C. MORRILL.

Bench-Dog.

No. 210,140. Patented Nov. 19, 1878.

Fig 1

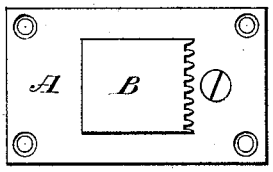


Fig 2

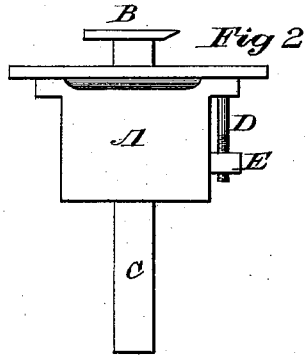


Fig 3

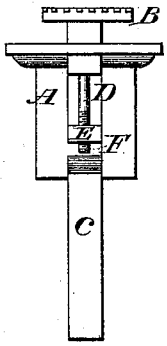


Fig 4

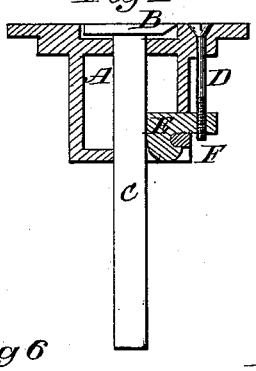


Fig 5

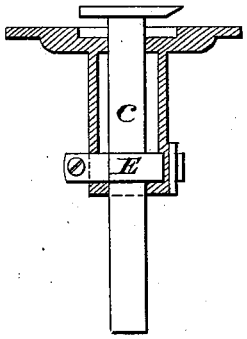


Fig 6

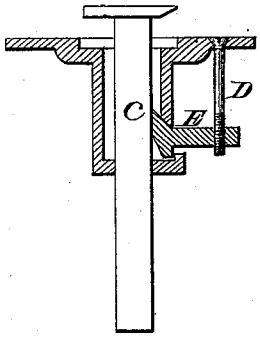
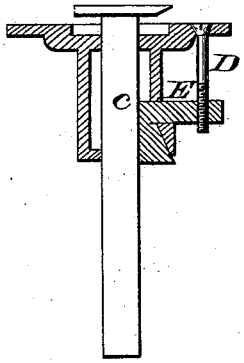


Fig 7



Attest.

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by A. Sidney Doane

Atty.

UNITED STATES PATENT OFFICE.

CHARLES MORRILL, OF NEW YORK, N. Y.

IMPROVEMENT IN BENCH-DOGS.

Specification forming part of Letters Patent No. **210,140**, dated November 19, 1878; application filed April 5, 1878.

To all whom it may concern:

Be it known that I, CHARLES MORRILL, of the city, county, and State of New York, have invented, made, and applied to use a new and useful Bench-Stop, to be used by carpenters and others; and that the following is a full, clear, and correct description of my invention, reference being had to the accompanying drawing, making part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a top view of my improved bench-stop. Fig. 2 is a side elevation of the same. Fig. 3 is an end view of the same. Fig. 4 is a longitudinal section. Figs. 5, 6, and 7 are views of devices sometimes employed to hold the shaft C in position.

In the drawing like parts of the invention are designated by the same letters of reference.

The nature of the present invention consists in the construction, as more fully hereinafter set forth, of an improved bench-stop to be used by carpenters and others, the object of the invention being the production of a bench-stop in which the shaft is held so firmly that all vibrations of the same are obviated, so that in running the plane back the tendency of the same to carry back with it the wood is obviated; and, further, that by making the teeth at one end of the plate open, as shown, the wood is crowded in between the teeth, and is firmly held as the fibers of the wood are crowded or pressed together.

To enable those skilled in the arts to make and use my invention, I will describe the same.

A shows a frame for supporting the operative parts of my bench-stop, provided with a recess, as shown in Fig. 4, in which is placed a shaft, C, having upon its upper end the plate B. This shaft C is reversible, so that either the toothed or plain end of the plate B can be used for the stuff to be planed to be placed against. The frame A is also provided at its bottom, upon the side where the clamping device is placed, with a pin, F, over which is passed the curved end of the hook-clamp E.

E shows a clamp for the purpose of holding the shaft C in position, the curved end of which is passed over and around the pin F.

D is a screw passed through an opening in the frame A, and entering the clamping device E, as shown.

Such being the construction, the operation is as follows: The device is first set into the bench flush, and secured in position by screws or in any convenient way, the plate B being flush with the upper surface of the frame A. To raise the plate B the screw D is reversed or loosened, by which the face of the clamping device is brought into a position parallel with the shaft C, which is then free to move and can be raised to any desired height, and having been so raised the screw D is depressed, by which the face of the clamping device is brought up hard against the shaft C and holds it in position, the pin F in each case forming the center around which the clamping device turns.

In Fig. 5 a binding-lever is used as a substitute for the clamping device, the binding-lever being operated by a screw, D, placed in a horizontal position, and passing through the binding-lever into a lug upon the opposite side, the forward end of the binding-lever passing through a recess in the frame A.

In Figs. 6 and 7 means closely resembling those shown in Fig. 1 are employed, except that the clamping device is made wedge-shaped.

Having now set forth my invention, what I claim as new is—

1. In a bench-stop, the combination of the following elements: a clamping device, E, a pin, F, supported in a frame, A, and a regulating-screw, D, constructed and operating substantially as and for the purpose indicated.

2. In a bench-stop, the combination of the following elements: a frame, A, plate B, shaft C, pin F, clamping device E, and regulating-screw D, constructed and operating substantially as and for the purpose set forth.

CHARLES MORRILL.

In presence of—

A. SIDNEY DOANE,

P. J. KEATING.