J. VIDAL Y DIAZ.

ATTACHMENT FOR KEY OPERATED MACHINES.

APPLICATION FILED JAN. 7, 1908.

**903,031.** Patented Nov. 3, 1908.

2 SHEETS—SHEET 1.

*Fig. 1.*

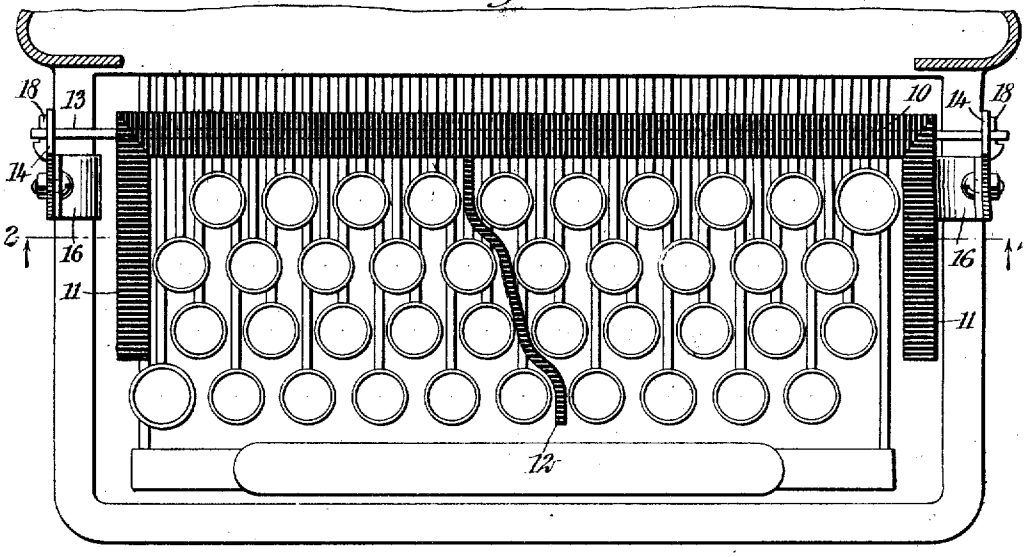



*Fig. 2.*

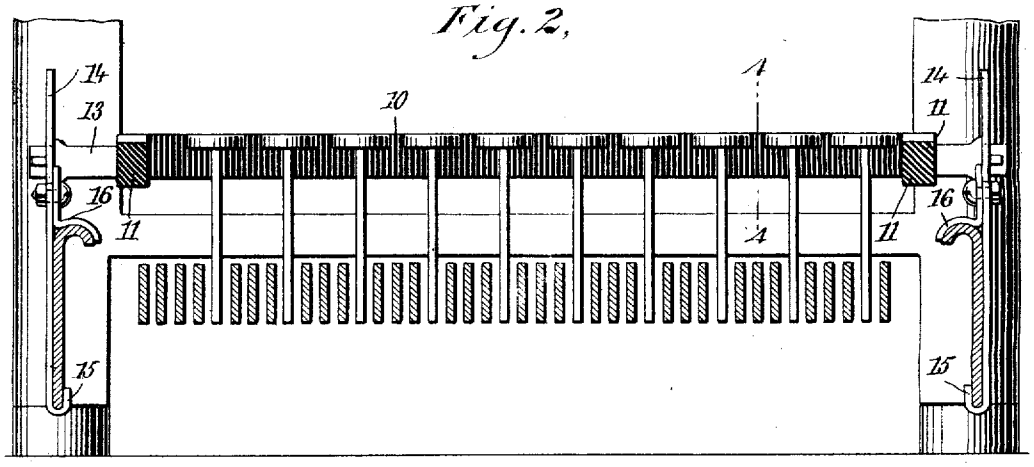



*Fig. 3.*

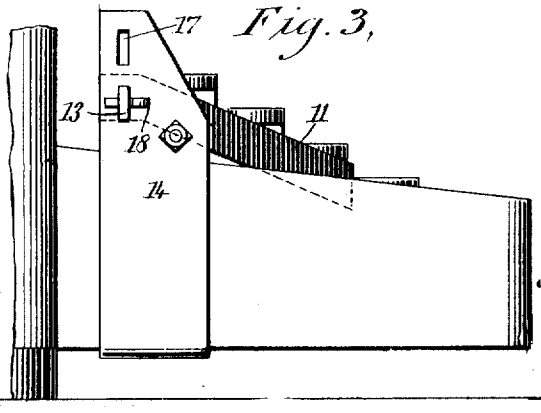
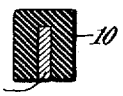



*Fig. 4.*




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2 SHEETS—SHEET 2.

