

Sept. 20, 1932.

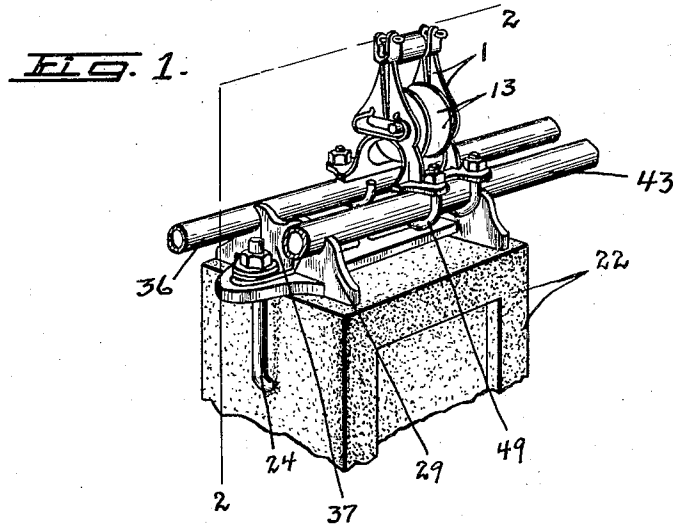
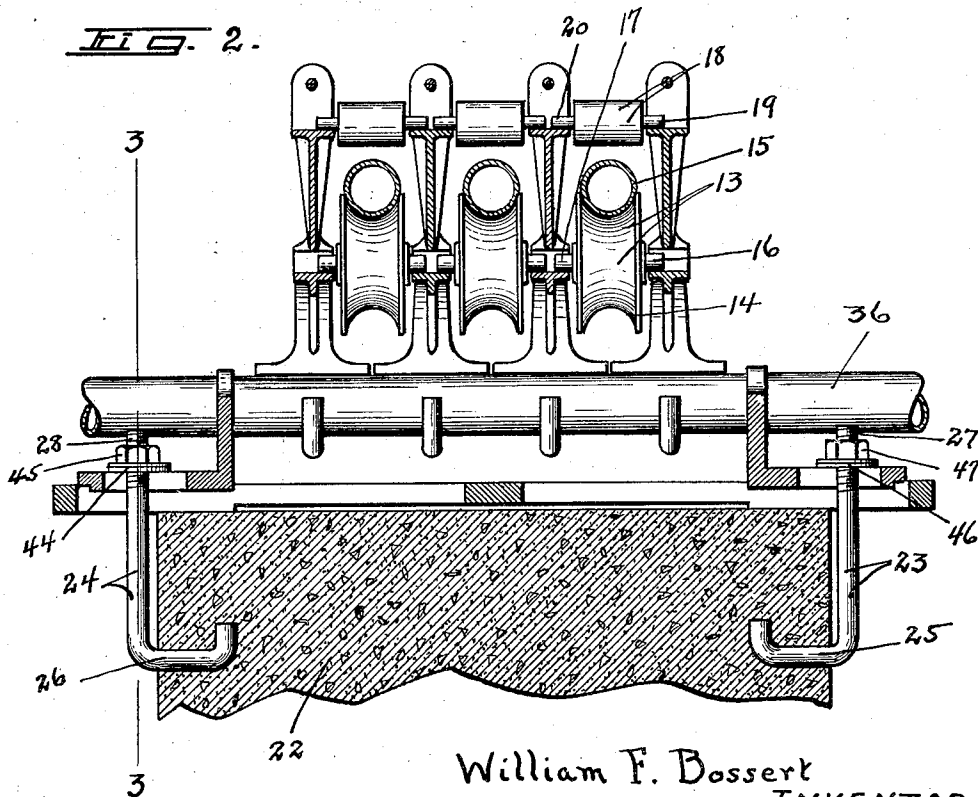
W. F. BOSSERT

