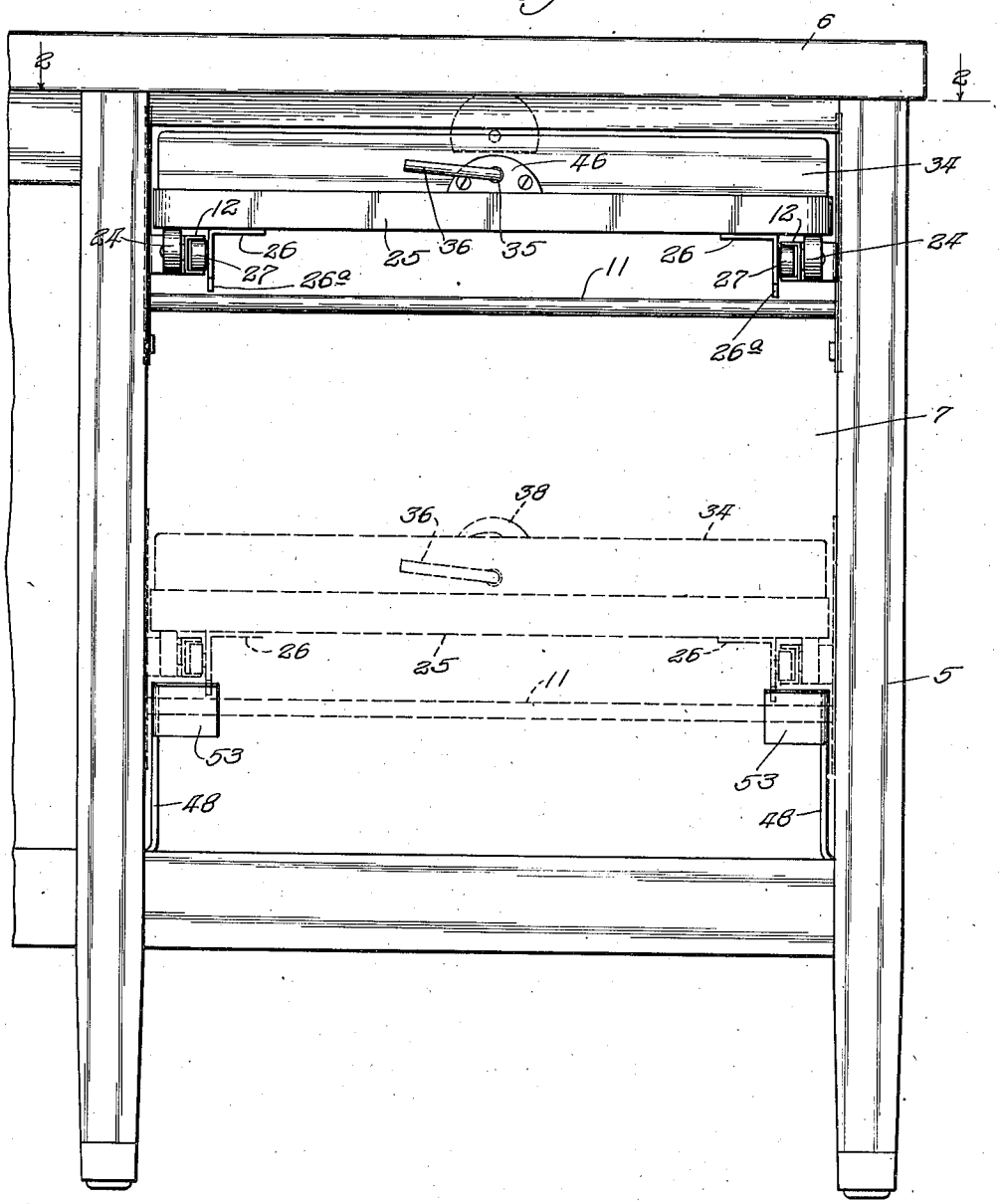
Sept. 30, 1947. M. FOX 2,428,211

DESK HAVING AN EXTENSIBLE SUPPORT FOR A TYPEWRITER

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Fig. 1.



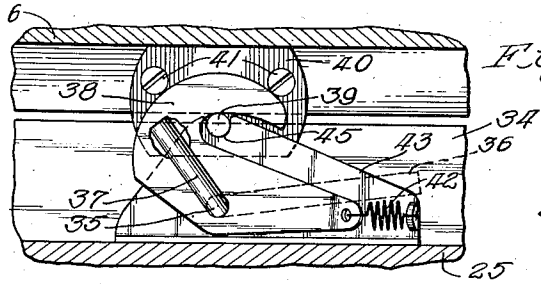


Fig. 4.

