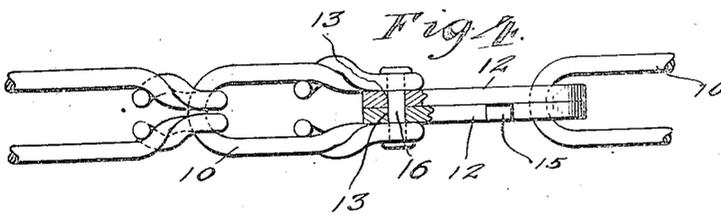
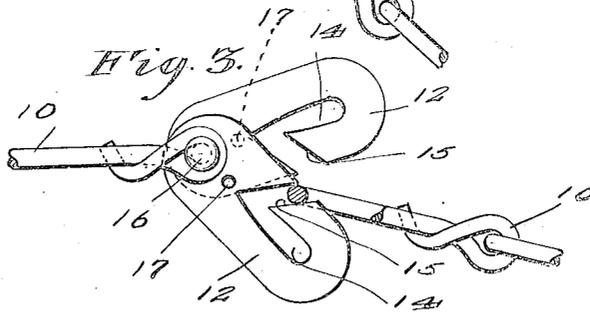
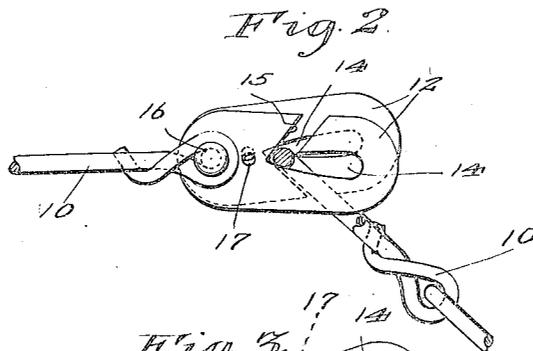
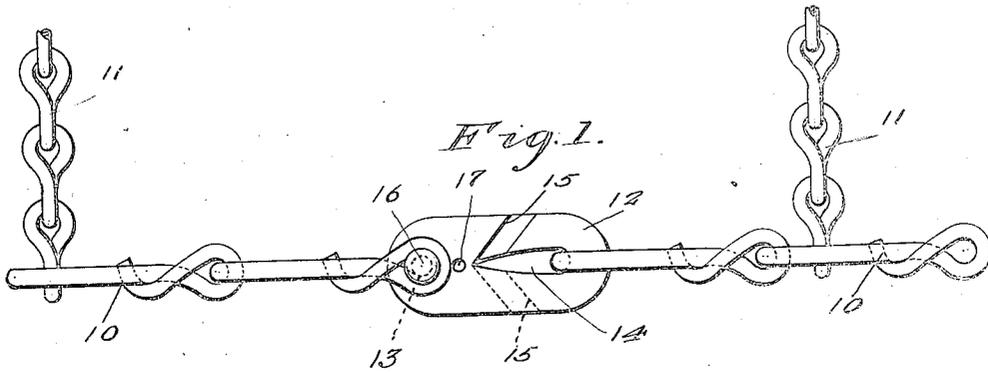


Jan. 2, 1923.

1,441,089.

W. T. HOPKE ET AL.  
CHAIN CONNECTOR,  
FILED JAN. 30, 1922.



W. T. Hopke  
J. A. Sincell

INVENTOR

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WITNESSES

## UNITED STATES PATENT OFFICE.

WILLIAM T. HOPKE AND JAMES A. SINCELL, OF GRAFTON, WEST VIRGINIA,

## CHAIN CONNECTOR.

Application filed January 30, 1922. Serial No. 532,835.

*To all whom it may concern:*

Be it known that we, WILLIAM T. HOPKE, and JAMES A. SINCELL, citizens of the United States, residing at Grafton, in the 5 county of Taylor and State of West Virginia, have invented new and useful Improvements in Chain Connectors, of which the following is a specification.

