H. P. HANSEN.

BENCH DOG.

APPLICATION FILED MAR. 19, 1915.

1,161,858. Patented Nov. 30, 1915.

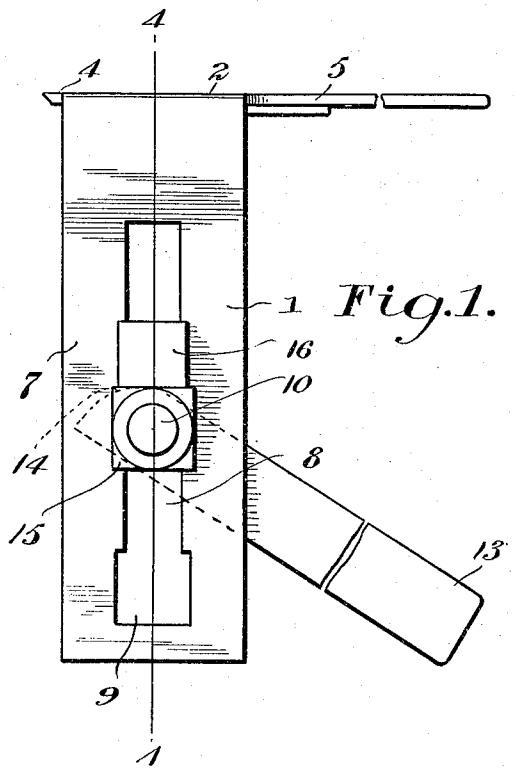


Fig. 1.

Fig. 2.

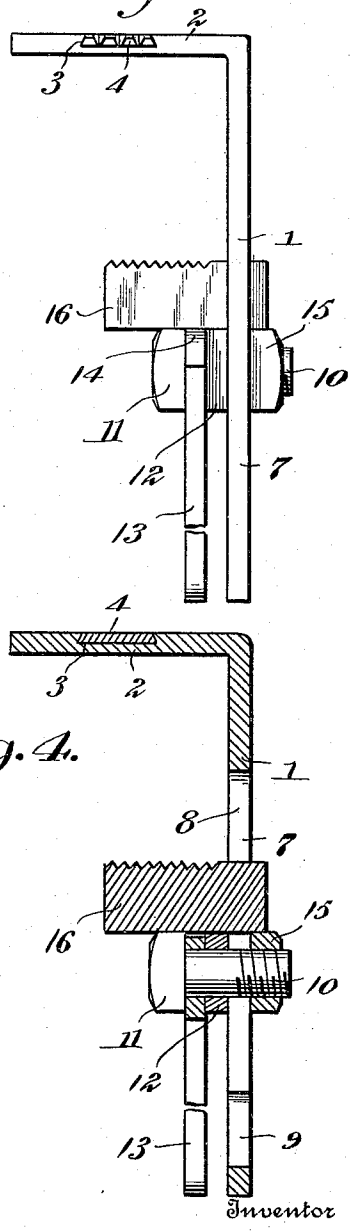


Fig. 3.

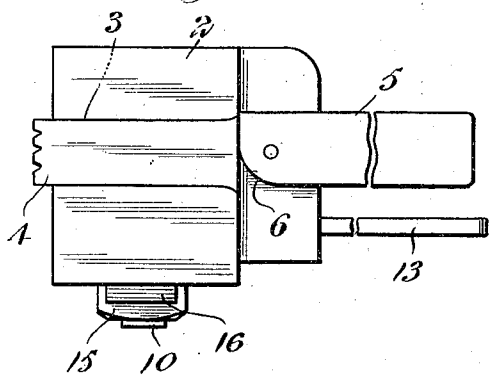


Fig. 4.

Witnesses

Frederick W. Ely.

C. Edmonston Jr.

Inventor

H. P. Hansen,

By Victor J. Evans

Attorney

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HANS P. HANSEN, OF WHITE CITY, FLORIDA.

BENCH-DOG.

