April 14, 1925. 1,533,585

C. B. CORCORAN

TYPEWRITING MACHINE

Filed Nov. 9, 1922

Fig. 1.

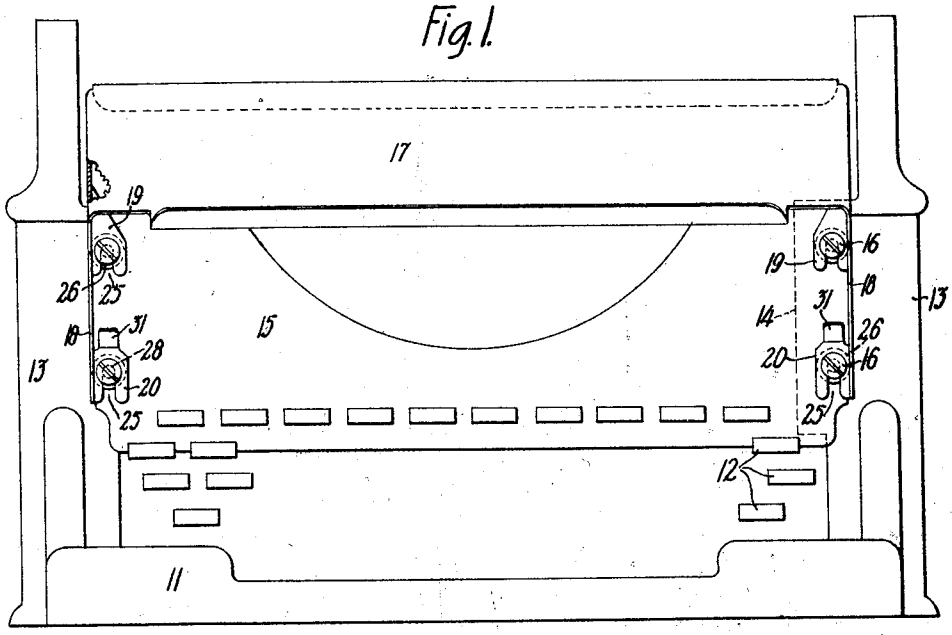


Fig. 2.

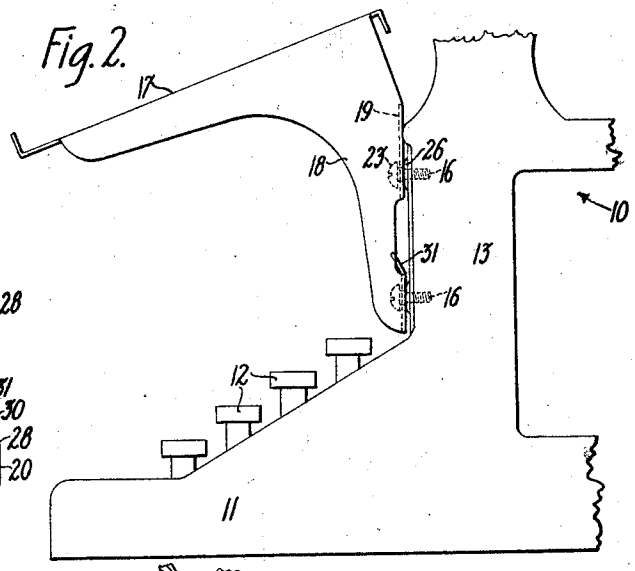


Fig. 3.

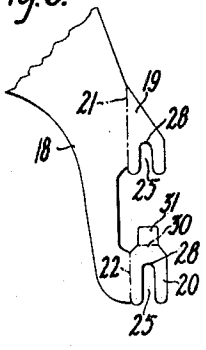
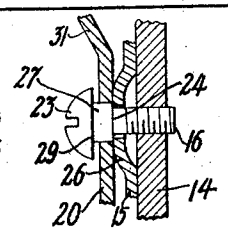


Fig. 4.



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UNITED STATES PATENT OFFICE.

CORNELIUS B. CORCORAN, OF NEW YORK, N. Y., ASSIGNOR TO UNDERWOOD TYPEWRITER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF DELAWARE.

TYPEWRITING MACHINE.

Application filed November 9, 1922. Serial No. 599,760.

To all whom it may concern:

Be it known that I, CORNELIUS B. CORCORAN, a citizen of the United States, residing in borough of the Bronx, in the county of the Bronx, city and State of New York, have invented certain new and useful Improvements in Typewriting Machines, of which the following is a specification.

The present invention relates to shields for typewriter-keyboards; that is to say, to shields which are used to conceal the board in the instruction of operators in the so-called touch system.

Shields of this character have heretofore been removably supported upon the machine, but have required special, and more or less cumbersome or expensive, means for holding the same to the machine. Such holding means, furthermore, have ordinarily been such as to be incompatible with easy and expeditious placement and removal of the shield.

An object of the invention is the provision of means whereby the shield may be supported directly from the front face of the machine; and may be fixed thereon or removed therefrom by a simple movement of the shield.

A feature of the invention is the provision of means whereby the screws, which ordinarily serve to hold the front plate of the machine to the standard thereof, may also serve as the means for securing the shield to the machine.

A feature of the invention is the provision, for the purpose mentioned, of screws, pins or lugs of such type as to involve no adjustment or loosening of the front plate of the machine in the attachment and removal of the shield; and of such type as to allow of easy movement of the shield, without the adjustment of any parts, in the placement and removal of the shield.

An object of the invention is a shield which, as an article of manufacture, may be made in a single sheet-metal piece, inexpensively formed in one or more stamping or bending operations.