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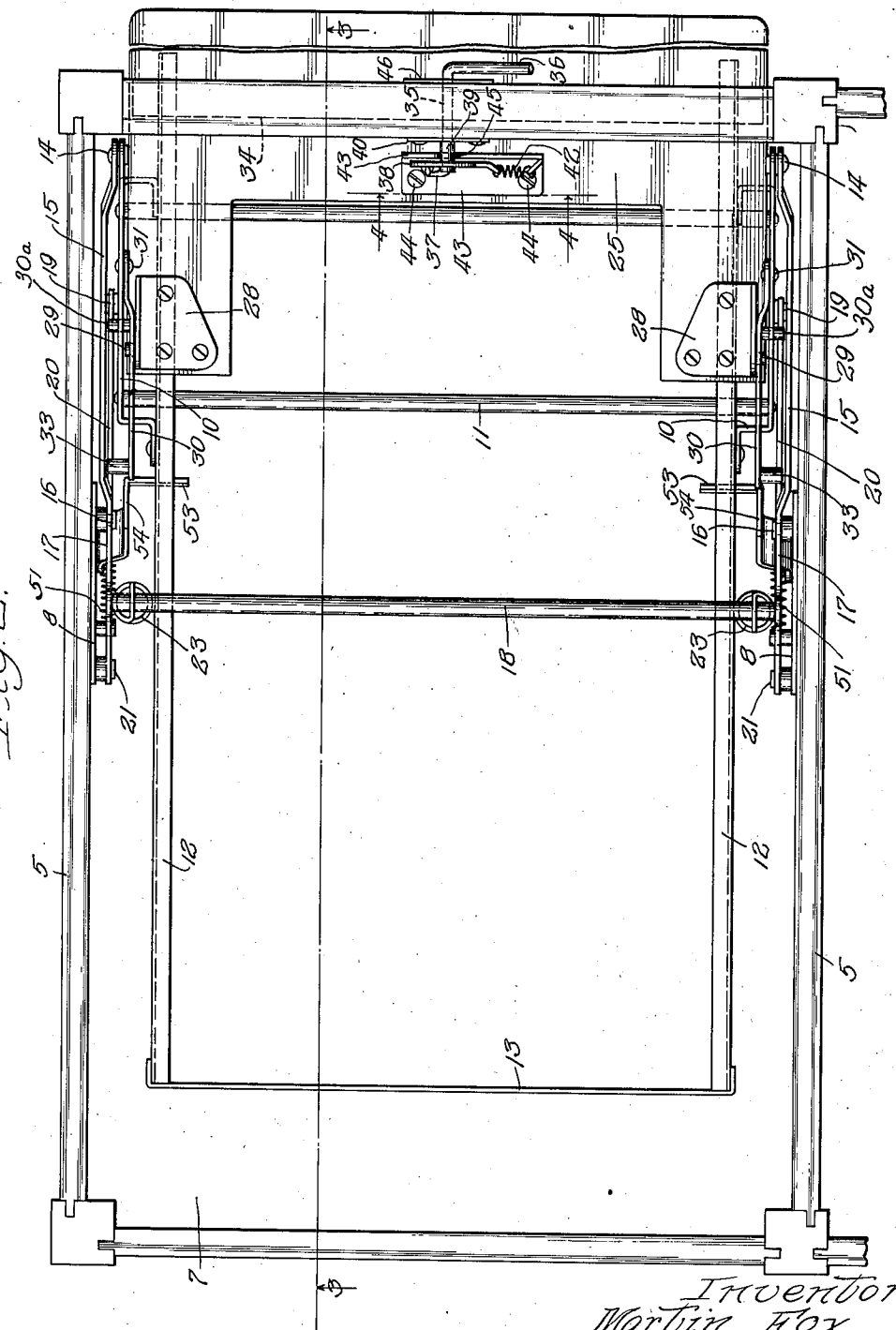


Fig. 2.