*Fig. 5.*

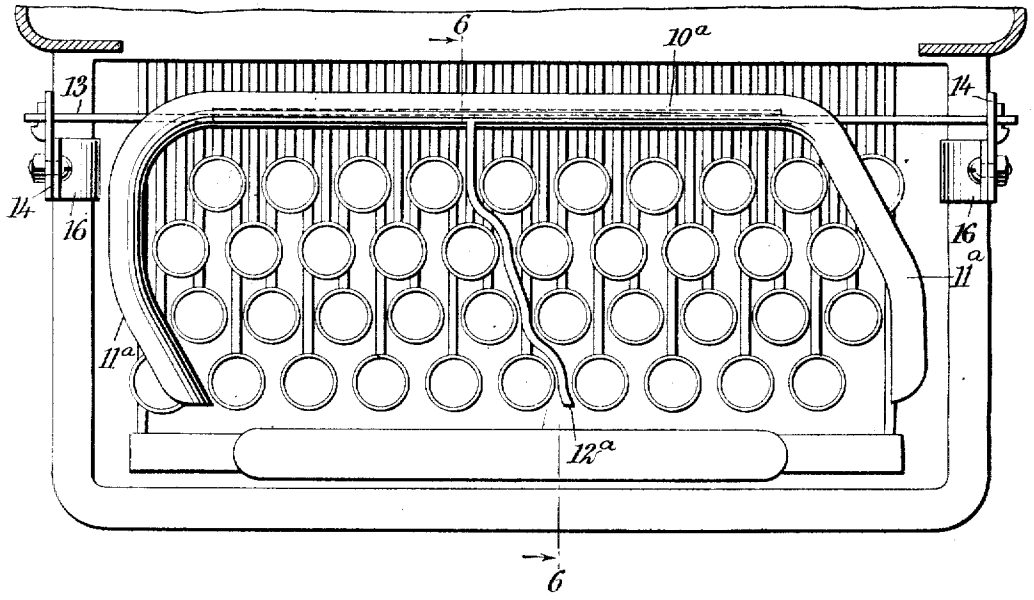
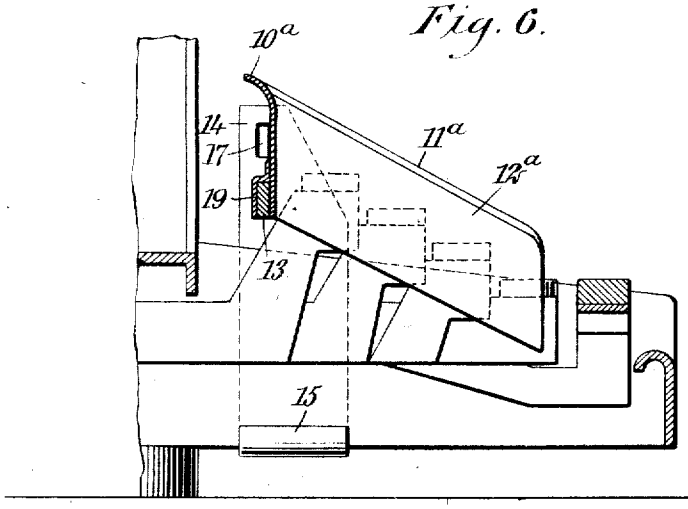



*Fig. 6.*




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# UNITED STATES PATENT OFFICE.

JULIAN VIDAL Y DIAZ, OF HABANA, CUBA, ASSIGNOR OF ONE-THIRD TO JUAN VENTOSA Y VENTOSA, OF NEW YORK, N. Y., AND TWO-THIRDS TO HIMSELF AND JUAN BAUTISTA VIDAL AND JOSÉ CALASANZ VIDAL, OF NEW YORK, N. Y.

## ATTACHMENT FOR KEY-OPERATED MACHINES.

No. 903,031. Specification of Letters Patent. Patented Nov. 3, 1908.

Application filed January 7, 1908. Serial No 409,625.

*To all whom it may concern:*

Be it known that I, JULIAN VIDAL Y DIAZ, a citizen of the Republic of Cuba, and a resident of Habana, Cuba, have invented a new and Improved Attachment for Key-Operated Machines, of which the following is a full, clear, and exact description.

