Nov. 10, 1931. E. J. HEULE ET AL 1,831,174

EXTENSION TABLE

Filed May 15, 1930

Fig. 1.

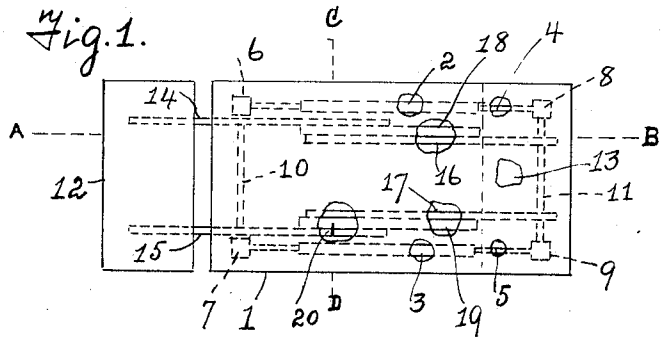


Fig. 2.

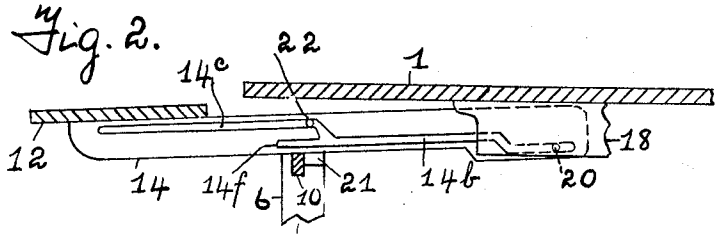


Fig. 3.

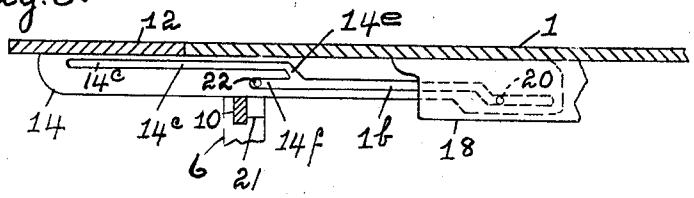


Fig. 4.

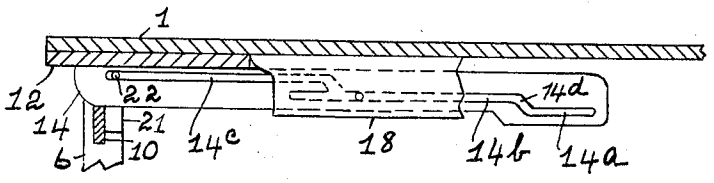


Fig. 5.

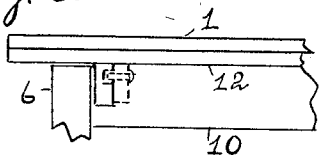
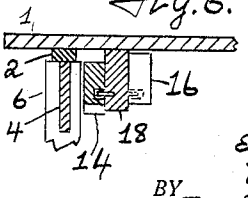


Fig. 6.



INVENTORS
Everett J Heule
Paul Novak
BY James T. Watson
ATTORNEYS.

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UNITED STATES PATENT OFFICE

EVERETT J. HEULE AND PAUL NOVAK, OF SUPERIOR, WISCONSIN, ASSIGNORS TO WEBSTER MANUFACTURING COMPANY, OF SUPERIOR, WISCONSIN, A CORPORATION OF WISCONSIN

EXTENSION TABLE

Application filed May 15, 1930. Serial No. 452,639.

Our invention relates to extension tables and has for its object the provision of an improved table of such type, and in which extension leaves are mounted on slide bars and positioned, are beneath a main table top, when in closed position, and may be drawn outwardly and raised into operative position flush with a stationary top of said table, thereby extending said table by adding a leaf to one or both of its ends. With this, and other objects in view, it consists of the structures, combinations and arrangements of parts hereinafter described and claimed.

In the drawings, Fig. 1, is a top plan view of said invention showing one of the extension leaves thereof drawn out to an intermediate position between closed and operative positions, as shown in section in Fig. 2; also showing diagrammatically, in broken lines, the approximate positions of the hereinafter described table legs, side and end rails, spacing and top-supporting blocks, cheek blocks, and sliding leaf arms. Fig. 2, is a vertical longitudinal section of one end of said table on the line A—B of Fig. 1, showing one of the table legs partly broken off and showing one of said extension leaves in an intermediate position. Fig. 3, is a similar section showing said extension leaf in operative position. Fig. 4, is a similar section showing said extension leaf in closed position. Fig. 5, is a fragmentary end elevation of said table, showing said leaf in closed position, and Fig. 6 is a fragmentary vertical transverse section on the line C—D of Fig. 1.