1,161,858. Specification of Letters Patent. Patented Nov. 30, 1915.

Application filed March 19, 1915. Serial No. 15,597.

To all whom it may concern:

Be it known that I, HANS P. HANSEN, a citizen of Denmark, residing at White City, in the county of St. Lucie and State of Florida, have invented new and useful Improvements in Bench-Dogs, of which the following in a specification.

This invention relates to bench dogs and the principal object of the invention is to provide a simple and efficient bench dog which may be conveniently and rapidly applied and which is adapted for clamping or holding the board against the ordinary stationary dog carried by the bench.

Another object of the invention is to provide a dog which is operable in conjunction with the ordinary bench dog to produce a vise for clamping a board upon the bench against horizontal or vertical movement.

Another object of the invention is to provide a bench dog of this character adapted to fit any thickness of bench table and which may be conveniently and simply adjusted so as to provide for the rapid attachment and removal from the bench when desired.

Further objects of the invention will appear as the following description is read in connection with the accompanying drawing, which forms a part of this application, and in which:—

Figure 1 is a front elevation. Fig. 2 is a side elevation. Fig. 3 is a top plan view. Fig. 4 is a detail vertical section on the line 4—4 of Fig. 1.

Referring more particularly to the drawing, 1 represents the body of the device which is substantially right angular, as shown, its short or horizontal leg 2 being provided with a transverse dove-tail groove 3 to receive the board engaging jaw 4 serrated upon its forward edge, as shown. This leg also carries a pivotally mounted lever 5 having a rounded corner producing a cam 6 which is eccentric to the pivot bolt, as shown, so that when the lever 5 is parallel with the leg 2 the jaw 4 can be retracted while when the lever 5 is arranged at right angles to the leg 2 the jaw 4 will be projected. In this latter position the jaw abuts directly against the squared end and prevents accidental turning of the lever to release the jaw. The long leg 7 of the body 1 is provided with a longitudinal closed slot 8 enlarged at its lower end, as shown at 9, for a purpose to be hereinafter described. Slidably mounted within the slot is the bolt 10 having spaced heads 11 and 12 mounted thereon between which is arranged a lever 13 journaled upon the bolt eccentrically to the rounded corner 14 thereof. The bolt is threaded as shown and carries a locking nut 15 which clamps the bolt in adjusted position upon the leg. Slidably mounted in the slot above the bolt is a locking jaw 16 which is adapted to engage the underneath side of the bench table and is serrated upon its upper side to insure a firm grip thereon, the leg 2 acting as a stationary jaw and resting upon the top of the bench table. This leg 2 may be approximately three-six-tenths of an inch thick, and as the lever 5 and jaw 4 are flush with the top, these parts do not interfere with the dressing of quarter inch boards.

In the operation of the device, when a piece of work is to be operated upon it is placed upon the bench with one end in engagement with the ordinary bench dog, customarily termed the head dog. The dog shown in this application is then applied to the bench by raising the stationary jaw 2 on the upper surface of the bench close to the rear end of the work with the movable jaw arranged beneath the surface of the bench. The lever 13 is then manipulated to move the slidable jaw against the underneath side of the bench whereby the dog will be clamped in position upon the bench adjacent the rear end of the work. The lever 5 is then operated to force the jaw 4 into engagement with the rear end of the work.

What is claimed is:—

A bench dog comprising angularly arranged, integrally connected short and long legs, said long leg being slotted, a lever supporting bolt adjustably mounted in the slot,

a cam lever carried thereby, a sliding jaw movable in the slot toward and away from the short leg and adapted to be actuated by said lever, said short leg being provided with a dove-tail groove, a board engaging dog slidably mounted in the groove in a plane at right angles to the movement of the sliding jaw, and a cam lever pivoted to the short leg and arranged to operate the dog.

In testimony whereof I affix my signature in presence of two witnesses.

HANS P. HANSEN.

Witnesses:
A. D. PENNEY,
LOYCE D. HACKETT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."