

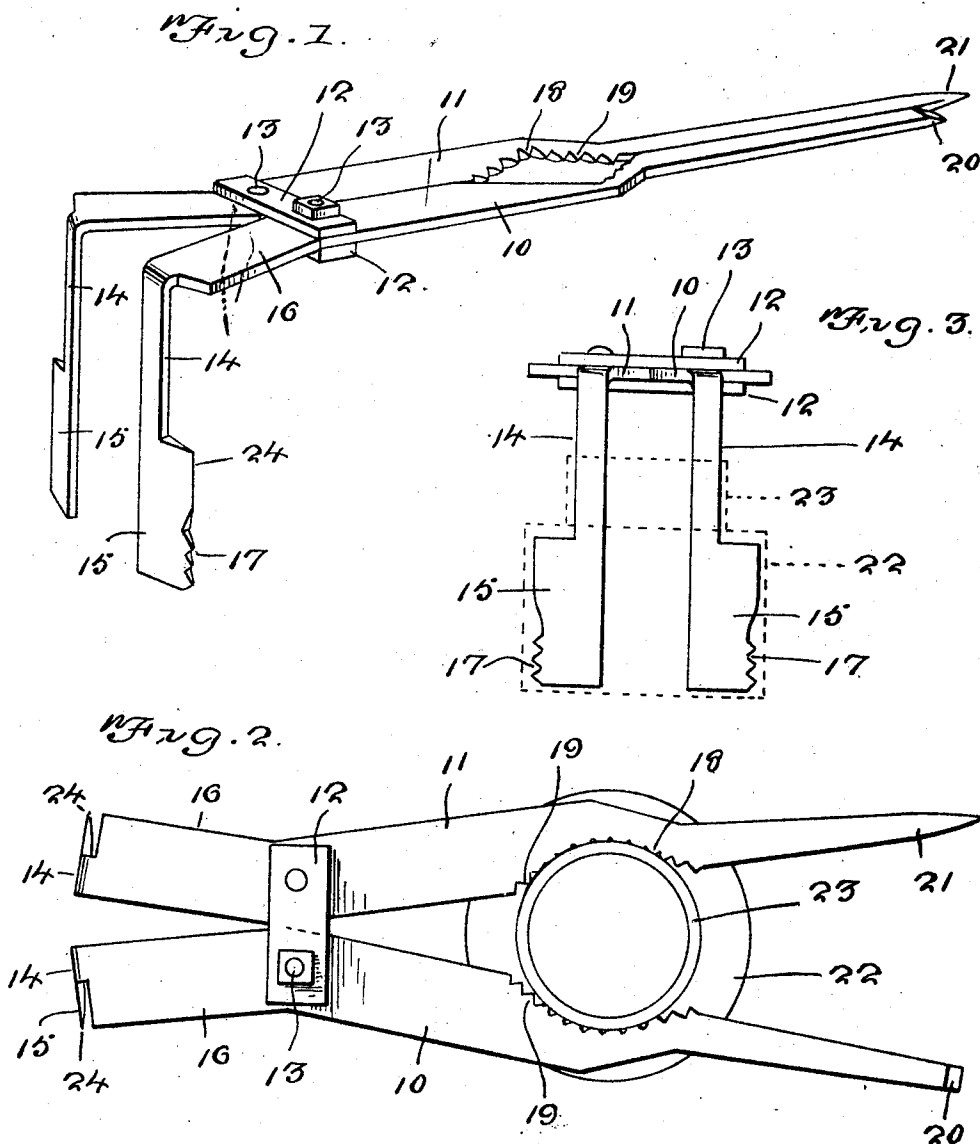
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J. E. TROSPER

1,560,441

LAMP CLEANER

Filed March 12, 1924



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WITNESS:

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UNITED STATES PATENT OFFICE.

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LAMP CLEANER.

Application filed March 12, 1924. Serial No. 698,725.

To all whom it may concern:

Be it known that I, JAMES EDWARD TROSPER, a citizen of the United States, residing at Jacksonville, in the county of Morgan and State of Illinois, have invented new and useful Improvements in Lamp Cleaners, of which the following is a specification.

This invention contemplates the provision of a tool designed to facilitate the removal of carbon or the like from the various parts of a miner's lamp, the tool being designed to be partly positioned in the lower portion of the lamp to remove the carbon from the walls thereof and also from the threads which are arranged interiorly and exteriorly of the neck of this portion, while the tool is further designed to facilitate separation of the component part of the lamp when the threads are stuck and to furthermore clean out the tube in the burner of the lamp.

