S. A. HUNTLEY.

BENCH STOP AND CLAMP.

APPLICATION FILED APR. 24, 1908.

915,354.

Patented Mar. 16, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

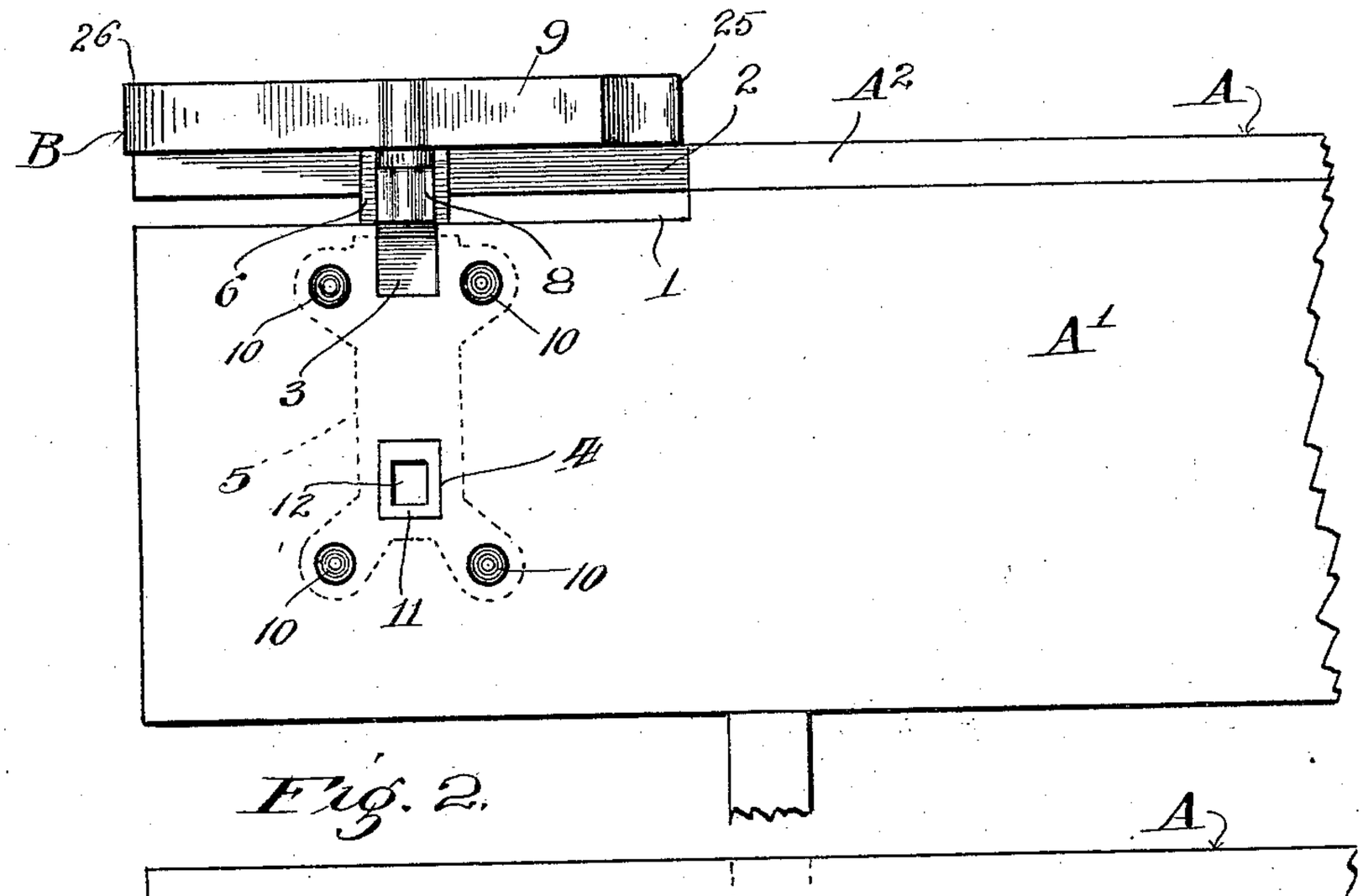
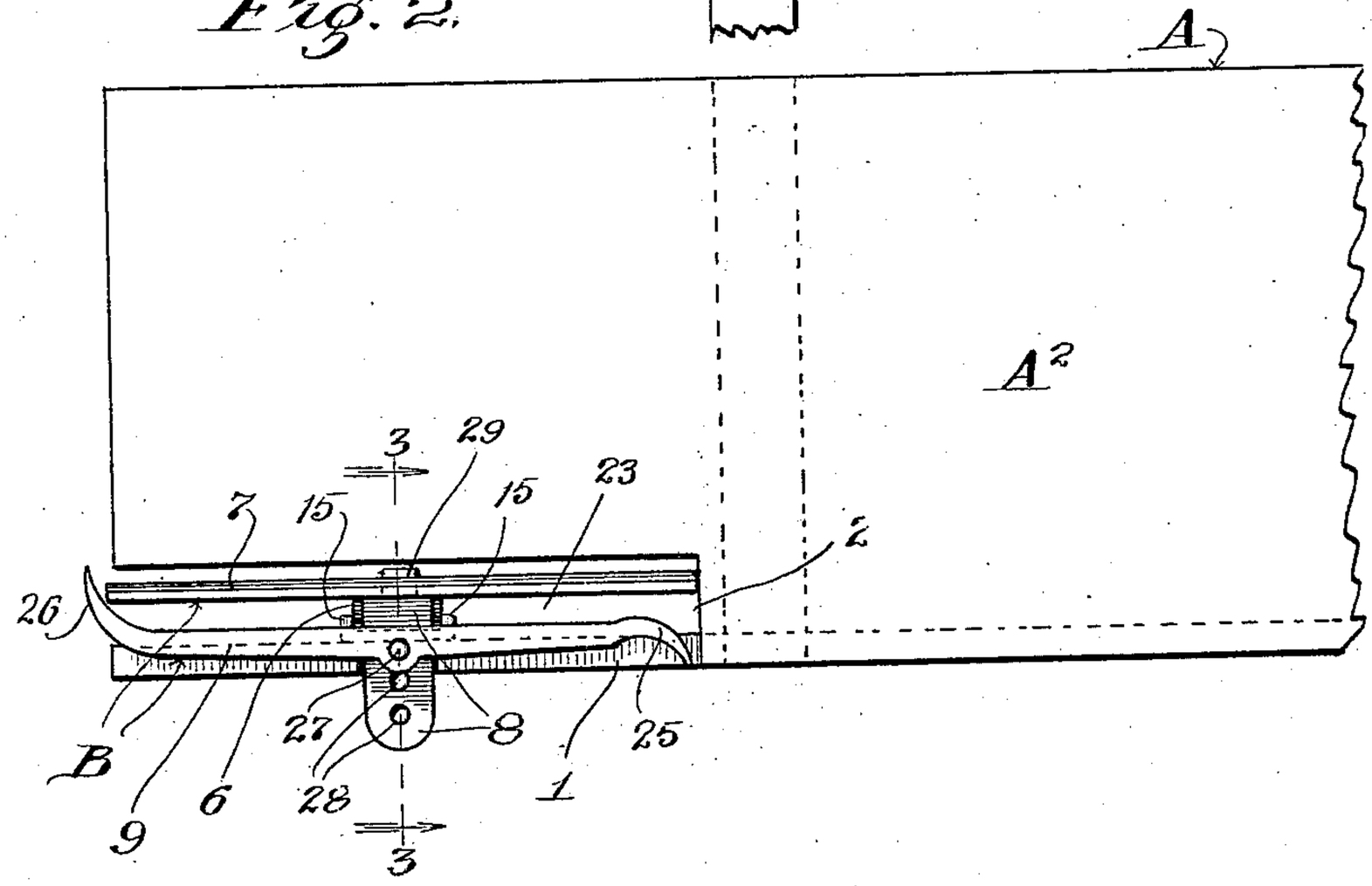


