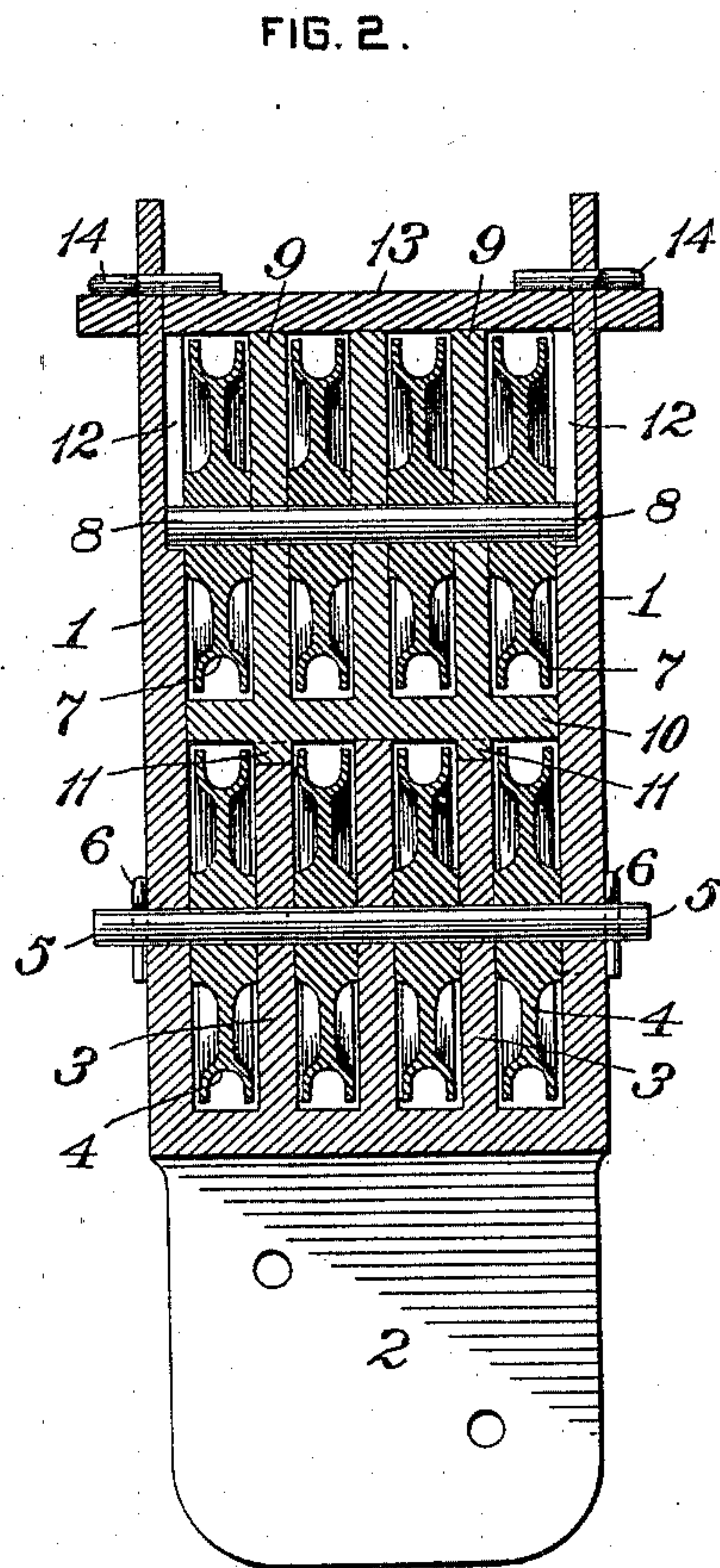
