J. S. DAVIS.

PIVOT CONNECTION.

APPLICATION FILED MAR. 17, 1913.

1,081,940. Patented Dec. 16, 1913.

Fig. 1

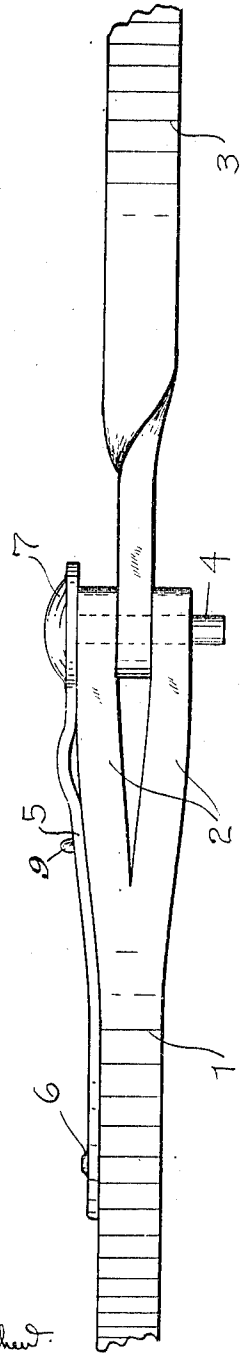
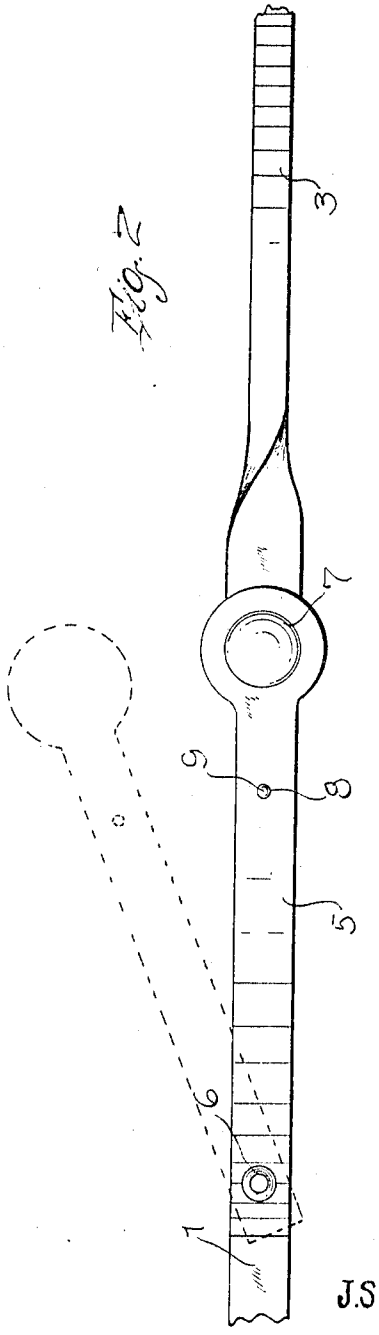


Fig. 2



Witnesses

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PIVOT CONNECTION.

1,081,940. Specification of Letters Patent. Patented Dec. 16, 1913.

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To all whom it may concern:

Be it known that I, JAMES S. DAVIS, a citizen of the United States, residing at Meadowview, in the county of Washington and State of Virginia, have invented certain new and useful Improvements in Pivot Connections, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in pivot connections, and more particularly to pivot connections for pivotally connecting switches to their connecting arms.

An object of this invention is the provision of a connecting arm and a switch bar, which are pivotally connected by a king bolt, the switch bar having a spring plate pivotally connected thereto, the free end of the spring plate being adapted to bear upon the head of the king bolt to prevent accidental displacement of the same.

A further object of this invention is the provision of a pivotally mounted spring plate which is adapted to bear upon the head of the king bolt, the plate having an opening therein for the reception of a pin projecting from the switch bar, whereby accidental lateral movement of the spring plate is prevented.

Still another object of this invention is the provision of a spring plate which is pivotally secured to a switch bar or similar device, the plate being formed with an enlarged concave head which is adapted to engage the head of the king bolt, the spring plate being spaced from the switch bar for a portion of its length, whereby a crowbar or other similar tool may be inserted between the plate and the bar to raise the plate out of engagement with the head of the bolt.

With these and other objects in view, my invention consists in certain novel constructions, combinations and arrangements of parts to be hereinafter more fully described, claimed, and illustrated in the accompanying drawing, in which—

Figure 1 is a side elevation of my device; and Fig. 2 is a top plan view of my device.

Referring more particularly to the drawing, the numeral 1 designates the switch bar which is connected to the switch stand, (not shown) and which is bifurcated at one end to form the spaced arms 2 between which is disposed one end of the tie bar 3, which connects the rails together. The connecting bar 3 and the switch bar 1 are pivotally connected by the king bolt 4, and to prevent accidental removal of the king bolt 4, I provide the spring plate 5 which is pivotally connected at one end to the switch bar by the pin 6. The opposite end of the spring plate 5 is formed with an enlarged concaved or recessed head 7 which is adapted to bear against the head of the king bolt. An opening 8 is formed in the plate 5 intermediate of its ends, the opening being adapted to engage an outstanding pin 9 which is secured in the switch bar, whereby lateral movement of the free end of the plate is prevented. When it is desired to remove the king bolt, it will be seen that it is necessary to raise the plate 5 so that the opening 8 is disengaged from the pin 9, whereby the head 7 of the plate may be moved out of engagement with the head of the bolt, and to facilitate this operation, the plate 5 is curved upwardly between its enlarged head and the opening 9 to space the same from the switch bar so that a crowbar or other similar tool may be inserted between the switch bar and the plate to readily raise the plate out of engagement with the pin 9.

It will be understood that the device may be used without the pin 9, as the concave head 7 of the plate engaging the rounded head of the bolt will tend to prevent any lateral movement of the free end of the plate. In use with switches in which great jar is imposed upon the switch bars, it is advisable to use the pin in connection with the opening in the spring plate to provide additional means for preventing the king bolt from moving out of engagement with the head of the bolt.

It will be understood that I do not limit this invention to use in connection with switch bars, but it may be used with any pivot connection in which a bolt forms the pivot point of the device.

Having thus described my invention, what I claim is:—

1. A device of the character described comprising a pair of bars, a king bolt pivotally connecting said bars, a spring plate pivotally connected to one of said bars, the free end of said plate being formed with an enlarged concave head which is adapted to bear against the head of said king bolt, the plate being spaced from said bar for a

portion of its length, as and for the purpose described.

2. A device of the character described comprising a pair of bars, a king bolt pivotally connecting said bars, a spring plate pivotally connected at one end to one of said bars, the free end of said plate being adapted to bear against the head of said king bolt, an outstanding pin formed on the last mentioned bar, and said plate being formed with an opening for engagement with said pin, as and for the purpose described.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

JAMES S. DAVIS.

Witnesses:
A. W. Aston,
C. W. Alderson.