1,878,100

PIPE CARRIER SUPPORT

Filed Jan. 3, 1928

2 Sheets-Sheet 1



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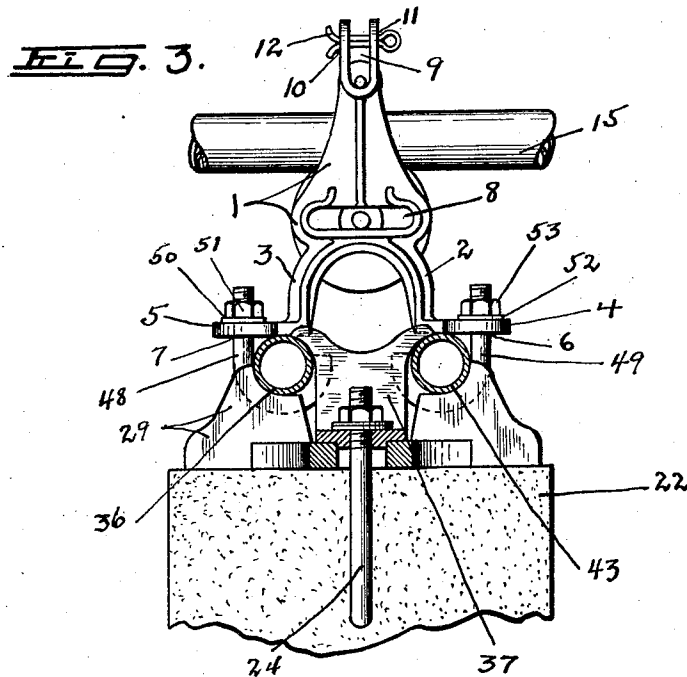
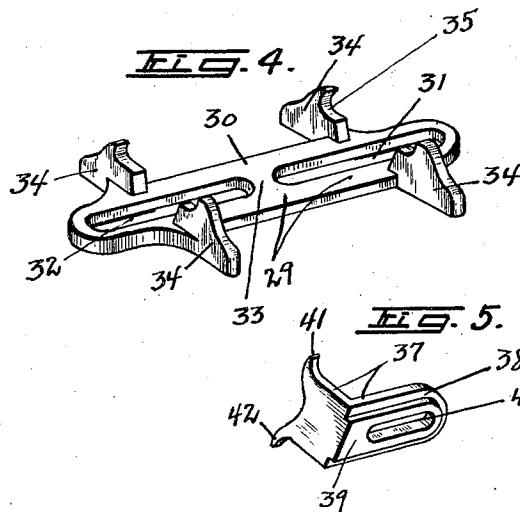
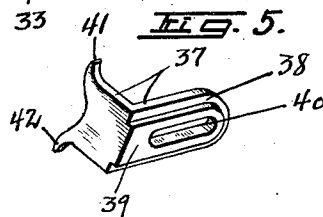
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UNITED STATES PATENT OFFICE

WILLIAM F. BOSSERT, OF UTICA, NEW YORK, ASSIGNOR TO SIGNAL ACCESSORIES CORPORATION, OF UTICA, NEW YORK, A CORPORATION OF NEW YORK

PIPE CARRIER SUPPORT

Application filed January 3, 1928. Serial No. 244,206.

This invention relates to a new and improved support for pipe carriers.

In manipulating railroad switches in railroad yards and in stations, the usual method is to provide a series of signal pipes running from a central control station to the different switches to be controlled, and so arranged that the movement of a signal pipe to and from a switch will throw the switch in the direction desired. It frequently happens that a very considerable number of switches are controlled from a single control station with the result that certain of the signal pipes must be of considerable length in order to reach to the switches which they control. This necessitates some means of supporting the signal pipes at spaced distances along their lengths so that they can be moved backward and forward with the minimum amount of effort, the different switches of necessity being located at different points and different distances from the control station. The lengths of the signal pipes will vary and the number of pipe carriers required for different lengths of signal pipes will also vary.

The installation of a system of this sort necessitates some means of supporting these pipe carriers and holding them fixed in position.

The main object of my invention is to provide a pipe carrier support which will be simple in construction, easy of application and yet one which holds the pipe carriers rigidly in position.

Another object of my invention is to provide a pipe carrier support which may be easily and conveniently adjusted to move transversely of a series of signal pipes so that the pipe carriers supporting a particular signal pipe may be placed and secured in alinement for the purpose of allowing that signal pipe to be manipulated with ease.

Another object of my invention is to provide a pipe carrier support in which and as part of the support may be utilized the scrap ends of signal pipe which necessarily result because of the fact that these signal pipes must be cut to the exact length to connect to the switches to which they run.

Other objects and advantages relate to the size, shape, and arrangement of parts all as will more fully appear from the following description taken in connection with the accompanying drawings in which:—

Figure 1 is a perspective view of my support with a single pipe carrier in position thereon.