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

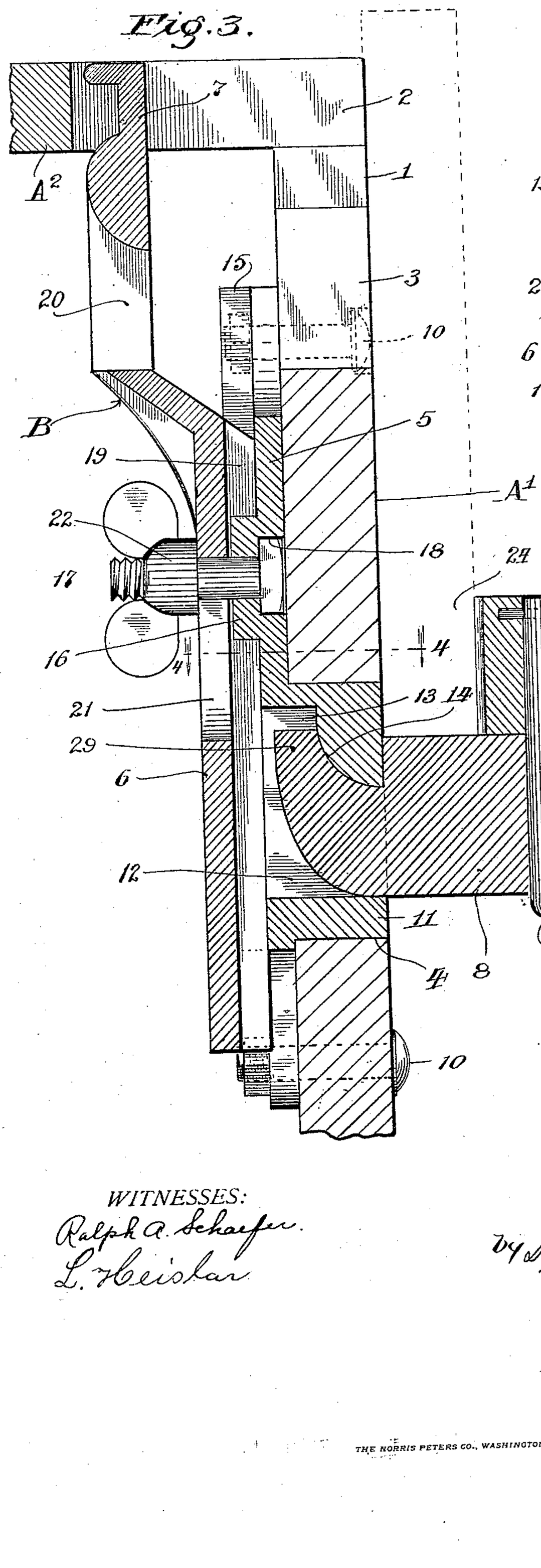
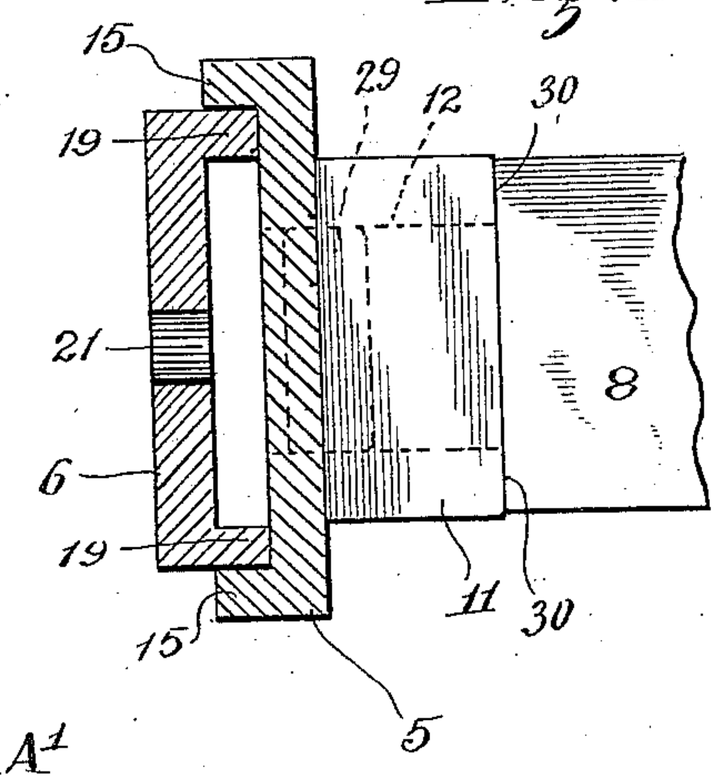


Fig. 4.



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UNITED STATES PATENT OFFICE.

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BENCH STOP AND CLAMP.

No. 915,354. Specification of Letters Patent. Patented March 16, 1909.

Application filed April 24, 1908. Serial No. 429,092.

To all whom it may concern:

Be it known that I, STEPHEN A. HUNTLEY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Bench Stops and Clamps, of which the following is a specification.

My invention relates particularly to combined stops and clamps adapted to be applied as carpenters' benches; and my primary object is to provide a device of the character indicated of simple and durable construction, and capable of use for various purposes.

This invention is illustrated in its preferred embodiment in the accompanying drawing, in which—

Figure 1 represents a broken side elevational view of a carpenter's bench equipped with my improved combination bench-stop and clamp; Fig. 2, a broken plan view of the same; Fig. 3 an enlarged broken sectional view taken as indicated at line 3 of Fig. 2, the self-adjusting clamping member being shown in a different position, however, from the position which it occupies in Figs. 1 and 2; and Fig. 4, a section taken as indicated at line 4 of Fig. 3.

In the construction illustrated, A represents a carpenter's bench having a side A^1; and B, my improved combination bench-top and clamp applied to the bench.

The end-portion of the side A^1 of the bench is cut away, or recessed, at its upper edge, as indicated at 1; and the adjacent edge-portion of the top A^2 of the bench is cut away, or recessed, as indicated at 2. The side A^1 of the bench is further provided with a recess or slot 3 which extends downwardly from the central portion of the recess 1; and at a distance beneath the recess 3 is a rectangular perforation 4.

