

N. LIPOFF.
 NON-SHORT-CIRCUITING PICK.
 APPLICATION FILED NOV. 28, 1913.

1,102,935.

Patented July 7, 1914.

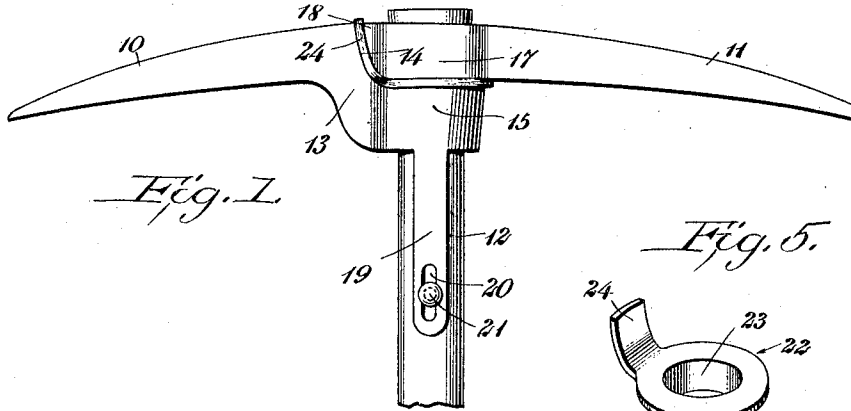


Fig. 1.

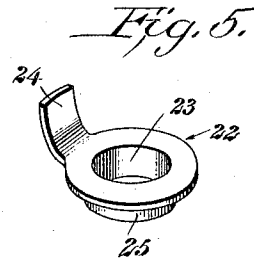


Fig. 5.

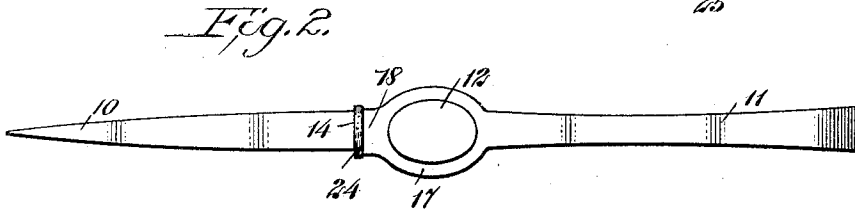


Fig. 2.

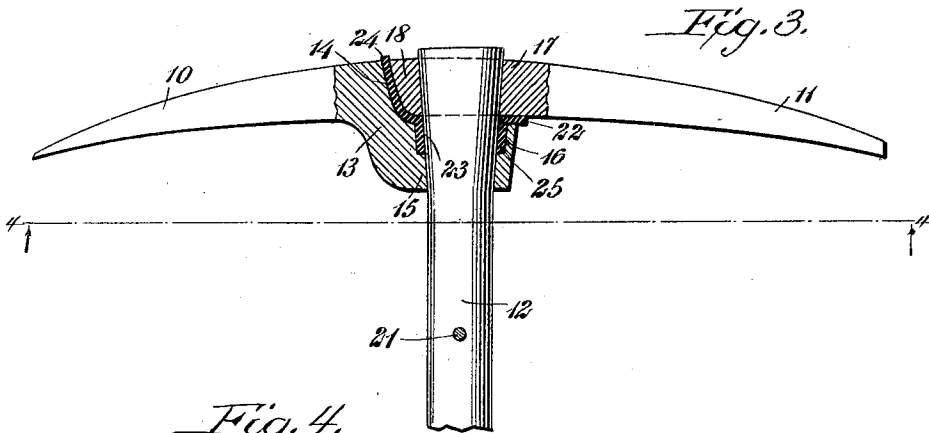


Fig. 3.

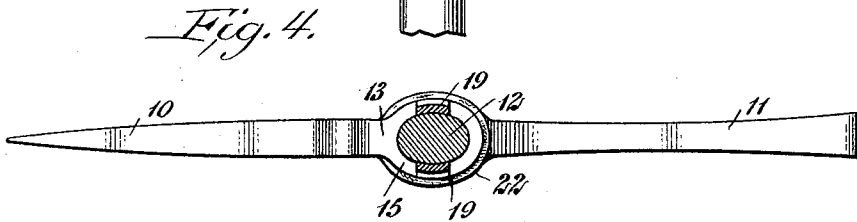


Fig. 4.

WITNESSES

Oliver H. Holmes
John P. Burch

INVENTOR
Nathan Lipoff
 BY *Mumford Co.*
 ATTORNEYS

UNITED STATES PATENT OFFICE.

NAHTEN LIPOFF, OF NEW YORK, N. Y.

NON-SHORT-CIRCUITING PICK.

1,102,935.

Specification of Letters Patent.

Patented July 7, 1914.

Application filed November 28, 1913. Serial No. 803,558.

To all whom it may concern:

Be it known that I, NAHTEN LIPOFF, a subject of the Czar of Russia, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Non-Short-Circuiting Pick, of which the following is a full, clear, and exact description.

This invention relates to novel and useful improvements in picks, and more particularly to picks adapted for use in electrical railroad construction or other work in which danger exists in the use of the common pick due to the liability of the pick causing the short-circuiting or grounding of the current, which would injure the working lines and in the case of currents of high voltage, would result either in the loss of life or injury to the user of the pick by "kicking" or by passage of the current to the user from the pick head, should it be touched or come in contact with the body of the user, or from the handle if the latter is wet.

