

H. S. OLLSON.  
 TURNBUCKLE FOR TROLLEY WIRES.  
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913,547.

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Fig. 1.

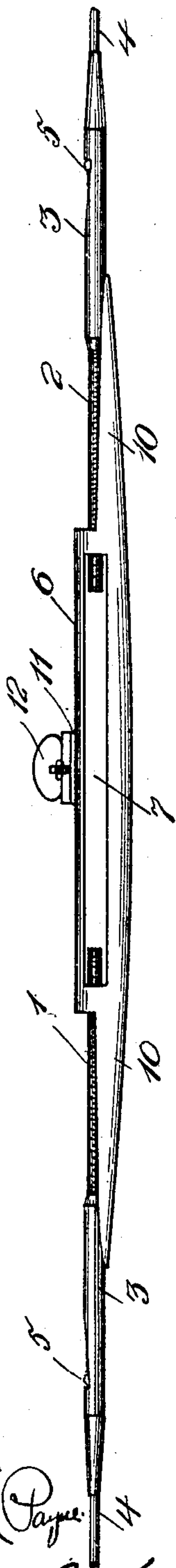


Fig. 2.

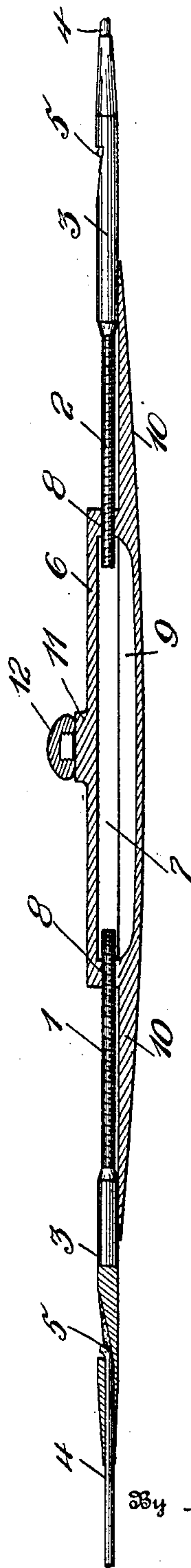
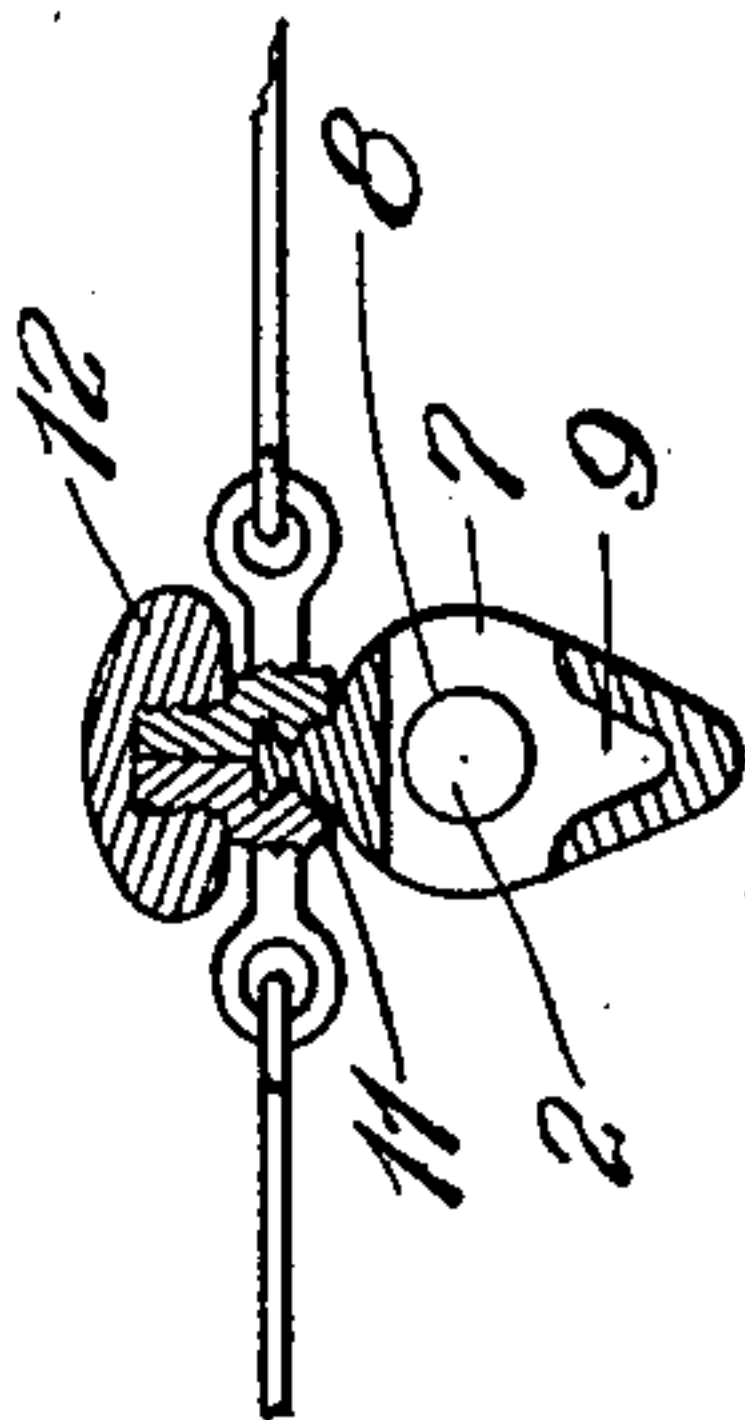