In the drawings, 1 is a stationary table top, supported on spacing blocks 2, 3, which are mounted on side rails 4, 5 which are supported by legs of any suitable number or structure, as 6, 7, 8 and 9. End rails 10 and 11 are also supported by said legs. Said stationary top is supported by said spacing blocks above the tops of said legs and rails so as to provide a space between said top and rails and the tops of said posts for the passage below said stationary top of extension leaves 12 and 13 at opposite ends of the table respectively.

Secured to, and depending from each of said leaves are one or more longitudinally directed sliding guide arms, as 14, 15, 16, 17, adapted to overlap one or the other of two longitudinally directed stationary cheek blocks as 18, 19, which are secured to, and depend from said stationary top.

Since the structure is similar at each end of said table, it is believed sufficient if only one end be further described in detail.

Extending transversely from each of said cheek blocks is a stationary guide finger or pin, as 20, adapted to engage a three-step groove formed in the opposing side face of a corresponding one of said arms at one end of said table.

The groove in each of said arms comprises a lower, and intermediate and upper plane portion, said lower plane portion being near the inward end of the arm, as at 14*a*, the upper portion of said groove being near the outward end of said arm as at 14*c* and the intermediate portion of said groove extending between the ends of said upper and lower portions as at 14*b*. Said lower and upper portions of said groove are connected with said intermediate portion by outwardly and upwardly inclined portions, as at 14*d* and 14*e*, respectively, and the outer end of said intermediate portion extends outwardly beyond the lower end of said inclined portion 14*e*, to form a pocket, 14*f*, for the guide and supporting finger 22 when said leaf is in operative position.

The outer ends of said arms are supported by said end rails and extend through slots formed therein.

Supported by any suitable means on said end rails as by a block 21, is a finger 22 adapted to extend into said groove.

If desired, the extension leaf and arms may be omitted at one end of the table.

To move one of said leaves to operative position, assuming it to be in closed position beneath the stationary top with the finger 20 extending into the intermediate level 14*b* of the groove in the opposing guide arm, and the finger 22 extending into the upper level 14*c* of said groove, the operator draws said leaf outward, causing the guide arms upon which it is mounted to ride on said fingers in such manner that the inclined por-

tion 14*d* and part of the lower portion 14*a* of the groove will pass said finger 20 thereby lifting the inward end of said arm. At the same time the inclined portion 14*e* of said groove will pass said finger 22 and the intermediate portion 14*b* of said groove will engage said pin 22 thus raising the outward end of said arm so that the leaf is flush with the stationary top of the table. The leaf is then pushed toward the stationary top until it contacts or approximately contacts therewith at the same level. While pushing the leaf into operative position, the operator manually supports the same to prevent the inclined groove 14*e* from again engaging said pin 22, which thereupon becomes engaged by the pocket end 14*f* of said groove and supports the outer end of said arm and leaf in operative position after the operator has withdrawn his manual support thereof. By reversing the procedure, the leaf is returned to closed position.

What we claim is—

1. In a table, the combination of legs, side rails supported by said legs, spacing blocks mounted on said side rails, a stationary top mounted on said blocks and spaced thereby above the tops of said legs and rails, a cheek block depending from said top between said spacing blocks, a reciprocable guide arm extending longitudinally of said table below the plane of said top and adapted to overlap said cheek block, said arm having a three-step groove formed in its side facing said cheek block and extending longitudinally of said arm, the lowest portion of said groove being near the inward end of said arm and being connected with the intermediate portion of said groove by a riser portion, the highest portion of said groove being near the outward end of said arm, said intermediate portion of said groove being connected with said highest portion by a riser portion, said intermediate portion having a pocket portion extending outwardly beyond the lower end of the upper said riser portion, a transversely directed finger extending from said cheek block into the inward half of said groove, a transversely directed finger extending into the outward half of said groove, means for supporting the second said finger, and a table leaf mounted upon and secured to the outer end of said arm.

2. The combination with the structure described in claim 1, of a second cheek block depending from said table top and extending parallel with the first said cheek block, a second guide arm adapted to overlap said second cheek block, said second guide arm being grooved in similar manner to the first said guide arm, a transversely directed finger extending from said second cheek block into the inward half of the groove in the second said arm, a transversely directed finger extending into the outward half of said groove, and means for supporting the fourth said finger, said leaf being also attached to the outer end of the second said arm.

In testimony whereof, we hereunto affix our signatures.

EVERETT J. HEULE.
PAUL NOVAK.