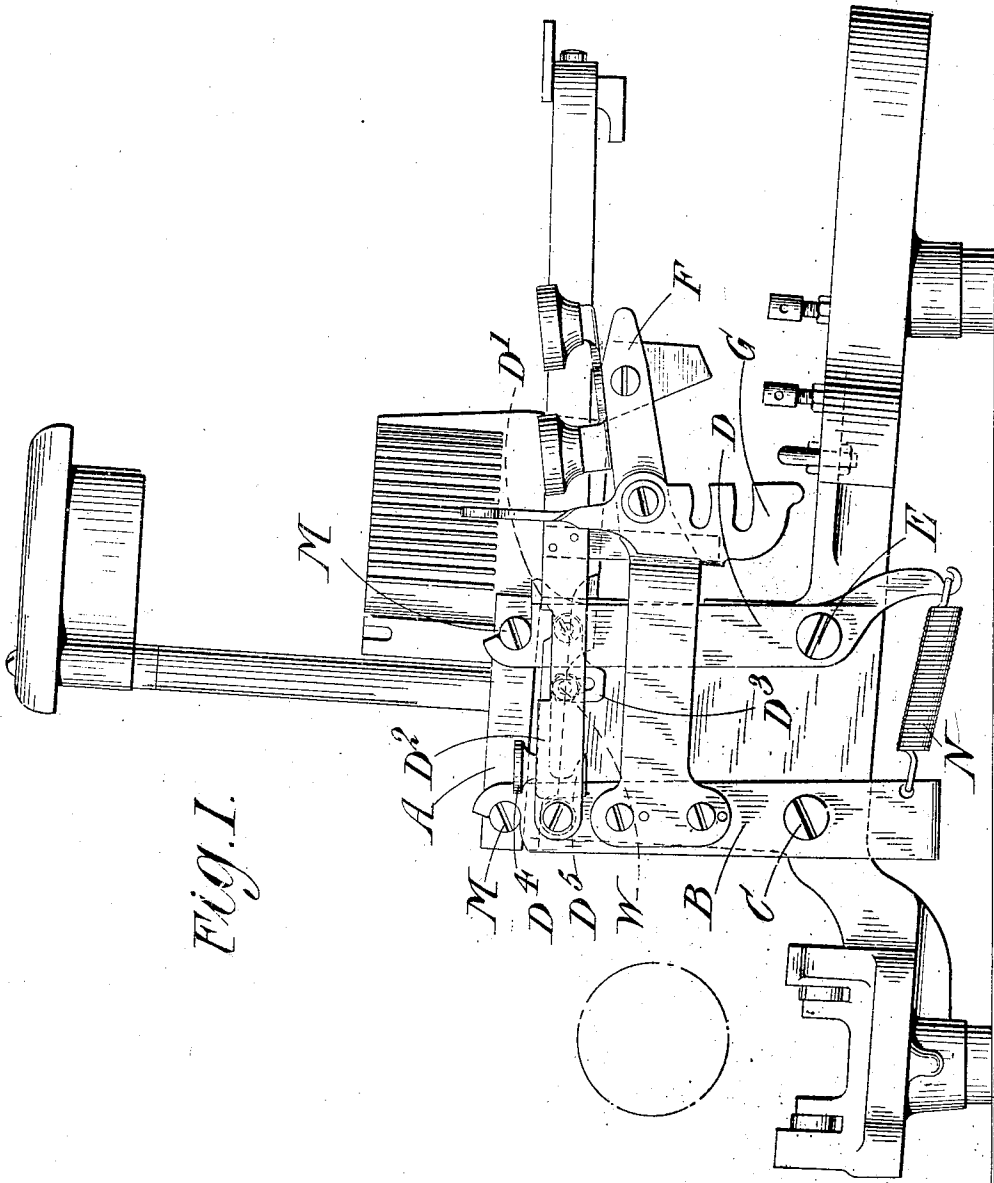


H. MOYA.
TYPE WRITER.
APPLICATION FILED MAY 18, 1912.

1,045,059.

Patented Nov. 19, 1912.