Figure 2 is a section through line 2—2 of Figure 1.

Figure 3 is a section through line 3—3 of Figure 2.

Figure 4 is a perspective view of the base plate of my device.

Figure 5 is a perspective view of one of the pipe clips used in conjunction with the base plate.

Pipe carriers, as such, are well known to the art and for the purpose of describing my device I have illustrated a pipe carrier which is in general use, in position on my pipe carrier support. The particular pipe carrier illustrated is one which is so designed that the supporting rollers may be increased or diminished in number as occasion requires by using more or less of the roller supports, such roller supports being so constructed that if desired one support may carry two rollers. For the purpose of explaining my device I will describe a pipe carrier which is provided with a single roller.

The pipe carrier consists of a supporting member —1— having legs —2— and —3— which carry outturned feet —4— and —5— provided with bolt holes —6— and —7—. An elongated slot —8— is provided in support —1— above the top ends of legs —2— and —3—. The upper end of support —1— carries a U-shaped slot —9— provided at its upper end with registering holes —10— and —11— for the reception of a cotter key —12—. A roller —13— having a concave outer rim —14— of a size and shape to receive a signal pipe —15— carries opposed trunnions —16— and —17—.

In assembling a pipe carrier two similar supporting members —1— are placed on the pipe carrier support in spaced relation and the trunnions —16— and —17— of the roller —13— are positioned in slots 8—8. A guard

roller —18— having opposed trunnions —19— and —20— is positioned between supports —1—1 with the trunnions —19— and —20— in the U-slots 9—9, and a cotter key 5 —12— is then placed through holes —10— and —11— for the purpose of preventing roller —18— from leaving slots 9—9.

The slots —8—8 which function as bearings for the trunnions —16— and —17— are 10 elongated, as shown, so that when the signal pipe —15— is moved toward and from the switch (not shown) to which it is attached, the initial movement of the signal pipe —15— can be accomplished with a minimum 15 amount of effort because the roller —13— may move the length of the slot 8—8 before it begins to revolve on its trunnions —16— and —17—. The roller —18— is provided to prevent upward movement of signal pipe 20 —15— without retarding its movement.

As perhaps may best be seen from Figure 2 it is possible to assemble supports 1—1 and the balance of the pipe carrier so that a plurality of rollers 13—13 may be positioned 25 side by side in spaced relation. This being possible because the slots 8—8 and the supports 1—1 are of a width to permit the insertion of the trunnions of two rollers 13—13, one trunnion entering slot —8— from one 30 side and the other entering slot —8— from the other side.

My device, which is particularly designed to support a series of pipe carriers similar to the ones just above described, consists of 35 a foundation —22— preferably made of cement and which carries at opposite ends opposed anchor bolts —23— and —24— secured therein by hook ends —25— and —26— imbedded in support —22— and carrying on 40 their upper ends threaded portions —27— and —28—. My base plate —29— consists of an elongated bottom plate —30— of a length greater than the distance between anchor bolts —23— and —24—. Bottom plate 45 —30— carries at opposed ends slots —31— and —32— of a size to receive pipe clips —37—37 hereinafter to be described, such slots —31— and —32— extending together approximately the full length of bottom plate 50 —30— and being separated by a strengthening web —33—. A plurality of similar bracing members —34—, in this case shown as four, are formed integral with bottom plate —30—. Two opposed bracing members 34—34 are 55 positioned adjacent one end of bottom plate —30— with two other opposed bracing members 34—34 positioned in spaced relation to the first-mentioned bracing members 34—34 at the opposite ends of bottom plate —30—. Bracing members 34—34 extend upwardly 60 above bottom plate —30— and carry on their inner faces arcuate depressions —35— of a size to register with a portion of the circumference of a pipe —36—.

I provide a pipe clip —37— L-shaped in

form having a bottom portion —38— wider than slots —31— and —32— with a depending elongated boss —39— of a size to fit in slots —31— and —32—. Bottom portion 70 —38— has an elongated slot —40— of a size and shape to permit the passage therethrough of an anchor bolt —23— or —24— and of a length to permit a longitudinal movement with relation to such anchor bolt. The upright portion of pipe clip —37— carries outwardly flaring ears —41— and —42— which 75 extend outwardly over portions of opposed bracing members 34—34 and which are of a shape to register with a portion of the circumference of a pipe —36—.