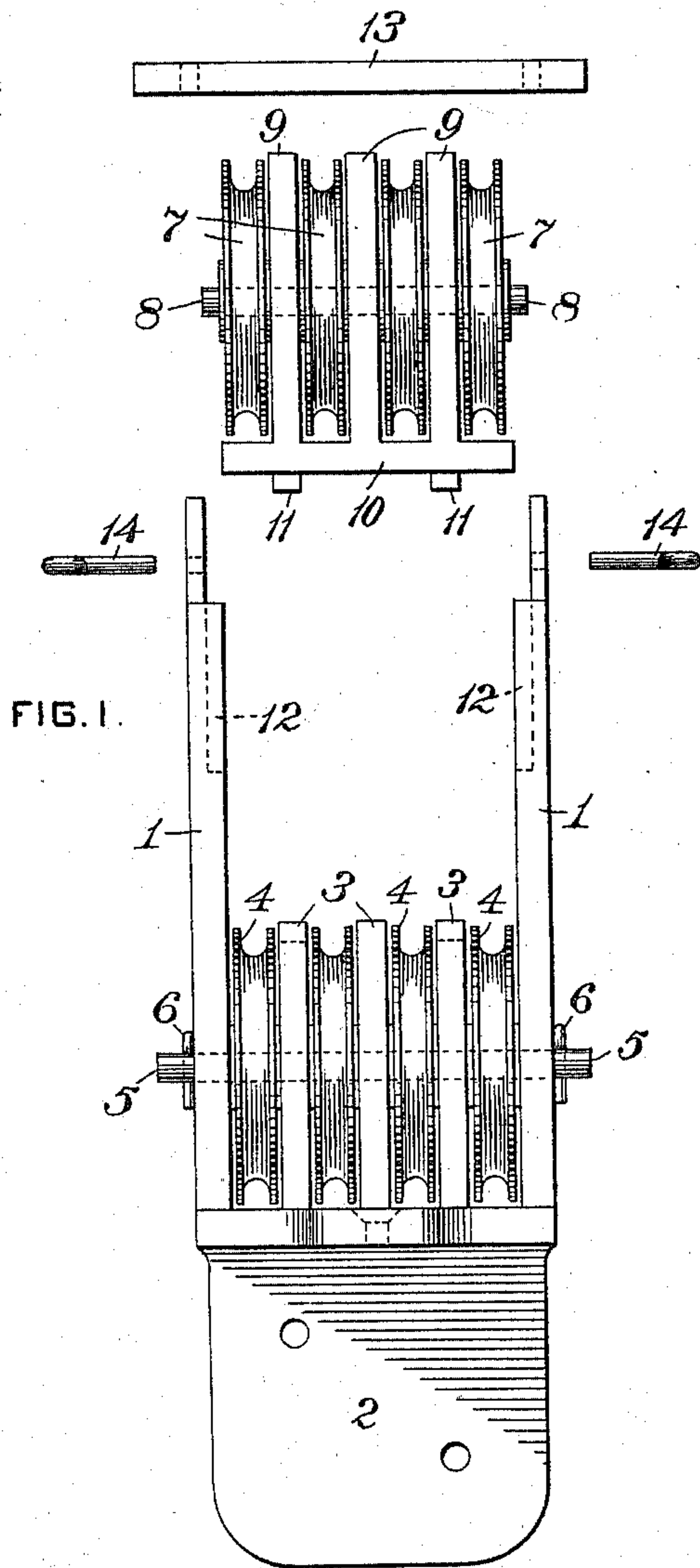