The above objection is obviated by an improved multi-part pick which embodies two sections including a point or digger and a tamper, each having sleeve portions attached to the handle of the pick in a novel manner, with insulation between the sections for the purpose of electrically separating the same.

With the above and other objects in view, the invention consists of certain peculiar combinations and arrangements of parts as will be hereinafter more fully described, claimed and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a non-short-circuiting pick constructed in accordance with the invention, only a fragmentary portion of the handle being shown; Fig. 2 is a plan view thereof; Fig. 3 is a vertical longitudinal sectional view with the outer portions of the pick sections in elevation; Fig. 4 is a horizontal sectional view on the line 4-4 of Fig. 3; and Fig. 5 is a detail perspective view of the insulation employed.

Referring to the drawings, in which like reference characters indicate corresponding parts throughout the several views, the pick is shown as comprising the sections 10 and 11, which are mounted upon the usual han-

dle 12. The section 10 forms the digging end or point of the pick, while the section 11 has an abrupt end for use of the same as a tamper, as will be readily understood by any one familiar with railroad work. In order to attach the sections 10 and 11 to the handle but to electrically separate or insulate the same, the section 10 is offset at its inner end as shown at 13, to provide a shoulder 14, and beyond this off-set portion the section 10 is provided with a sleeve 15 adapted to fit the handle. This sleeve 15 is provided with an interior annular recess 16 which communicates with its outer edge, as clearly shown in Fig. 3 of the drawings.

The section 11 is provided at its inner end with a sleeve 17 having an extension 18 adapted to occupy the space between the handle and shoulder 14, said portions being inclined toward the pick handle. The section 10 is further secured to the handle by means of diametrically opposed and longitudinally extending side strips or extensions 19 preferably formed with the sleeve 15, and each having a longitudinal slot 20, which are aligned with respect to one another at the opposite sides of the handle. A bolt or other fastening member 21 is engaged through the handle and through the slots in the strips 19 so as to anchor the section 10 to the handle by preventing pivotal movement thereof on the handle, but permitting slight longitudinal adjustment of the section 10 for the purpose of tightening the sleeves on the handle when the handle becomes loose and it is necessary to force wedges into the free end thereof to spread the handle within the sleeve, as is common in the use of picks. The insulation is indicated by the numeral 22 and consists of a washer-like member of such material as fiber or rubber adapted to encircle the handle by means of the aperture 23. This washer-like insulating member is provided with an extension tongue 24 which is curved outwardly therefrom as shown in Fig. 5, so as to lie between the portion 18 and the shoulder 14 of the sections of the pick when in position, and thus prevent the formation of a continuous circuit through the pick sections. The insulated member is molded in the shape specified and is preferably further provided with a sleeve extension 25 which extends into the annular recess 16 of the sleeve 15 so as to further obviate

any likelihood or possibility of the sleeve portions of the pick sections coming in contact with each other. The edges of the insulation also project beyond the faces of the pick sections to further insure this result.

In the device above described, it has been found that pressure is exerted wholly on the handle due to the arrangement of the sleeves and the provision of the side strips 19 which relieve the leverage produced by the off-setting of the sleeve 15. There is, however, a slight pressure exerted when using the tamper by engagement of the wall of the extension 18 against the shoulder 14, and consequently upon the insulation located between these parts. The pick is especially adapted for use in electrical railway construction or similar work where a pick in use is liable to bridge an electrical conductor and ground member, or two electrical conductors, the first instance being in railroad construction having a third rail positioned adjacent to one of the track rails, the third rail constituting the conductor and the track rail constituting the ground of the circuit.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

- 30 1. A non-short-circuiting pick embodying a handle, and insulated sections secured thereto.
- 35 2. A non-short-circuiting pick consisting of a head having sections electrically separated.
- 40 3. A pick embodying a pair of sections, said sections each having sleeve portions, a handle on which said sleeve portions are mounted, and an insulating member between the said sleeve portions and encircling the handle.
- 45 4. A pick embodying a pair of sections, said sections each having sleeve portions, a handle on which said sleeve portions are mounted, and an insulating member between the said sleeve portions and encircling the handle, one of said sleeve portions having

an interior recess in which said insulation projects.

5. A non-short-circuiting track pick comprising sections including a digging member and a tamper, one of the sections having an off-set sleeve, a handle on which said sleeve is engaged, the other section having a sleeve also engaged on the handle outwardly of the first mentioned sleeve and having an extension disposed in juxtaposition to the off-set, an insulating member comprising a washer mounted on the handle between the sleeves and having curved extensions between said juxtapositioned parts, said first-mentioned sleeve having side strips disposed along opposite sides of the handle, and a connector carried by the handle relative to which said extensions are movable.

6. A non-short-circuiting track pick comprising sections including a digging member and a tamper, one of the sections having an off-set sleeve, a handle on which said sleeve is engaged, the other section having a sleeve also engaged on the handle outwardly of the first mentioned sleeve and having an extension disposed in juxtaposition to the off-set, an insulating member comprising a washer mounted on the handle between the sleeves and having curved extensions between said juxtapositioned parts, said first mentioned sleeve having an interior annular recess communicating with its outer edge, the insulating member having a sleeve extending into said recess, side strips carried by the off-set sleeve and having longitudinal slots, and a securing member disposed through the handle and slots to permit longitudinal shifting of the sleeves on the handle when the sleeves are tightened by spreading of the handle.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

NAHTEN LIPOFF.

Witnesses:

JOHN E. BURCH,
PHILIP D. ROLLHAUS.