This invention relates to improvements in 10 non-skid chains for vehicle tires and has particular relation to means for securing the chains in position for use.

An object of the present invention is the provision of a novel form of chain connector 15 or hook, by means of which the free ends of the chains may be quickly and easily connected in a manner to prevent their accidental separation, yet permit them to be quickly and easily separated when it is desired to remove the chains. 20

Another object of the invention is the provision of a device of the above character, which is simple of construction and operation and which in addition, is cheap 25 to manufacture, being stamped from sheet metal with the use of a single die and in one operation.

With the above and other objects in view, the invention further includes the following 30 novel features and details of construction, to be hereinafter more fully described, illustrated in the accompanying drawings and pointed out in the appended claim.

In the drawings:—

Figure 1 is a fragmentary elevation of a 35 portion of a non-skid chain with the invention applied thereto the chain being shown in connected position.

Figure 2 is a similar view with the connector or hook partly opened preparatory 40 to the separation of the chain.

Figure 3 is a like view showing the chain released.

Figure 4 is a plan view showing the parts 45 in the position illustrated in Figure 1.

Referring to the drawings in detail, wherein like characters of reference denote corresponding parts, the reference character 10 indicates the adjacent ends of the longitudinal members of a non-skid chain, the 50 cross members or chains by means of which the longitudinal members are connected being indicated at 11.

For the purpose of detachably connecting 55 the adjacent free ends of the longitudinal members 10 together, the invention pro-

vides a connector or hook which is formed of a pair of complementary members 12. Each of these members is preferably stamped from flat metal and is provided at 60 one end with an opening 13 for the passage of a pivot pin, by means of which the members may be pivotally connected together and pivotally secured to one end of the chain 10. Each member is further provided 65 with a longitudinally disposed slot 14 which tapers at its inner end, at which end it communicates with a transverse slot 15. This last mentioned slot opens at one side edge of the member 12 and is disposed at 70 an acute angle with respect to the slot 14.

When the members 12 are secured to the end of the chain, they are arranged in superposed relation with the slots 15 extending 75 in opposite directions and are connected together and to the chain 10 by a pivot pin 16 so as to permit of relative pivotal movement. In use, the members are opened to the position shown in Figure 3 and the free end of the chain is inserted in one of the 80 entrance slots 15, the members being partly closed and the end link of the chain moved in a direction toward the enlarged end of the slot 14 until the said link reaches the outer end of the other entrance slot 15. The 85 link is then moved inward along this slot to the position shown in Figure 2, whereupon the members may be completely closed and the link moved to the outer end of the slot 14. The slots 14 of the two members 90 thus provide a completely closed slot so as to return the engaged link in place.

If desired, the members may be provided with an additional opening 17 which is located at the longitudinal center of the members 95 so that when the latter are closed, the slots 17 will be brought into register for the passage of a cotter pin or other suitable locking element.

By the construction shown and described, 100 the connector may be made with the use of a single die, the members being reversed to reverse the position of the open ends of the entrance slots 15 and as the openings 13 and 17 are located on the longitudinal center 105 members, they may be brought into register for the passage of the pivot pin 16 and a suitable locking element.

The invention is susceptible of various changes in its form, proportions and minor 110 details of construction and the right is herein reserved to make such changes as prop-

erly fall within the scope of the appended claim.

Having described the invention what is claimed is:—

5 A chain connector comprising a pair of complementary members arranged in superimposed relation and pivotally connected together at one end, each of said members being provided with a longitudinally disposed  
10 slot and an angularly disposed slot extend-

ing from the inner end of the first mentioned slot and the angularly disposed slots of the said members being open at their outer ends and inclined oppositely and outwardly in a direction away from the pivoted ends of said members. 15

In testimony whereof we affix our signatures.

WILLIAM T. HOPKE.  
JAMES A. SINCELL.