

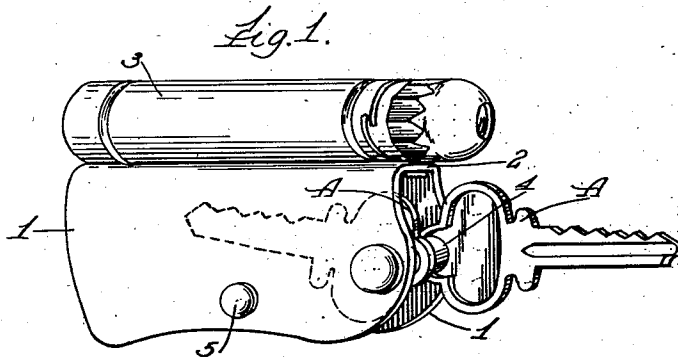
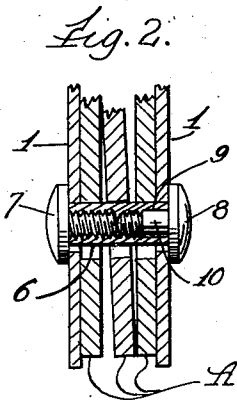
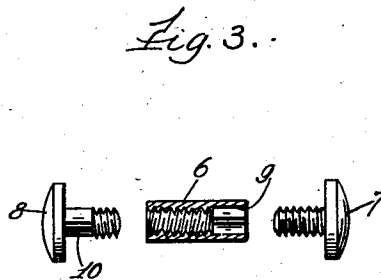
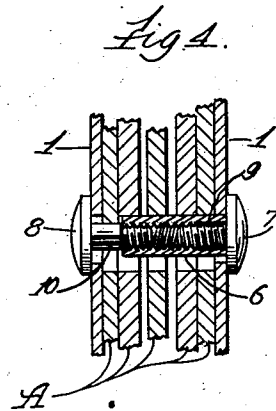
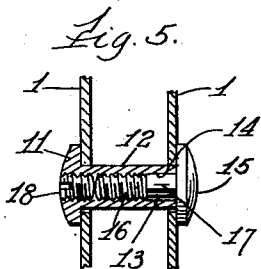
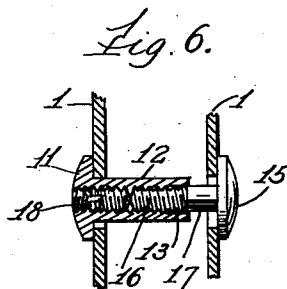
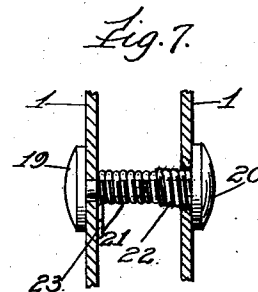
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2,210,048

KEY CASE PIVOT

Original Filed Aug. 31, 1936



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2,210,048

KEY CASE PIVOT

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Original application August 31, 1936, Serial No. 98,726. Divided and this application December 15, 1938, Serial No. 245,929

5 Claims. (Cl. 85—1)

This invention relates to a pivot of adjustable length, and for purposes of illustration, it is herein shown as employed in a key case for securing the keys to the case. The invention consists of certain features and elements of construction in combination, as herein shown and described and as indicated by the claims.

This application is a division of my pending application Serial No. 98,726, filed August 31, 1936.

In the drawing:

Figure 1 is a perspective view of a key case embodying this invention.

Figure 2 is a detail section taken axially through the key-holding pivot and showing the latter at one limit of adjustment.

Figure 3 is a disassembled view of the pivot parts showing the sleeve element in section.

Figure 4 is a sectional view similar to Figure 2, but showing the pivot at a different position of adjustment.

Figure 5 is a detail section similar to Figure 2, but showing a modified form of pivot.

Figure 6 is a sectional view of the structure shown in Figure 5, adjusted to a different position.

Figure 7 is a sectional view of the key case including another modified form of key-holding pivot associated therewith.

In order to illustrate the application and utility of the adjustable pivot, which is the subject of this invention, I have shown it embodied in a key case which, in this instance, happens to be associated with a small pocket flashlight. The key case comprises two side walls 1, 1 preferably of flexible sheet material, such as leather, connected by a shorter transverse portion 2 which is shown secured against the outer surface of the flashlight shell 3. Figure 1 shows the keys A held between the two side walls 1, 1 of the case on a pivot member 4 and it will be understood that when the keys are swung into position between the walls, as indicated in dotted outline in Figure 1, these walls will be connected by a snap fastener button 5 for retaining the keys until one of them is wanted for use. One form of pivot is illustrated in Figures 2, 3 and 4, as consisting of a threaded sleeve 6, a screw 7, and a screw 8. The sleeve is counterbored for a portion of its length from one end, as seen at 9, and the screw 8 is threaded only for a portion of its length, leaving an unthreaded shank 10 of approximately the same length as the counterbore 9 in the sleeve. The other screw, 7, is threaded through its entire length up to the head, and the total length of the sleeve is equal to or greater than the sum of the lengths of the

screws, exclusive of their heads. Thus the parts may be assembled, as shown in Figure 2, with the screw 7 inserted in the threaded end of the sleeve as far as it will go, and with the screw 8 inserted into the counterbored end of the sleeve. The heads of the screws will bear tightly against the ends of the sleeve 6 for securely holding the parts, and the distance between the heads of the screws will accommodate a limited number of keys, three keys being indicated in section at A in Figure 2.