The device B comprises a fixed plate 5 secured to the side A^1 of the bench at the inner surface of said side; a vertically adjustable member 6 connected with the plate 5 and equipped at its upper end with a rigidly carried bar-form clamping-member 7; a socket-member 8 adapted for connection with either the plate 5 or the member 6; and a self-adjusting pivotally-mounted clamping member 9 carried by the socket-member 8 and co-acting, either with the side A^1 of the bench, or with the bar-form clamping-member 7, according to whether the member 8 is mounted on the member 5 or on the member 6.

The bench-plate, or member 5, is of the general rectangular form indicated by dotted lines in Fig. 1, and is applied to the inner surface of the side A^1 of the bench by bolts 10. The plate is equipped on one side with a rectangular boss 11 which is fitted in the opening 4 through the side of the bench. Through the plate 5 and the boss thereof extends a rectangular socket perforation 12. At the upper perforation, or slot, 12, metal is cut away, or recessed, as indicated at 13, the shoulder thereat being beveled, or rounded, as indicated at 14.

The plate 5 is equipped on its side opposite that having the boss 1 with guide-flanges 15, and between said flanges and above the socket 12, with a boss 16 through which extends a bolt 17 whose head is entered in a counter-sink 18.

The stem 6 of the clamp-bar 7 is equipped on one side with flanges 19 which fit between the flanges 15, and the upper portion of said stem is offset from the plate 5, so as to support the bar 7 at some distance inside the plane of the side A^1 of the bench. Near the junction of the stem 6 and bar 7 is a socket-perforation 20 of like dimensions with the socket perforation 12. The stem 6 is provided with a vertical slot 21 through which the bolt 17 extends. The bolt 17 is equipped with a winged-nut 22.

The socket-member 8 is interchangeably mounted on the fixed plate 5 or the adjustable member 6, according to whether the pivotally supported clamping-member 9 is to coöperate with the side A^1 of the bench or with the clamping-bar 7. In Fig. 1, the socket engaging member 9 is shown mounted on the member 6, and the member 6 is adjusted high to raise the clamping-members above the bench level. In Fig. 3, the adjustable member 6 is dropped to bring the bar 7 flush with the bench-top, and the clamping member 9 is, through the medium of the socket-member 8, mounted on the plate 5. As shown in Fig. 2, there is a space 23 between the clamping-members 7 and 9 when the member 9 is mounted to coöperate with the member 7; and, as shown in Fig. 3, there is a space 24 between the member 9 and the side of the bench when the member 9 is supported in its lowermost position. The member 9 has one end 25 bent away from the bar 7 (Fig. 2), and the other end 26 bent toward the bar 7 and crossing the space 23. Said member 9, which is horizontally disposed, is equipped on its lower side with a pivot

27; and the block 8 is provided with a series of vertical pivot perforations 28 adapted to receive the pivot 27, according to the thickness of the board to be clamped. The block 8 has a hook 29 which is suitably curved to enter the socket 12, and at the base of said hook are shoulders 30 adapted to bear on the plate 5 or the plate 6, as the case may be.

My invention provides an exceedingly handy and durable device, which is capable of use as a combination stop and clamp at the top of the bench, or as a clamp at the side of the bench.

The great practical advantage of the device will be at once appreciated by those familiar with the art.

The foregoing detailed description has been given for clearness of understanding only, and no undue limitation should be understood therefrom.

What I regard as new, and desire to secure by Letters Patent, is—

1. The combination of a fixed bench-plate, a vertically movable clamping-bar adjustably connected therewith, each of said members having a socket, a socket-engaging member adapted to be entered in either of said sockets, and a clamping-member pivotally mounted on said socket-engaging member.

2. The combination of a fixed vertical bench-plate having a horizontal socket, a socket-engaging member projecting laterally from said bench-plate, and a pivoted, self-adjusting clamping-member mounted on a vertical pivot carried by said socket member free to swing in a horizontal plane.

3. The combination with a bench having a side with a perforation therein, a bench plate applied to the inner surface of the side of the bench and equipped with a female socket-member, a socket-block having a hook engaging said female socket-member, and a pivoted self-adjusting clamping-member mounted on said block and coacting with the side of the bench.

4. The combination with a bench plate equipped on one side with vertical guide-flanges, said plate having a transverse socket-perforation, a clamping-bar having a stem fitted to move along said guide-flanges, said last-named member having a transverse socket-perforation, a socket-block interchangeably fitting either socket-perforation and a clamping-bar pivotally mounted on said socket-block.

5. The combination of a fixed vertical bench-plate, clamping-bar having an offset stem vertically adjustable on said plate, a bar-supporting member projecting laterally from said clamping-bar, and a self-adjusting clamping-bar pivoted on said bar-supporting member.

STEPHEN A. HUNTLEY.

In presence of—
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R. SCHAEFER.