The nature and advantages of the invention will be better understood when the following detailed description is read in connection with the accompanying drawing, the invention residing in the construction, combination, and arrangements of parts as claimed.

In the drawing forming part of this application, like numerals of reference indicate similar parts in the several views, and wherein:

Fig. 1 is a perspective view of the tool;

Fig. 2 is a plan view showing one use of the tool, that is, for removing carbon from the threads arranged exteriorly of the lower part of the lamp; and

Fig. 3 is a fragmentary sectional view showing another use for the tool, that is, for cleaning carbon from the interior of the lower part of the lamp.

The tool forming the subject-matter of the present invention consists of two identically constructed levers 10 and 11 which are connected together by spaced parallel links 12 arranged above and below said levers, which links have openings to receive pivoted bolts 13. It will be noted that each lever is substantially L-shaped, with the body portions of the levers pivotally connected in the manner just stated, while the short branches of these levers are each formed with a reduced portion 14 and a relatively wide portion 15. It will be noted from an inspection of Fig. 1 that the body portions of the respective levers diverge as at 16 from a point directly in advance of the links 12, so that

when the body portions of these levers are in edge-to-edge contact, the short branches just referred to are spaced apart. The outer edge of each broad portion 15 is formed with teeth 17 for a purpose to be hereinafter described. The adjacent edges of the levers 10 and 11 are also curved, or substantially so, as at 18, these curved portions being directly opposite each other and formed with teeth 19 for a purpose to be presently set forth. The end of the lever 10 is tapered as at 20 to permit of its use in the capacity of a screw-driver, while the corresponding end of the lever 11 tapers to a point 21 to permit of its use in cleaning out the tube and openings in the burner of the lamp as will be readily understood.

As above stated this tool is designed and intended to remove carbon or the like from different parts of a miner's lamp, which of course includes a body or lower portion 22 having a reduced neck 23 which is both interiorly and exteriorly threaded, and detachably associated with the upper part of the lamp (not shown) but of ordinary well-known construction.

In using the tool, the body portion 22 of the lamp is first unscrewed and separated from the top portion of the lamp, after which the levers 10 and 11 are moved away from each other to bring the corresponding offset branches together to permit these branches to be passed within the body of the lamp through the neck portion 23 thereof. Then the levers 10 and 11 are moved together for the purpose of separating the offset branches, which of course move the latter into contacting engagement with the interior of the body portion of the lamp as shown in Fig. 3 and then by turning the tool within the lamp body, or turning the body upon the tool, the portions 15 scrape the threads whereby the carbon is removed therefrom. It will be noted from an inspection of Fig. 1 that these portions 15 are tapered to provide knife edges 24 to facilitate this work. Then again, the reduced portions 15 of these offset branches provide sufficient clearance to allow the portions 15 to be moved to contact within the interior surface of the lamp body as shown in Fig. 3. After the carbon has been removed from the interior of the lamp body, the levers 10 and 11 are moved away from each other to bring the offset branches in edge-to-edge contact, and these branches are arranged

partly within the neck 23 with the teeth 17 engaging the threads on the interior of the neck, so that the carbon can be easily removed from these threads by either turning the tool within the neck, or by turning the body portion on the tool. In order to remove carbon from the threads arranged exteriorly of the neck 23, the neck is positioned between the curved portions 18 of the levers as shown in Fig. 2, and the teeth 19 enter the threads to cut the carbon therefrom. Then again, this portion of the tool can be used as a wrench in order to separate the body portion of the lamp from the top portion thereof when these parts are so tightly secured together by the presence of the carbon as to make the use of the tool necessary to separate them. A screw-driver 20 is very useful in manipulating the screw in the reflector forming part of the top of the lamp, while the pointed extremity of the lever 11 can be inserted into various openings and tube in the burner for the purpose of removing carbon therefrom. The tool is very simple in construction and can be conveniently handled and manipulated for the pur-

pose intended and can also be manufactured and sold at a nominal cost.

While it is believed that from the foregoing description, the nature and advantages of the invention will be readily apparent, I desire to have it understood that I do not limit myself to what is herein shown and described, and that such changes may be resorted to when desired as fall within the scope of what is claimed.

Having thus described the invention, I claim:

A tool of the character described comprising a pair of similarly constructed levers pivotally connected together and arranged in edge-to-edge relation, each lever being similarly bent at one end to form lateral projections and said levers being also shaped adjacent the projections to space the same apart, each of such projections including a reduced portion and a relatively wide portion formed to provide a knife edge, and teeth formed on each knife edge.

In testimony whereof I affix my signature.

JAMES EDWARD TROSPER.