If a longer pivot is desired, the screws 7 and 8 may be removed from the sleeve and re-inserted respectively into the opposite ends of the sleeve, as seen in Figure 4. Then the unthreaded shank 10 of the screw 8 will extend from the threaded end of the sleeve while the screw 7 will be inserted for its full length, as before, engaging with the threads beyond the counterbore 9. Thus the length of the smooth shank 10 is added to the length of the sleeve for accommodating more keys. A between the heads of the screws, five keys being shown in Figure 4.

Another adjustable form of pivot is seen in Figures 5 and 6, in which one screw 11 is provided with a hollow shank 12 bored from end to end and threaded inwardly from the head at 13. The innermost end of the hollow shank is counterbored at 14, and the other screw 15 has a threaded portion 16 and an unthreaded shank portion 17, the latter being of approximately the same length as the counterbore 14. Thus for a minimum capacity the screw 15 will be inserted into the hollow shank 12 up to its head, as seen in Figure 5, but to increase the distance between the heads the screw 15 may be backed out to the extent of its unthreaded shank 17 which will thus serve as a portion of the pivot engaging the keys A, as seen in Figure 6. In either case a small headless set screw 18 may be inserted from the head end of the screw 11 so as to impinge against the end of the screw 15 within the threaded portion 13 of the screw 11—acting in the same manner as a "jamb nut" to lock the screws in any adjusted relation.

A third modification of the pivot is shown in Figure 7 in which the screws 19 and 20 may be understood as being similar respectively to the screws 7 and 8 already described, but in which the threaded sleeve is replaced by a tightly coiled wire cylinder 21. Through most of its length the cylinder is coiled to fit the threads of the screws 19 and 20, but at one end the coils are made larger, as seen at 22, so as to form an enlarged portion, the equivalent of a counterbore, loosely engageable with the threads or with the unthreaded shank of the screw 20. Thus the screws

19 and 20 may be assembled with the coil, as shown in Figure 7, to afford a minimum space for keys between their heads, or they may be transposed so that the unthreaded shank of the screw 20 will project from the closely coiled portion of the wire 21, to elongate the pivot and provide greater capacity for keys. Since the wire coil may have a tendency to clutch the threads of the screws when they are unscrewed therefrom, I provide a tail-piece 23 at the end of the coil, extending therefrom to lie flatly against one of the walls 1 of the key case. By means of this tail-piece the coil may be held against rotation to facilitate removal of the screws when desired.

I claim:

1. A pivot comprising two headed screws, one threaded up to its head, and the other having an unthreaded portion adjacent its head, together with a sleeve formed by a coiled wire, a portion of the length of said sleeve being coiled to fit the threads of either screw, and one end portion being coiled to form a larger cylinder adapted to fit over the unthreaded portion of the said screw when the latter is inserted in that end of the coil, said portion of the screw being too large to enter the other end of the coil when the screws are transposed.

2. A pivot comprising a threaded sleeve counterbored from one end, a headed screw threaded to its head and engageable with the threads of said sleeve from either end, and a second headed screw having an unthreaded portion adjacent its head adapted to enter the counterbore of the sleeve when said screw is engaged in that end of the sleeve but too large to enter the other end of the sleeve when the screws are transposed to lengthen the pivot.

3. A pivot comprising a sleeve having a bore enlarged adjacent one end, a headed member having a shank inter-engageable with the sleeve from either end and a second headed member having a shank also inter-engageable with the sleeve from either end and formed with a portion adjacent its head dimensioned to enter the enlarged bore of the sleeve when said member is engaged in that end of the sleeve but too large to enter the other end of the sleeve when said headed members are transposed.

4. A pivot comprising a pair of headed threaded members and a connector threaded for engagement therewith but having an unthreaded portion adjacent one end, one of the headed members having threads extending to its head and the other headed member having an unthreaded portion adjacent its head adapted to telescope with the unthreaded portion of the connector but serving to limit the extent of the interlapping engagement of said headed member with the other end of the connector when the headed members are transposed thereon.

5. A pivot comprising a pair of headed, threaded members and a connector threaded for engagement therewith but having an unthreaded portion adjacent one end, one of the headed members having only a part of its length threaded and having an unthreaded portion adjacent its head dimensioned to telescope with the unthreaded part of the connector but incapable of telescoping with the threaded portion thereof, the other threaded member having a longer portion threaded and dimensioned to telescope with either the threaded or the unthreaded portion of the connector.

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