lines, the cam-lever being broken away. Fig. 4 is a cross-section on the line 4 4 of Fig. 2.

In detail, 1 represents a carpenter's bench which obviously, so far as this invention is concerned, may be made in any desirable form. On the top of the bench at the forward end there is usually placed a stationary spur or dog 2, which is familiar to all of us, for holding the forward end of the piece of timber 3 while it is being planed or otherwise treated. In the other end of the bench I provide a groove or recess 4, that is parallel with the working side of the bench. It preferably should begin at the end of the bench and extend as far as may be desired. Obviously it should be placed at the point in the bench where the piece of timber is usually placed while being worked upon.

My adjustable bench-dog fits and operates in said groove 4. It consists of a body 5, with a spur on the forward end thereof, and a pair of parallel rearward extensions or arms 7, as

seen in Fig. 4. The thickness of the rearward extensions 7 should be such as not to interfere with their flexibility, so that they may spread apart at their free ends, as shown in dotted lines in Figs. 2 and 3. The dimensions of this device should be somewhat less than the dimensions of the groove 4 in order that the bench-dog may be easily placed and moved in the groove.

The bench-dog is held in position by spreading the rearward extensions 7 within the groove 4, so that they engage tightly with the side walls of said groove. Any suitable means for accomplishing this spreading may be used, but what I show here I consider preferable. I form the rearward extensions 7 in cross-section wider at the bottom than at the top, as seen in Figs. 3 and 4. About midway or at any desirable point I pivot between them a cam-block 8 on the pivot 9. This cam-block, when it is turned, as shown in Fig. 3, is wider above than below, as seen in Figs. 3 and 4—that is, its width is the converse of that of the space between the parallel extensions 7. The cam-block is provided with a lever 10. From this it is obvious that when the cam-block is rotated from the position shown in Fig. 4 to the position shown in dotted lines in Fig. 3, or in Fig. 1, the wider portion of the cam-block is forced down between the converging inner surfaces of the parallel extensions, whereby they are pressed apart and firmly wedged in the groove 4. In order that the parallel arms may be thus pressed apart by the cam-block, the pivot 9 should be so made as to permit such movement—that is, have at least one end without a head.

From the foregoing description the operation is obvious. A board is placed against the forward dog 2, the adjustable dog is slipped up against the other end of the board, and the cam-lever 11 pressed down or rotated until such dog is firmly wedged in the groove. It is clear, too, that it would hold the timber if such adjustable dog were elevated so that its upper half, say, would extend above the surface of the bench. This elevation is sometimes desirable with some kinds of boards when the lower set spur or dog would not suffice.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of a bench having a groove therein, a bench-dog movably seated in said groove and consisting of a body with a suitable spur thereon and a pair of extensions
5 from said body, a cam-block pivoted between said extensions, the thickness of the cam-block and of the extensions where said cam-block is mounted varying in a reverse order, whereby when the block is rotated it will

press said extensions apart, and means for rotating said cam-block.

In witness whereof I have hereunto set my hand this 9th day of December, 1896.

HERMANN H. BROCKSMITH.

Witnesses:

HENRY W. ALEXANDER,
A. E. HUMKE.