In the preferred embodiment of the invention, the shield is of sheet-material, having supporting arms formed thereon, and ears formed on the arms for attaching the structure as a unit to the machine; the ears being vertically slotted to receive the screws or lugs, and to permit of removal and placement of the shield upon mere upward and downward movement thereof, over the face of the front plate, respectively, to a position where the screws or lugs may be cleared of the slots for removal of the shield, and to a position where the screws or lugs may be received in the slots, for placement of the shield.

Other features and advantages will hereinafter appear.

In the accompanying drawings,

Figure 1 is a front view of a machine having the shield of the present invention mounted thereon.

Figure 2 is a view, in side elevation, of the structure shown in Figure 1.

Figure 3 is a view, in side elevation, of one of the shield-supporting arms before the ears which connect the same to the machine are turned into position in the manufacture thereof.

Figure 4 is an enlarged detailed view, showing the manner in which the shield and front plate are held to the machine-frame.

Referring to the drawings, the machine-frame 10 is shown as having the usual keyboard-extension 11 and keyboard 12; and also as having the usual standard 13 including a flat surface 14 forming the front face thereof. To the surface 14 of the standard, the front plate 15 is ordinarily secured by screws which pass through the front plate and thread into the standard. In the Underwood machine, these screws are located in the positions where the screws 16 of the present drawings are located.

The shield 17 is of sheet-material, having arms 18 unitary therewith and turned down vertically from the side edges thereof. In the stamping or cutting of the arms 18 (see Figure 3), ears 19 and 20 are formed thereon. In the process of manufacture, these ears 19 and 20, are, however, turned on the lines 21 and 22, respectively, at right angles to the arms 18 proper. As shown in Figure 1, the ears 19 and 20 on one arm are turned toward the other arm; and all the ears 19 and 20 lie in the same vertical plane in the finished shield, so that, as shown in Figures 1 and 2, the ears may be set to the front plate of the machine.

In order that the shield may be placed and removed without the use of a screwdriver, the screws 16, here used, are preferably somewhat different than the screws or-

dinarily used for securing the front plate to the machine-frame. The screws 16, instead of holding the front plate 15 by means of their heads 23, or, when the shield is employed, of holding the shield to the front plate and the front plate to the frame by means of the heads 23, are provided with shoulders 24 which bear against the usual bosses 26 formed on the front plate. When, as shown in Figure 4, the screws are threaded into the standard, the front plate is held to the standard, regardless of whether the shield is on the machine or not; and the removal and placement of the shield involves no disturbance of the screws.

For securing the shield to the front plate by means of the screws, the ears 19 and 20 on the arms 18 of the shield each have vertical slots 25 adapted to receive the enlarged parts 27 of the screws, when the shield is set against the front plate and slid down to bring the ears over the screws. The fit of the enlarged parts 27 in the slots 25, while reasonably snug, is such as to permit of easy movement downward of the shield in placement thereof and of easy upward movement of the shield when the same is to be removed.

The home position of the shield on the screws is determined by engagement of the screws with the upper end walls 28 of the slots 25. In order that the heads 23 of the screws may not interfere with easy movement of the shield, the enlarged parts 27 are, as shown in Figure 4, of greater length than the thickness of the ears 19 and 20, so that the shoulders 29, formed by the heads, are somewhat forward of the front surfaces of the ears 19 and 20.

On the dotted line 30 (see Figure 3), a tongue 31 is turned forward at an incline (see Figure 2), from each of the ears 20. The purpose of the tongues 31 is to prevent the upper edges of the ears 20 from catching onto the heads of the upper screws 16 when the shield is lifted to remove the same. If, in such removal, the shield is drawn up against the front plate sufficiently high, the tongues 31 strike the heads of the upper screws 16, and act to cam the ears 20 forward and away from the upper screws.

Variations may be resorted to within the scope of the invention, and portions of the improvements may be used without others.

Having thus described my invention, I claim:

1. The combination with a typewriting machine, having a standard, a front plate and upper and lower screws, at each side of the front plate, for securing the front plate to the standard, of a keyboard-shield having upper and lower ears thereon, at each side of the machine, for holding the shield to the machine by means of said screws; said ears having vertical slots therein, open at their lower ends, to receive the screws upon downward movement of the ears along the front plate in placement of the shield, and to clear the screws upon upward movement of the ears along the front plate in removal of the shield; and the lower ears having inclined surfaces thereon, for camming the same clear of the upper screws in removal of the shield.

2. The combination with a typewriting machine, having a standard, a front plate and upper and lower screws, at each side of the front plate, for securing the front plate to the standard, of a keyboard-shield of sheet-material, having upper and lower ears turned out at each side thereof in a plane substantially parallel to the front plate of the machine; the ears being vertically slotted, to receive said screws on downward movement of the ears along the front plate of the machine in placement of the shield, and to clear said screws upon upward movement of the ears along the front plate of the machine in removal of the shield, and the lower ears having tongues bent forward therefrom to cam the lower ears clear of the upper screws upon removal of the shield.

3. The combination with a typewriting machine, having a standard, a front plate and screws for securing the front plate to the standard, of a keyboard-shield having means whereby the same may be held to the machine directly by said screws; said screws having shoulders to hold the front plate to the standard, and having extensions forward of the shoulders to receive the shield, so that the shield may be placed and removed without disturbance or adjustment of the screws.

4. The combination with a typewriting machine, having a standard, a front plate and screws for securing the front plate to the standard, of a keyboard-shield having means whereby the same may be held to the machine directly by said screws; said screws having shoulders to hold the front plate to the standard, and having extensions forward of the shoulders to receive the shield, so that the shield may be placed and removed without disturbance or adjustment of the screws; and having other shoulders or heads so positioned on said extensions as to permit freedom of movement of the shield between the front plate of the machine and such other shoulders or heads.

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