2 SHEETS—SHEET 1.



Witnesses.
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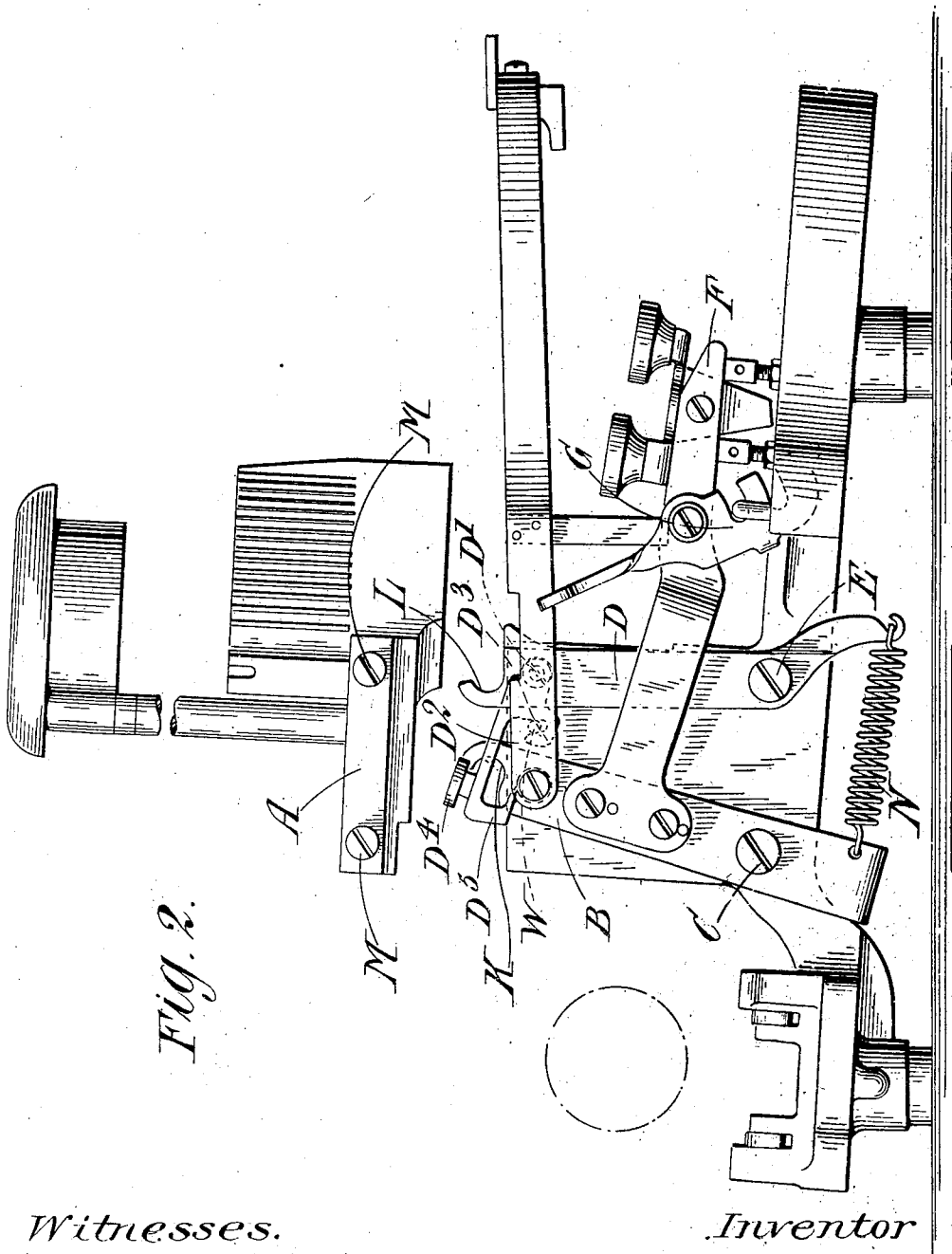


Fig. 2.

Witnesses.

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HIDALGO MOYA, OF NORTH EVINGTON, ENGLAND, ASSIGNOR TO IMPERIAL TYPE-
WRITER COMPANY LIMITED, OF NORTH EVINGTON, ENGLAND.

TYPE-WRITER.

1,045,059.

Specification of Letters Patent.

Patented Nov. 19, 1912.

Application filed May 18, 1912. Serial No. 595,181.

To all whom it may concern:

Be it known that I, HIDALGO MOYA, a citizen of the United States of America, residing at North Evington, in Leicestershire, England, have invented certain new and useful Improvements in Type-Writers, of which the following is a specification.

This invention relates to typewriters of the kind in which a type-bar base is detachable carrying with it type-bars, type-levers, key-levers and associated mechanism, so that another base may be substituted therefor to print characters of a different type, as for example in a different language.