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DESK HAVING AN EXTENSIBLE SUPPORT FOR A TYPEWRITER

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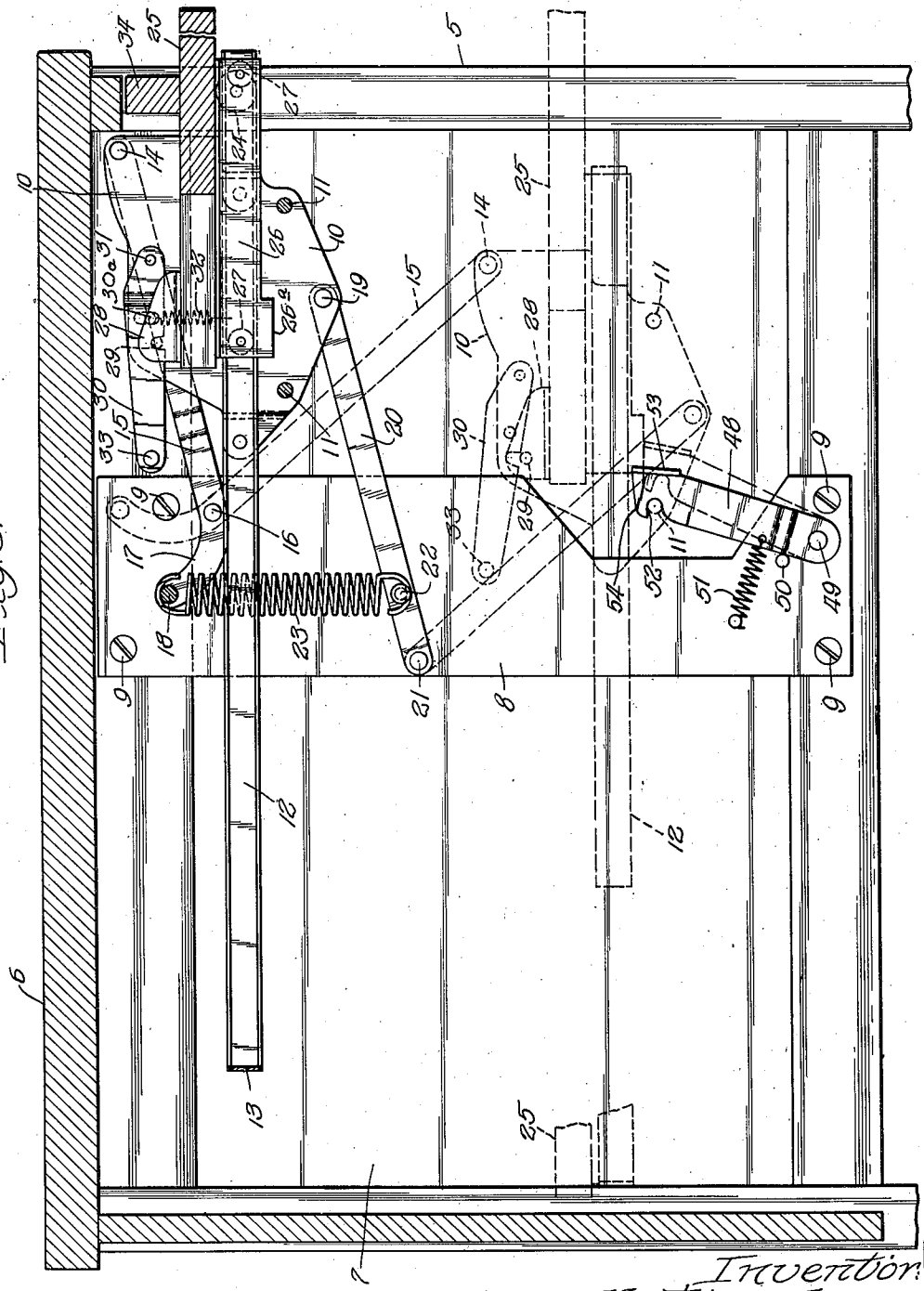


Fig. 3.

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UNITED STATES PATENT OFFICE

2,428,211

DESK HAVING AN EXTENSIBLE SUPPORT FOR A TYPEWRITER

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Application April 17, 1944, Serial No. 531,434

7 Claims. (Cl. 312—28)

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This invention relates to fixtures for supporting a typewriter in a desk compartment so that it may be moved rapidly from a concealed position to an extended operative position.

The primary object of the invention is to provide improved mechanism whereby a typewriter may be supported on a movable carriage in upright position, and be moved rapidly to and from writing position.

The invention is illustrated in a preferred embodiment in the accompanying drawings in which—

Figure 1 is a fragmentary elevational view of the front of a desk compartment with the compartment door removed and the typewriter platform extended to operating position, the dotted lines indicating the lower retracted position of the typewriter platform; Fig. 2, a plan view with the top of the desk removed, taken as indicated at line 2—2 of Fig. 1; Fig. 3, a vertical sectional view taken as indicated at line 3—3 of Fig. 2; and Fig. 4, a fragmentary sectional view of the manually operable locking device.