This invention relates to certain improvements in typewriters or other machines having a plurality of keys adapted to be manually operated, and the object of the invention is to provide means for locating and defining the keyboard by other than the sense of direct sight, whereby said operator instinctively retains the hands in the proper position in respect to the keyboard while reading the copy and operating the machine simultaneously. In order to secure this object, I provide a frame or border extending along adjacent the outermost keys, so that the boundaries of the keyboard are more clearly defined and so that the operator may without looking directly at the keyboard locate the keys thereon. This frame may be of a contrasting color to that of the keys, in which case the operator even though not looking directly at the keyboard may still locate it accurately; or said frame may extend upward from the keyboard, so that the hand will engage therewith should it move beyond the confines of said keyboard.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures, and in which

Figure 1 is a plan view of a portion of a typewriter having a marginal frame for the keyboard of a contrasting color to that of the keys; Fig. 2 is a vertical section on the line 2—2 of Fig. 1; Fig. 3 is an end view of the parts shown in Fig. 1; Fig. 4 is a section on the line 4—4 of Fig. 2; Fig. 5 is a plan view of a portion of a typewriter, similar to Fig. 1 but showing a frame extending to a higher elevation than the keys; and Fig. 6 is a vertical section on the line 6—6 of Fig. 5.

My improved device is so constructed as to be readily applied to any typewriter, and includes in its construction a marginal frame having a subdividing partition, a supporting bar for said frame, and brackets adapted to be secured to the frame of the machine and serving to support said bar.

In the specific form illustrated in Figs. 1 to 4, inclusive, the marginal frame includes a longitudinally-extending member 10, adapted to lie beyond but adacent the upper line of keys, and two side members 11 adapted to extend along the ends of the keyboard. The frame supports a dividing partition 12, which extends substantially parallel to the side members 11 but is bent or curved to pass between the keys and to subdivide the keys operated by the right hand from those operated by the left hand. The frame with its partition 12 is of a contrasting color to the keys, in the present instance, the keys being white and the frame being black. This contrast is such that even though the operator does not look directly at the keyboard, he may unconsciously locate the keyboard and the keys thereon while he is reading the copy. The frame is readily detachable from the machine, it being preferably supported upon a transverse supporting bar 13, extending longitudinally of the frame member 10. The member 10 is preferably provided with a longitudinally-disposed slot extending into its lower side, as is illustrated in Fig. 4, and the bar 13 fits into this slot. The ends of the bar are supported upon suitable brackets fastened to the frame of the machine, each of said brackets preferably including a vertically-disposed member 14, having a hook 15 at the lower end thereof adapted to engage with the under side of a portion of the frame, and having a securing member 16 adapted to be rigidly secured thereto and to engage with the upper side of a portion of the machine frame. The vertically-extending member 14 is provided with a series of perforations 17, through which the bar 13 may extend and be supported at different elevations. The bar 13 may be secured to the brackets in any suitable manner, as, for instance, by keys 18.

The frame illustrated in Figs. 5 and 6 may, if desired, be used in place of the frame illustrated in Figs. 1 to 4, inclusive, and is so constructed that it may be readily secured to the supporting bar 13. In this form the frame is designed to locate and define the

keyboard, not by a contrasting color so much as by being raised to a higher elevation than the keyboard, so that should the hand of the operator pass to one side of the keyboard, it will immediately engage with the frame and the operator will instinctively move his hand back to its proper position over the keyboard. The frame illustrated is formed of a strip of sheet metal having a longitudinally-extending portion $10^a$, side portions or members $11^a$, and a partition $12^a$. The lower edge of the member $10^a$ is provided with a flange 19, which forms therewith a slot adapted to receive the supporting bar 13, the slot being open at the lower side, so that the frame may be readily raised and removed. The upper edge of the sheet metal is curved outwardly to form an inwardly-directed inclined surface which not only prevents the operator from hurting the hand by striking against the sharp upper edge, but also serves to direct the hand inwardly onto the keyboard. The frame and its partition may extend to any desired elevation above the keyboard dependent upon the skill of the operator and the necessity for said frame. The elevation may be varied by raising or lowering the supporting bar 13 in respect to the brackets.

As the shift keys are not operated as frequently as are the letter-keys of the machine, the side portions of the frame may be extended inwardly at such an angle as to leave these keys outside of the frame, whereby the liability of touching said keys unintentionally is materially reduced. As the frame stands somewhat above the keyboard, these keys may be readily operated when desired.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. An attachment for machines having keyboards, comprising two brackets detachably connected to the frame of the machine, a horizontally-disposed supporting bar carried by said brackets and vertically adjustable, and a frame carried by said supporting bar and having portions extending along three sides of the keyboard.

2. An attachment for machines having keyboards, comprising two brackets detachably connected to the frame of the machine, and having a plurality of openings adjacent the upper end thereof, a horizontally-disposed supporting bar having the end portions thereof adapted to extend into any one of said openings, so as to permit of the vertical adjustment of the bar, and a frame having a longitudinally-disposed groove for the reception of said supporting bar and having portions extending adjacent the keyboard and serving to define the borders of the keyboard.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JULIAN VIDAL Y DIAZ.

Witnesses:
EVERARD B. MARSHALL,
CLAIR W. FAIRBANK.