The invention is particularly applicable to typewriters of the kind in which the type-bar base is supported on a pair of rocking bars or on a movable yoke and is movable to print the particular font required, this movement being effected by a shift key mechanism, which is also provided with a locking mechanism to hold the type-bar base in any one of the desired positions.

This invention consists in the combination, in a typewriter having a removable type-bar base, of two retaining members movably mounted on the frame to engage the type-bar base with, and disengage it from, the frame and means for locking one of these members relatively to the frame prior to releasing the base whereupon the second member may be moved relatively to the first member to release the type-bar base.

According to a further feature of this invention there is provided in combination with the ordinary shift key and locking mechanism for moving and locking one of the retaining members, means for locking the other retaining member to the frame so that by first locking this second member and then moving and locking the first member, the type-bar base is disengaged, so that it can be lifted out of place.

According to yet another feature of the invention, there is provided in combination with the two retaining members a distance strut which holds them apart during normal operation, but which can be displaced to allow them to approach one another for releasing the type-bar base. In the preferred construction the distance strut also acts as the locking means for one of the retaining members to which it is pivoted, so that in one position it acts as a strut and when dis-

placed from that position it locks the retaining member to the frame.

In the accompanying drawings which illustrate one construction according to this invention:—Figure 1 is a side view of so much of a typewriter as is necessary to the understanding of the invention, showing all the parts in their normal position. Fig. 2 is a similar view showing the parts in the released position with the type-bar base lifted out.

Like letters indicate like parts throughout the drawings.

In order to simplify the specification the mechanism on one side only of the typewriter will now be described, but it will be understood that some parts of such mechanism are duplicated on the other side of the machine.

The type-bars, type-levers, key-levers and associated mechanism are all mounted on a base which is termed the type-bar base A. The ordinary rocking bar B by the movement by which the various fonts are brought into alinement for printing, is pivoted at C to the frame of the machine. It will be understood that this and the corresponding bar on the other side of the machine may be replaced by a single yoke as is used in some forms of typewriter. A second pair of detent bars D (which may also be replaced by a yoke) are fixed to the frame of the machine.

The rocking bar B is provided with a usual form of shift key F and locking mechanism G which are operatively connected by a link H to the bar B so that depression of the shift key normally causes the bar B to rock forward and carry with it the type-bar base to print a different font. A notch or recess K is provided at the upper end of the bar B and a similar notch L at the upper end of the detent bar D to engage pins M on to the type-bar base A and lock the said base in its normal position by applying outward pressure on the two pins, this outward pressure being obtained by means of a spring N which is in tension and connects the ends of the bars B and D. On the detent bar D is pivoted at D¹ a distance strut D² having a hook extension D³ which engages with the pin W fixed on the frame of the machine or on some other stationary part. The distance strut D² extends to and engages the rocking

bar B, so that when it is in the position shown in Fig. 1, it prevents the bars B and D approaching one another, thus reinforcing the action of the spring. The pin W is so positioned that when the normal font is in use *i. e.* when the type-bar base is in its farthest backward position, the strut D² on being raised will cause the hook D³ to engage the pin W and lock the detent bar D in that position, at the same time releasing the rocking bar B with respect to the detent bar D. The depression of the shift key F can now cause the rocking bar B to move forward against the action of the spring N toward the detent bar D thereby diminishing the distance between the notches K and L at their respective upper ends so that it is possible to remove the type-bar base therefrom. The distance strut D² is so shaped at the end D⁵ wherewith it engages the rocking bar B that when the latter has been advanced toward the detent bar D, the member D² is engaged by a part of or a projection on the rocking bar B and is thus prevented from falling and releasing the detent bar D. A finger piece D⁴ is provided on the member D² by which the latter may be raised or lowered as required.

Assuming that there is a type-bar base in position and that it is required to replace it, the operation is as follows:—The distance strut D² at each side of the machine is raised engaging its corresponding pin W thereby locking the detent bars in position; the type-bar base is then held steady and the shift key lever depressed and locked whereby the rocking bars B are drawn forward and held in that position; a slight forward and upward movement then releases the type-bar base so that it can be removed. The new type-bar base is now placed in position so that the pins M engage the notches L on the detent bars D. The shift key mechanism is released and the rocking bars B tilt forward under the action of the spring N so that the notches K engage the pins M and hold the type-bar base in position. The distance struts D² are now released from engagement with the pin W so that the detent bars are released and the pairs of rocking bars and detent bars are locked apart. The type-bar base A is securely held between them and is free to be moved by the shift key mechanism in the ordinary operation of the machine.