In the embodiment illustrated, a desk 5 having a top 6 affords a typewriter compartment 7, which has an open front and may be provided with a door (not shown).

A pair of standards or mounting plates 8 are secured to the inner walls of the desk by means of screws 9. A pair of side plates 10 are connected by cross rods 11, and to these plates are secured a pair of rearwardly extending channel-like rails 12, which are connected at the rear end by a cross bar 13.

As best shown in Fig. 3, the upper front portion of the side plate 10 is pivotally connected at 14 with an upper pitman 15, which is pivotally connected to the standard at 16, and has an upwardly turned end 17 which is connected to a companion parallel pitman cross rod 18. The pitman 15 is offset outwardly to provide clearance for other parts of the mechanism. The lower central portion of the side plate 10 makes a pivotal connection at 19 with a parallel lower pitman 20 which is pivoted to the standard 8, as indicated at 21. The lower pitmans 20 are provided with studs 22, and springs 23 are tensioned between the stud and the cross rod 18. Thus it will be understood that the plates 10 and the rails 12 may be moved by parallel movement from the

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upper extended position shown in Fig. 3, to the lower retracted position indicated by the dotted lines. As shown in Figs. 1 and 3, rollers 24 are journalled on the rails 12 to support the outer end of the typewriter platform 25, when it is rolled back into its lower retracted position.

The typewriter platform 25 may be made of wood, and has a pair of downwardly extending metal brackets 26 on which are journalled rollers 27, which travel in the channel-like rails 12. As shown in Figs. 2 and 3, the platform 25 has a pair of rearwardly extending arms on which are mounted a pair of upwardly extending brackets 28 carrying latching studs 29. Each of the side plates 10 is provided with a latching arm 30 which is pivotally mounted as indicated at 31, and has a notch adapted to engage the stud 29. Studs 30a on the latching arms 30 extend outwardly through elongated slots in the side plates 10 and are connected to the side plates by tension springs 32 to urge the latches downwardly into engaging position. Each of the latches 30 is provided with a second outwardly extending stud 33, which engages the lower pitman 20 and releases the platform when the rails are lowered into the position indicated by dotted lines in Fig. 3.

The typewriter platform is also provided with a rear wooden cross bar 34 through which extends a shaft 35 provided with a finger arm 36. The shaft is provided at its inner end with an arm 37, which is welded to a hook-like latch 38 which is adapted to engage a stud 39 provided on a plate 40 which is secured to the desk by means of screws 41. A tension spring 42 urges the latch into gripping position. As shown in Figs. 2 and 4, a bracket 43, which is L-shaped in cross section, is secured to the platform 25 by screws 44. This bracket presents a socket 45 to receive the stud 39, and limits the upward travel of the typewriter platform. The shaft 35 extends through a front escutcheon plate 46, and impales the bracket 43, so that when the arm 36 is thrown into latching position the rear of the typewriter platform is rigidly secured against vibration.

In order to hold the rails 12 in low retracted position, against the action of springs 23, a pair of pivoted latch members 48 are provided. These members are pivoted to the lower end of the standards 8, as indicated at 49, and are urged

rearwardly against stops **50** by means of springs **51**. Each of the latches has a notch **52**, opening rearwardly and adapted to snap over the rear cross rod **11**. Each latch has an inwardly directed finger **53**, and the tops of the members are beveled downwardly and rearwardly as indicated at **54**, to form a cam like surface. Each of the downwardly extending metal brackets **26** has a projection **26***a* to engage the finger **53** of the latch **48**.

The latches **48** are engaged and disengaged automatically by the typewriter platform mechanism in the following manner. When the operator desires to return the typewriter platform to its concealed position in the desk compartment, the arm **36** is raised and the platform pressed downwardly and rearwardly to the position indicated by the dotted lines in Fig. 3. In this movement, the rear cross rod **11** swings the latch **48** forwardly, and at the same time the latch **30** is disengaged by the stud **33** coming in contact with the pitman **20**. As the typewriter platform is rolled rearwardly on the track **12**, the latch **48** engages the rear cross rod **11** and holds the rails in their low retracted position. The typewriter platform may be rolled back to the rear of the compartment.

When it is desired to move the typewriter platform into writing position, it is merely necessary to draw the platform forwardly, which will cause the projection **26***a* to strike the finger **53** and release the latch **48**. As the platform is lifted upwardly, the latch **30** will lock the platform against movement on the rails **12**, and when it reaches the position shown in Fig. 3, the stud **39** may be gripped by operation of the finger piece **36**.