(No Model.)

J. CHALMERS, Jr.  
CARRIER FOR SIGNAL WIRES.

No. 581,932.

Patented May 4, 1897.



WITNESSES:

Chas. F. Miller.  
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INVENTOR.

James Chalmers Jr.  
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Att'y.



# UNITED STATES PATENT OFFICE.

JAMES CHALMERS, JR., OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO THE  
UNION SWITCH AND SIGNAL COMPANY, OF SAME PLACE.

## CARRIER FOR SIGNAL-WIRES.

SPECIFICATION forming part of Letters Patent No. 581,932, dated May 4, 1897.

Application filed March 26, 1897. Serial No. 629,426. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES CHALMERS, JR., a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered certain new and useful Improvements in Carriers for Signal-Wires, of which improvements the following is a specification.

The invention described herein relates to certain improvements in what is known as "wire carriers or supports" used in connection with signaling apparatus for the purpose of supporting the wire connecting the signal with its operating mechanism.

As heretofore constructed, it has been necessary in arranging the wires extending to the signals to pass the ends through the space occupied by each supporting-pulley for the whole length of the wire. As the signal is frequently arranged at a distance of fifteen hundred feet or more from its operating-lever it is necessary to draw such a length of wire through the guides, thereby greatly increasing the work of erection.

The object of the present invention is to so construct the wire-supports that the wire can be stretched along from the signal to the lever and then shifted into place at each support. In general terms the invention consists in the construction and combination as hereinafter described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a view showing the several parts in elevation and separated from each other; and Fig. 2 is a sectional elevation showing the several parts of the support arranged in proper operative position.

In the practice of my invention arms or standards 1 are formed on or secured to a suitable plate or flange 2, which is adapted to be bolted or otherwise secured on a suitable post or support. On the flange and intermediate of the arms or standards 1 are formed or secured a series of one or more dividing posts or plates 3, the number of such posts or plates being dependent upon the number of wires which are to be used. A series of two or more grooved pulleys are arranged in the spaces between the arms or standards and the dividing-plates, said pul-

leys being loosely mounted upon a pin 5, passing through the arms and dividing-plates, said pins being held in position by cotters 6 or any other suitable means. The pulleys 7, forming the upper tier, are loosely mounted upon the pin 8, which passes through plates 9, separating the pulleys from each other and formed upon a supporting-base 10, which is adapted to fit down between the arms or standards 1 and rest upon the upper ends of the plates 3, dividing the pulleys forming the lower tier. While it is probable that under normal conditions the frame carrying the upper tier of pulleys would not be dislodged or shifted, it is preferred to form lugs 11 on the lower side of the base 10, said lugs being adapted to engage notches in the upper ends of the plates 3. The pin 8 is made of a length a little greater than the width of the base 10, so that when the frame of the upper tier of pulleys is placed in position between the arms or standards 1 the ends of the pin 8 will enter grooves 12, formed in the inner faces of the arms or standards 1, thereby holding the frame as against lateral movement, such locking of the frame into position being assisted or rendered more certain by the lugs 11 on the base 10 of the frame. The frame carrying the upper tier of pulleys is held in position by means of a cross-bar 13, adapted to be secured to the upper ends of the arms or standards 1 in any suitable manner—such, for example, as that shown—and consisting in cotters 14, passing through the upper ends of the arms or standards 1, which are slightly reduced in transverse dimensions and project through holes formed in the cross-bar 13.

It will be observed that the pin 8 is held in position by the arms or standards 1, which also serve to hold the outside pulleys of the upper tier on the pin.

When wires are to be strung, if they are to be placed on the pulleys forming the lower tier, the frame carrying the upper tier of pulleys is removed, thereby permitting of the wires being placed in position on the pulleys 3. The frame is then placed in position, thereby locking the lower tier of wires in proper position, and the other wires are placed upon the pulleys forming the upper tier and the cross-bar secured in position.



It will be readily understood by those skilled in the art that by the use of my improved support a large number of wires can be readily placed in position and the drawing of the wire through each support is entirely avoided.

I claim herein as my invention—

1. In a carrier for signal-wires, the combination of an open-topped frame, one or more rollers mounted in said frame, a second frame adapted to be detachably secured to the first frame and forming a top therefor, and one or more rollers mounted in the second frame, substantially as set forth.

2. In a carrier for signal-wires, the combination of a frame, one or more posts or plates intermediate of and shorter than the sides, two or more pulleys or rollers loosely mounted between the intermediate posts or plates and the sides, a second frame adapted to fit be-

tween the sides of the first frame, two or more rollers mounted in the second frame, and means for removably securing the second frame in position, substantially as set forth.

3. In a carrier for signal-wires, the combination of a U-shaped or open-topped frame, one or more posts or plates intermediate of the sides of the frame, one or more rollers loosely mounted in the slots or pockets formed by the posts or plates and sides of the frame, and a detachable cross-bar for holding the wires in the slots or pockets, substantially as set forth.

In testimony whereof I have hereunto set my hand.

JAMES CHALMERS, JR.

Witnesses:

DARWIN S. WOLCOTT,  
F. E. GAITHER.