What I claim as my invention and desire to secure by Letters Patent is:—

1. In a typewriter having a removable type-bar base the combination of, two retaining members movably mounted on the frame to engage the type-bar base with, and disengage it from, the frame, and means for locking one of said members relatively to the frame prior to releasing the base whereupon the second member may

be moved relatively to the first member to release the type-bar base, substantially as described.

2. In a typewriter having a removable type-bar base the combination of, two retaining members movably mounted on the frame to engage the type-bar base with, and disengage it from, the frame, means for locking one of said members relatively to the frame prior to disengaging the base and means for locking the second member after it has been moved relatively to the first member when locked to release the type-bar base, substantially as described.

3. In a typewriter having a removable type-bar base the combination of, two retaining members movably mounted on the frame to engage the type-bar base with, and disengage it from, the frame, means for locking one of said members relatively to the frame prior to releasing the base, and shift-key locking mechanism (G) cooperating with the second member for locking it after it has been moved relatively to the first member to release the type-bar base, substantially as set forth.

4. In a typewriter having a removable type-bar base the combination of, two retaining members movably mounted on the frame to engage the type-bar base with, and disengage it from, the frame, and a shift-key (F) with locking mechanism (G) operatively connected with one of said members to shift the base thereby for writing in different fonts, said locking mechanism being further employed to lock said retaining member in position when it is desired to displace the retaining members relatively to one another and release the type-bar base, substantially as described.

5. In a typewriter having a removable type-bar base the combination of, two retaining members movably mounted on the frame to engage the type-bar base with, and disengage it from, the frame, a movable hook member (D³) pivoted to one retaining member and engaging the frame to lock said retaining member in one position, and shift key locking mechanism (G) cooperating with the second member for locking it after it has been moved relatively to the first member to release the type-bar base, substantially as described.

6. In a typewriter having a removable type-bar base the combination of, two retaining members movably mounted on the frame to engage the type-bar base and arranged to be brought into engagement with the base by movement relatively to each other, movable means for holding the retaining members in engaging position, and means for locking one of said members relatively to the frame in order to release the base whereupon after displacing the movable means for holding the retaining mem-

bers in engaging position, the second member may be moved relatively to the first to release the type-bar base, substantially as described.

5 7. In a typewriter having a removable type-bar base the combination of, two retaining members movably mounted on the frame to engage the type-bar base with, and disengage it from, the frame, a hook member pivoted to one of the retaining members and in one of its positions hooking into a part carried by the frame of the typewriter to lock said member thereto said hook member being further so formed and situated as to constitute a removable distance strut when in its unhooked position to normally hold the retaining members apart, substantially as described.

10 8. In a typewriter having a removable type-bar base the combination of, a frame, shift-key mechanism for moving the base back and forth in the frame, two links pivoted to the frame at one end and shaped at the other end to grip the base between them one at the front and the other at the rear of said base, said links being free to swing with the base as it moves back and forth, and means for locking one of the links relatively to the frame prior to releasing the base whereupon the second link may be moved relatively to the first and the type-bar base disengaged from both, substantially as described.

15 9. In a typewriter having a removable type-bar base the combination of, a frame, shift-key mechanism for moving the base back and forth in the frame, two links pivoted to the frame at one end and shaped at the other end to grip the base between them

one at the front and the other at the rear of said base, said links being free to swing with the base as it moves back and forth, means for locking one of the links relatively to the frame prior to releasing the base, a yielding-control for the links to normally keep them in gripping position for the base, and means for locking the second link in the released position relatively to the first whereby the two links may be locked against the action of the yielding control and the base removed, substantially as described.

10. In a typewriter having a removable type-bar base the combination of, a frame, two links pivoted to the frame at one end and shaped at the other end to grip the base between them one at the front and the other at the rear of said base, said links being free to swing with the base as it moves back and forth in the frame, yielding means for keeping the two links in gripping position, a shift-key (F) and locking mechanism (G) for locking the same, operatively connected with one of the links so that the type-bar base is shifted by the shift-key through the medium of said link, said locking mechanism also serving to hold the said link in the released position for the base so that when the other link is in its released position the base can be removed, substantially as described.

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

HIDALGO MOYA.

Witnesses:

HARRY ELDRIDGE,

J. CAMERON RENNIE.