(No Model.)

A. G. MacGREGOR.

SPOKE CLEANER FOR BICYCLES.

No. 595,958. Patented Dec. 21, 1897.

Fig. 1

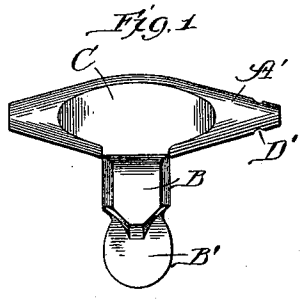


Fig. 2

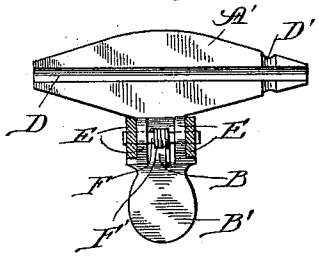


Fig. 3

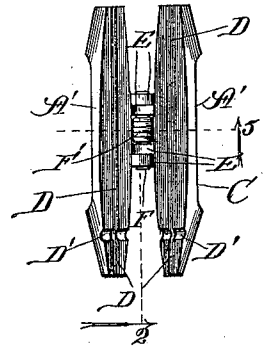


Fig. 4

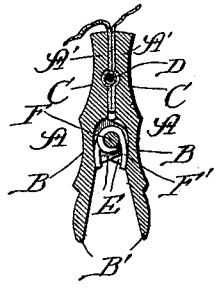
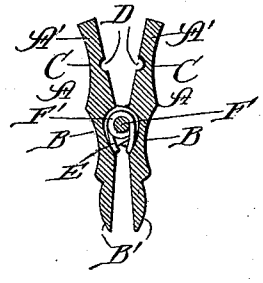


Fig. 5



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SPOKE-CLEANER FOR BICYCLES.

SPECIFICATION forming part of Letters Patent No. 595,958, dated December 21, 1897.

Application filed March 23, 1897. Serial No. 628,928. (No model.)

To all whom it may concern:

Be it known that I, ALBERT G. MACGREGOR, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Spoke-Cleaner for Bicycles, of which the following is a specification.

My invention relates to a device for cleaning or polishing wires or comparatively slender rods, being particularly intended for use upon the spokes of a bicycle, the position of which make them difficult to clean by a cloth held in the hand.

In the accompanying drawings, in which like letters refer to similar parts throughout the several views, Figure 1 is a side elevation of my improved spoke-cleaner. Fig. 2 is a longitudinal section on the line 2 of Fig. 3. Fig. 3 is a top plan view showing the jaws separated. Fig. 4 is a transverse section showing a spoke and a piece of the cleaning fabric in place between the jaws, and Fig. 5 is a transverse section on the line 5 of Fig. 3.

A A designate a pair of coöperating members, of any suitable material, preferably cast metal, each consisting of three portions—the jaws A′ A′, the hinges or connecting portion B B, and the finger-pieces B′ B′.

The jaws are preferably of a general semi-circular cross-section and are sufficiently elongated in a direction substantially at right angles to the finger-pieces to grasp a considerable portion of the wire between them. They are of greatest diameter at the center and taper toward the ends to permit of their being carried along the wires to be cleaned at points where they approach closely together. At the center of each is preferably a depression at C, of less diameter than the length of the jaw, by which they may be firmly grasped by the fingers when in use, pressed against the object upon which the cleaner is being used, and drawn back and forth. Upon the contacting faces of the jaws are grooves D D, registering with one another, to receive the wire and prevent the cleaner slipping from it. Near one end of the jaws are similar transverse grooves D′ D′, which enable the device to be successfully used on such short lengths of wire as occur, for example, in the tangent spokes of a bicycle between their points of intersection and the hub. While these grooves are preferably in both of the jaws, as described and illustrated, it would be equally within the spirit of my invention if they were on but one side, acting against a plain surface on the other.

The hinge portions B B each consist of a small and comparatively thin plate projecting from one side of the jaw, having upon the inner side a pair of lugs E E, those upon one member being placed nearer together and resting between those on the other. Through these lugs are registering holes to receive a pin F, upon which the members hinge. The jaws are preferably held in contact by a spring F′, encircling the pin and having its ends resting between the lugs at the opposite side of the pin from the jaws. Although the use of this spring is convenient, it is not necessary to the operativeness of my invention, but may be entirely omitted or another form of spring substituted.

Beyond the hinge portions are the finger-pieces B′ B′, of any desired form, as that illustrated, which will readily enable them to be grasped between the thumb and forefinger and separated to introduce the cleaning and polishing fabric and the wire.

The operation of the device will be readily understood. A loop of common cloth or other suitable material, which may be dusted or coated with crocus, emery, or similar substance and moistened, if desired, with oil or other cleaning fluid, is placed upon the wire to be cleaned. The jaws are then separated, as above stated, and the grooves closed upon the cloth, when the cleaner may be grasped by the depressions C C and drawn back and forth upon the wire until it is properly polished. The cloth preferably extends the entire length of the jaws. A pressure of the third finger upon the finger-piece opposite that resting against the thumb releases the wire without displacing the cloth and the cleaner is clamped upon another. When in use upon the tangent spokes of a bicycle, the short reaches within the intersections may be cleaned in the same manner, only substituting a strip of cloth in the grooves D′ for that in D.

Although the device has been particularly described and is intended for use upon the spokes of a bicycle, it is obvious that it is

equally useful for cleaning and polishing any wire or rod that it will conveniently grasp and that various sizes may be made to suit the conditions encountered.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a spoke-cleaner, the combination of two elongated jaws adapted to be pressed into contact, and a longitudinal groove extending across the contacting faces of said jaws, substantially as described.

2. In a spoke-cleaner, the combination of two elongated jaws tapering toward the ends and adapted to be pressed into contact, and a longitudinal groove extending across the contacting faces of said jaws, substantially as described.

3. In a spoke-cleaner, the combination of two hinged members each consisting in part of a finger-piece and a jaw, the latter elongated in a direction substantially at right angles to the former, substantially as described.

4. In a spoke-cleaner, the combination of two hinged members each consisting in part of a finger-piece and a jaw, the latter elongated in a direction substantially at right angles to the former, and a transverse groove extending across the contacting faces of said jaws at one end thereof, substantially as described.

5. In a spoke-cleaner, the combination of two elongated jaws adapted to be pressed into contact, a longitudinal groove extending across the contacting faces of said jaws, and a similar transverse groove at one end thereof, substantially as described.

6. In a spoke-cleaner, the combination with two hinged jaws of a pin for securing them movably together, the jaws being elongated in a direction substantially parallel to the pin, substantially as described.

7. In a spoke-cleaner, the combination of two elongated jaws adapted to be pressed into contact, a groove extending across the contacting faces thereof, and a depression upon the outer surface of each of said jaws, substantially as described.

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