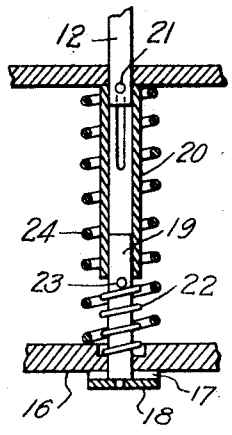
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LOST MOTION MECHANICAL LINKAGE

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LOST MOTION MECHANICAL LINKAGE

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This invention relates to a lost motion mechanical linkage, mainly designed to actuate an electrical switch, the general object of the invention being to provide a simple means for imparting movement to a spring actuated element from a second element when said second element has been moved to a certain extent, without moving the spring actuated element during the initial movement of the second element.

The invention also consists in certain other features of construction and in the combination and arrangement of the several parts being hereinafter fully described, and illustrated in the accompanying drawing and specifically pointed out in the appended claim.

In describing the invention in detail, reference will be had to the accompanying drawing which is a sectional view through the invention with parts in elevation, and showing the invention used for operating a switch.

In this drawing, the numeral 7 designates an upper member and the numeral 16 designates a lower member, this lower member having attached to its lower face, stationary contacts of a switch, one of which is shown at 17. The movable member 18 of the switch is fastened to the lower end of a rod 19 which passes through the member 16 and carries a spring 22, one end of which bears against the member 16, and the other end against the pin 23 which passes through the rod 19. This spring holds the rod with the member 18 engaging the contacts 17.

A sleeve 20 has its lower end fitting over the upper end of the rod 19, with its lower end engaging the projecting end of the pin 23. A rod 12 passing through a hole in the upper member 7, its lower end fitting in the upper end of the sleeve 20, and said rod 12 has a pin and slot connection, shown generally at 21, with the sleeve 20. A spring 24 encircles the sleeve, the rod 19, and the spring 22, and has its lower end bearing against the member 16 and its upper end engages the pin of the pin and slot connection 21, so that this spring 24 acts to hold the sleeve and the rod 12 in raised position, so that the spring 22 can hold the rod 19 in raised position with the contact 18 engaging the contacts 17 as shown in Fig. 1.

When the rod 12 is depressed, the lower end will move downwardly through the sleeve until the pin of the pin and slot connection engages the lower end of the slot when the sleeve 20 will be moved downwardly, and thus the lower end of the sleeve will exert pressure on the pin 23, so that the rod 17 will be moved downwardly and thus separate the contact 18 from the contacts 17. When pressure upon the rod 12 is removed, the spring 24 will raise the rod and the sleeve, and then the spring 22 will raise the rod 19 so that the contact 18 will again engage the contacts 17.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be made in the construction and in the combination and arrangement of the several parts provided that such changes fall within the scope of the appended claim.

Having thus described our invention, what we claim as new is:—

A device of the class described comprising upper and lower members, a rod passing through the lower member, a pin passing through an intermediate part of the rod, a spring encircling the rod and having one end bearing against the pin and its other end against the lower member, a sleeve having its lower end receiving the upper end of the rod with the spring holding the pin against the lower end of the sleeve, a second rod passing through the upper member with its lower end fitting in the upper end of the sleeve, a pin and slot connection between the second rod and the upper end of the sleeve and a second spring encircling the sleeve and the first rod having its lower end resting against the

lower member and its upper end engaging the pin of the pin and slot connection whereby after the second rod has been moved to a certain extent the pin therein will engage the lower end of the slot in the sleeve to cause downward movement of the sleeve and this movement of the sleeve will move the first rod downwardly by the engagement of the lower end of the sleeve with the pin in the first rod.

In testimony whereof we affix our signatures.

JOSEPH E. KELLY.
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