The foregoing detailed description is given for clearness of understanding only, and no unnecessary limitations should be understood therefrom, for some modifications will be obvious to those skilled in the art.

I claim:

1. In a desk having an open-front typewriter compartment: a pair of channel-like rails secured together by cross rods to form a frame carried by two pairs of parallel links, the links of each pair being arranged one above the other and said links being pivoted on the opposite side walls of the compartment so that the frame will swing down level from an upper horizontal extended position to a low retracted horizontal position in said compartment, a typewriter platform having rollers continuously engaging said rails for forward and backward movement thereon when the rails are in low retracted position, and means for securing said rails in a low retracted position and for releasing them by forward movement of said platform.

2. For a desk having an open-front typewriter compartment: a pair of upwardly extending standards adapted to be secured to the opposite walls of said compartment, a pair of rails secured together in spaced relation by cross rods and linked to said standards by parallel pairs of parallel pitmans, the pitmans in each pair being arranged one above the other so that the rails may be moved level from an upper horizontal extended position to low retracted position in said compartment, a typewriter platform antifrictionally mounted on said rails for limited forward and rearward travel, a latch between one of said pitmans and said platform for holding said platform in its foremost position on the rails when in upper extended position, and a releasable spring catch on one of said standards for engaging one of said cross rods and holding the rails in low retracted position.

3. For a desk having an open-front compartment: a pair of upwardly extending standards adapted to be secured to the opposite walls of said compartment, a pair of vertically disposed side plates connected together in spaced relation by cross rods and secured to a pair of rearwardly extending rails, a pair of upper pitmans, parallel to each other, linking the upper front portion of said plates to said standards, a parallel pair of lower pitmans, which are also parallel to each other, linking the lower central portions of the plates to the standards, said pitmans providing means whereby the rails may be swung level from an upper horizontal position to a lower horizontal position in said compartment, a platform slidably mounted on said rails, a latch on one of said side plates to hold said platform releasably in extended position on the rails, means for automatically releasing said latch when the rails are swung to the lower position, and a manually operable hook catch pivotally mounted on said platform so as to engage a stud on the desk when the platform is in upper extended position, said catch having an inner cam-like surface to grip the stud and draw said platform and desk together rigidly.

4. Apparatus as specified in claim 3, including latching means on the lower ends of the standards to grip a cross rod of the side plates when the rails are in lower position, and means on the platform for disengaging said latching means when said platform is drawn to its foremost position on the rails.

5. In a desk having an open front compartment: a pair of rails secured together at their rear ends by a cross bar and carried by two pairs of parallel links, the links of each pair being arranged one above the other and pivoted to one of the opposite side walls of the compartment and pivotally connected to the rails so that said rails may be swung as a unit from an upper horizontal extended position down to a low retracted position in said compartment, spring means for urging the rails upwardly, latching means for engaging and releasably holding said rail unit in a low retracted position, a platform having rollers engaging said rails to facilitate movement thereon when the rails are in a low retracted position, and means for automatically releasing said latching means when the platform is moved to its outermost position on the rails.

6. For a desk having an open front compartment: a pair of upwardly extending standards adapted to be secured to the opposite inside walls of the compartment, a pair of rails secured together by cross rods and pivotally linked to said standards by two pairs of parallel pitmans, the pitmans of each pair being arranged one above the other and connected to said rails so that the rails may be swung from an upper horizontal extended position to a low horizontal retracted position in the compartment, a platform anti-frictionally mounted on said rails for limited forward and rearward travel, a latch pivotally connected to the rails to releasably engage said platform in its foremost position on said rails when in an upper extended position, spring latching means on one of said standards for engaging one of said cross rods and holding the rails in low retracted position, and means on the platform for automatically releasing said latching means when said platform is drawn to its foremost position on said rails.

7. In a desk having an open front compartment: a pair of rails secured together at their rear ends by a cross bar and pivotally linked to the opposite side walls of the compartment by a pair of upper pitmans and a pair of lower parallel pitmans so that the rails may be swung from an upper horizontal extended position to a low retracted position in said compartment, said upper pitmans having arms extending rearwardly from their pivotal connection with the walls of the compartment, and tension springs connected to the free ends of said arms and to the lower pitmans at points between their pivots so as to urge the rails to an upper position, a platform mounted on said rails for limited forward and rearward travel, and releasable spring latching means comprising elements pivoted to opposite walls of the compartment for holding the rails in low retracted position.

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