Fig. 3.



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# UNITED STATES PATENT OFFICE.

HUGH STANDWOOD OLLSON, OF MARS, PENNSYLVANIA.

## TURNBUCKLE FOR TROLLEY-WIRES.

No. 913,547.

Specification of Letters Patent.

Patented Feb. 23, 1909.

Application filed October 10, 1908. Serial No. 457,106.

*To all whom it may concern:*

Be it known that I, HUGH STANDWOOD OLLSON, a citizen of the United States of America, residing at Mars, in the county of Butler and State of Pennsylvania, have invented certain new and useful Improvements in Turnbuckles for Trolley-Wires, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to a turn buckle for trolley wires, and the primary object of my invention is the provision of positive and reliable means for taking up the slack in a trolley wire, without interrupting the electrical conduit or the passage of a trolley wheel upon the wire.

Another object of my invention is to provide a turn buckle of a durable construction that can be advantageously used in connection with trolley wires for compensating for the expansion and contraction of said wires.

With the above and other objects in view which will more readily appear as the invention is better understood, the same consists in the novel construction, combination and arrangement of parts to be presently described and then specifically claimed.

In the drawings:—Figure 1 is a side elevation of a turn buckle constructed in accordance with my invention, Fig. 2 is a longitudinal sectional view of the same, and Fig. 3 is an enlarged cross sectional view of the turn buckle.

To put my invention into practice, I provide a right hand threaded screw 1 and a left hand threaded screw 2, with metallic sockets 3 for the confronting ends of a trolley wire 4, the ends of said wire being bent and soldered within the sockets 3, as at 5.

The screws 1 and 2 are connected together by a turn buckle body 6 having a central longitudinal opening 7 and longitudinally alining interiorly threaded openings 8 for the screws 1 and 2, said openings 8 being threaded to accommodate the right and left hand threads of said screws. The body 6 of the turn buckle is recessed, as at 9, to reduce the weight of the same, and is provided at the ends thereof with tapering extensions 10 V-shaped in cross section, these extensions gradually tapering towards the sockets 3, to provide a smooth and uninterrupted passage

for a trolley wheel or pantograph from one socket to the opposite socket.

The top of the body 6 is provided with a central button 11 to which is detachably connected a hanger 12 employed for supporting the turn buckle, should the position of said turn buckle require such support. The hanger 12 can be of the mushroom type ordinarily employed for supporting a trolley wire or can be of any other conventional form.

It is apparent from the novel construction of the turn buckle that the same can be easily rotated, when the hanger 12 is removed to either tighten or loosen the confronting ends of the wire 4.

The turn buckle is made of bronze or similar durable metal, and provides a positive metallic conductor for a current of electricity between the ends of the trolley wire.

It is thought that the utility and manner of adjusting my turn buckle will be readily understood from the above description, and while in the drawings there is illustrated the preferred embodiments of my invention, it is obvious that various changes can be made in the details of construction without departing from the spirit of the invention.

Having now described my invention what I claim as new, is:—

1. The combination with the confronting ends of a trolley wire, of right and left handed screws, sockets carried by said screws and adapted to receive the confronting ends of said wire, a turn buckle body having longitudinally alining interiorly threaded openings formed therein to receive said screws, tapering extensions carried by the ends of said body and tapering towards said sockets, and a button carried centrally of the top of said body, substantially as described.

2. The combination with the confronting ends of a trolley wire, of right and left handed screws, sockets carried by said screws and adapted to receive the confronting ends of said wire, a turn buckle body having longitudinally alining interiorly threaded openings formed therein to receive said screws, and tapering extensions carried by the ends of said body and tapering towards said sockets.

3. A turn buckle for trolley wires comprising wire sockets, right and left hand

threaded screws carried by said sockets, a turn buckle body adapted to screw upon said screws, and end extensions carried by said body and engaging said sockets.

- 5 4. A turn buckle for trolley wires comprising right and left hand threaded screws, sockets carried by said screws, a turn buckle body adapted to screw upon said screws,

and extensions carried by the ends of said body.

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

HUGH STANDWOOD OLLSON.

Witnesses:

DE LETTA OLLSON,

MAX H. SROLOVITZ.