The functioning of my device is as follows; a pipe clip —37— is placed in slot —31— with its upright portion registered with bracing members 34—34 and with its bottom portion —38— positioned at the end 80 of base plate —29—, and a second pipe clip —37— is positioned at the other end of base plate —29— with its bottom portion —38— at the end of base plate —29— and with its upright portion registering with the bracing 85 plates 34—34 at the other end of the base plate —29—. Two similar pieces of pipe —36— and —43— of the desired length are then placed in position as may perhaps best be seen in Figure 1, one along one edge of 90 base plate —29— and the other parallel to the first along the other side of base plate —29—, each of them between clips —37— and bracing members —34—. The device 95 is then placed in position so that anchor bolt —24— extends upwardly through a slot —40— in one pipe clip —37— and anchor bolt —23— extends upwardly through slot —40— of the opposed pipe clip —37—. A washer —44— of a size to extend across slot 100 —40— is placed on anchor bolt —24— and a nut —45— is threaded on anchor bolt —24— to hold the pipe clip —37— in position. Similarly a washer —46— and a nut —47— are placed in position on anchor bolt —23—. 105

The desired number of pipe carriers —1— are then placed on top of pipes —36— and —43— with leg —3— resting on pipe —36— and leg —2— resting on pipe —43— with 110 the outturned feet —4— and —5— extending outwardly from the top of pipes —43— and —36— a sufficient distance so that hook bolts —48— and —49— may be placed in position with pipe —36— in the hook of 115 hook bolt —48— with the shank of hook bolt —48— extending upwardly through hole —7— in outturned foot —5—, and with pipe —43— in the hook of hook bolt —49— with the shank of hook bolt —49— extending upwardly through hole 120 —6— in outturned foot —4—. A washer —50— and a nut —51— are then placed in position on hook bolt —48— to lock leg —3— to pipe —36—, and similarly washer —52— and bolt —53— are placed in position 125 130

on hook bolt —49— to lock pipe —43— to leg —2—. The description thus given of the operation of securing one pipe carrier to my pipe carrier support would be the same in the case of any other pipe carriers which it was desired to secure to the pipe carrier support.

a plurality of pipe sections, and means for securing the pipe sections between the base plate and the pipe clip in spaced parallel relation with the outwardly extending portion of the pipe clip engaged in the slot in the base plate, such means including a means for securing the device on the main support, and means for securing a pipe carrier to the pipe sections.

In witness whereof I have hereunto set my hand this twenty eight day of December 1927.

WILLIAM F. BOSSERT.

It will be understood that when the pipe carrier supports 1—1 are secured to pipes —36— and —43—, nuts —45— and —47— may be loosened to permit lateral movement of pipes —36— and —43— in relation to base plate —29— and also to allow lateral movement of base plate —29— with reference to support —22—. This lateral adjustment provides an easy and convenient way to align a pipe carrier with its corresponding pipe carrier which may be positioned on the next adjacent support.

It will be obvious that, by the use of varying lengths of pipes —36— and —43—, provision may be made for supporting a varying quantity of pipe carriers 1—1.

It will also be obvious that my pipe carrier support may be made of steel or iron or any other appropriate material and that my anchor bolts —23— and —24— may be locked in support —22— in ways other than above described, and it will also be obvious that the length of my pipe carrier support may be varied at will without departing from the spirit of my invention, for although I have shown and described a specific structure and form of part as an exemplification of an embodiment of my invention, I do not desire to restrict myself to the exact shape, form or relation of parts as various changes may be made within the scope of the appended claims.

What I claim is:

1. In a device of the class described in combination, a main support, a base plate having a slot, opposed pipe supports on the base plate, an L-shaped pipe clip, one arm of the pipe clip having a slot and an outwardly extending portion adapted to engage the slot in the base plate, the other arm of the pipe clip having opposed outwardly flaring ears, each adapted to engage a pipe section, a plurality of pipe sections, and means for securing the pipe sections between the base plate and the pipe clip in spaced parallel relation with the outwardly extending portion of the pipe clip engaged in the slot in the base plate, such means including a means for securing the device on the main support.

2. In a device of the class described in combination, a main support, a base plate having a slot, opposed pipe supports on the base plate, an L-shaped pipe clip, one arm of the pipe clip having a slot and an outwardly extending portion adapted to engage the slot in the base plate, the other arm of the pipe clip having opposed outwardly flaring ears, each adapted to engage a pipe section,

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