

O. M. SHIREY.
 HOLDER FOR CURRENT COLLECTORS.
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1,006,301.

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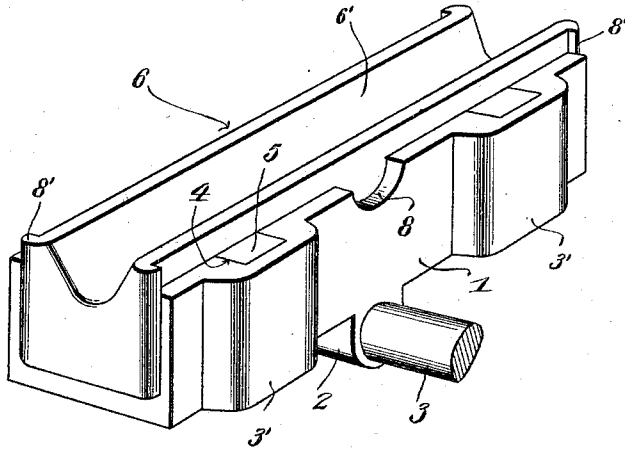


Fig. 1

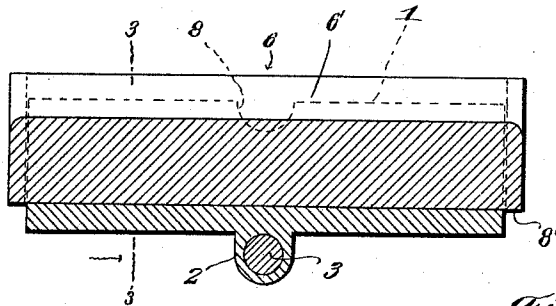


Fig. 2

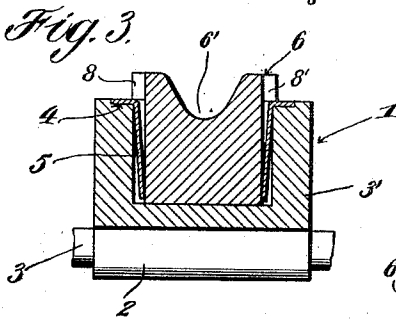


Fig. 3

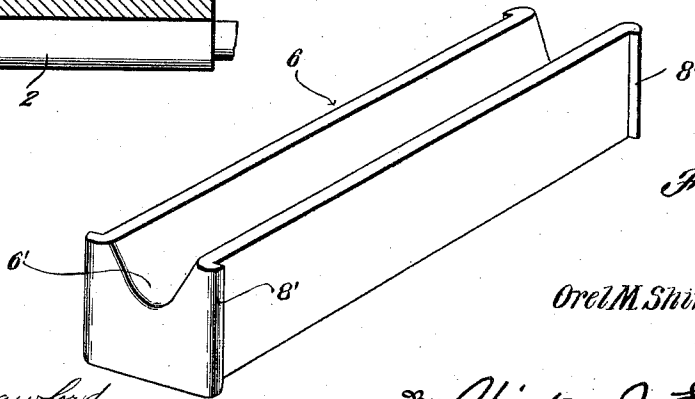


Fig. 4

Witnesses

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HOLDER FOR CURRENT-COLLECTORS.

1,006,301.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, OREL M. SHIREY, a citizen of the United States, residing at New Brighton, in the county of Beaver and State of Pennsylvania, have invented new and useful Improvements in Holders for Current-Collectors, of which the following is a specification.

This invention relates to holders for the current collectors of electrically-driven vehicles, the object of the invention being to provide a device of this character which is particularly adapted for use upon electrical cranes for supporting the current collector proper thereof, and which admits of the ready removal of the collector when worn or injured and the substitution of a new collector therefor.

The invention consists of the features of construction, combination and arrangement of parts, hereinafter fully described and claimed, reference being had to the accompanying drawings, in which:—

Figure 1 is a perspective view of a holder for current collectors embodying my invention. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is a vertical transverse section on the line 3—3 of Fig. 2. Fig. 4 is a view of the shoe.

In carrying my invention into practice, I provide a holder comprising an oblong rectangular trough or receptacle 1 provided upon its base with a perforated lug or eye 2 for the passage of a fastening bolt or screw 3, whereby it is adapted to be secured to the collector supporting portion of the frame of the vehicle or machine.

Formed upon the outer faces of the side walls 2 for the holder are spaced vertical bosses or enlargements 3', having sockets 4 to receive the upper angularly bent ends of clamping or retaining springs 5, made of spring copper or other suitable material. The free ends of these springs project at an inward and downward angle into the holder to provide clamping jaws, between which the collector 6 is adapted to be firmly and yet removably held. In the present instance, a pair of springs is shown upon each side wall of the holder, said springs being disposed on opposite sides of the transverse center of the holder, said springs being arranged in opposite transverse pairs to engage opposite sides of the ends of the collector.

When the collector is held in position as usual between the spring jaws, it is maintained in position to engage the trolley wire which passes through a longitudinal groove or recess 6' therein. The ends of the collector project beyond the open ends of the holder and are provided with flanges 8' to hold it from longitudinal displacement. Grooves or recesses 8 are provided in the side walls of the receptacle at a point between the spring clamping jaws to enable the thumbs and fore fingers of the hands to be applied to engage the sides of the collector, whereby the latter may be conveniently applied and removed. It will thus be seen that the construction provides a holder which admits of the ready application of a collector and its removal when worn without the necessity of unfastening any holding parts whatever, by which a saving of time and labor is effected in the removal of a worn collector and the substitution of a new one therefor.

Having thus described the invention, I claim:—

1. The combination of a holder comprising an oblong rectangular receptacle open at the top and each end, a correspondingly shaped collector adapted to fit within said receptacle and to be inserted and removed through the open top thereof, said collector being provided in its top with a longitudinal groove and at its ends with lateral flanges to bear against the side walls of the receptacle, and springs upon the side walls of the receptacle to engage and clamp the collector therein.

2. The combination of a holder comprising an oblong rectangular receptacle open at the top and rear end and having its side walls provided with central finger recesses and bosses on opposite sides of said recesses, clamping springs held by said bosses and projecting down into the receptacle, and an oblong rectangular collector adapted to fit within the receptacle and to be inserted and removed through the open top thereof and clamped by said springs, said collector being provided in its top with a longitudinal groove and at its end with lateral flanges to bear against the side walls of the receptacle.

3. The combination with an oblong rectangular receptacle open at top and each end, of a correspondingly shaped collector

adapted to fit within said receptacle, said
collector being provided with a longitudinal
groove in its top and with lateral flanges at
its ends to bear against the ends of the re-
5 ceptacle, and springs upon the sides of the
receptacle to engage and clamp the collector
therein.

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

OREL M. SHIREY.

Witnesses:

WARREN JONES,
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
