

L. & A. W. SHAFFER.
 MINER'S COMBINATION TAMPING TOOL, &c.
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1,040,037.

Patented Oct. 1, 1912.

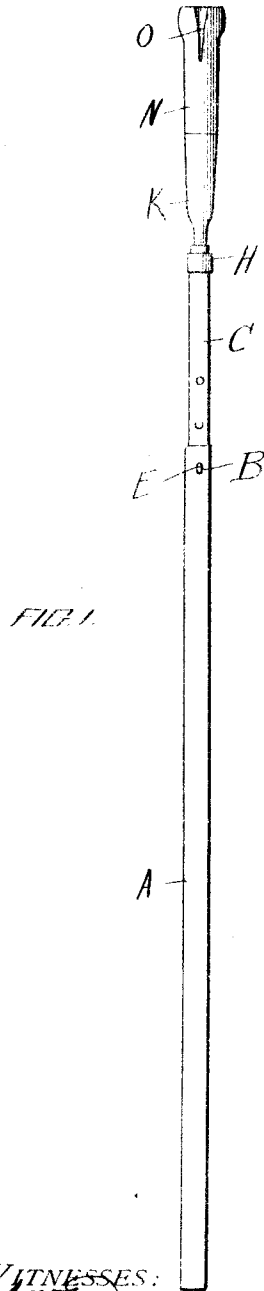


FIG. 1.

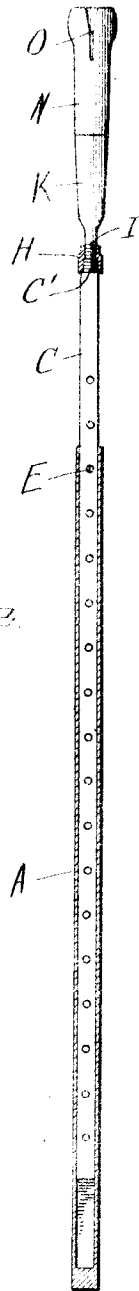


FIG. 2.

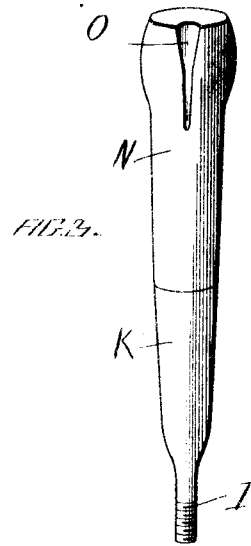


FIG. 3.



FIG. 4.



FIG. 5.

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MINER'S COMBINATION TAMPING-TOOL, &c.

1,040,037.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, LEWIS SHAFFER and ALFRED W. SHAFFER, citizens of the United States, residing at Duryea, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Miners' Combination Tamping-Tools, &c.; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in combination miner's tool, adapted especially for use in tamping, removing the material loosened by the drill, etc., and comprises a simple and efficient device of this nature having various details of construction and combinations and arrangements of parts which will be hereinafter fully described, shown in the accompanying drawings and then specifically defined in the appended claim.

We illustrate our invention in the accompanying drawings, in which:—

Figure 1 is a side view of our improved tamping tool having adjustable handle. Fig. 2 is a longitudinal sectional view through the same. Fig. 3 is an enlarged detail view of the tamping head, made preferably of wood. Fig. 4 is a detail view of a scraper attachment, and Fig. 5 is a detail view of a trimming tool.

Reference now being had to the details of the drawings by letter, A designates a tubular section of the handle which may be square or circular, as may be desired, provided with an aperture B therein. A rod or tube C telescopes within the section A and is provided with apertures for the reception of the pin E which passes through apertures in the two sections and is adapted to hold the parts in adjusted relation, one with the other. The end of the telescoping section C is threaded as at C' for the reception of the union H which has threaded

connection therewith and which union also has a contracted end interiorly threaded for engagement with the threads I upon the socket member K, in which the tamping head N is fastened. Said tamping head, which is made preferably of wood, has a flaring tamping end which is grooved on its circumference, as at O, to allow the fuse to pass therethrough.

In Fig. 4 of the drawings, we have shown a semicylindrical trimming tool, designated by letter T, and which is adapted to be connected to said union and provided for the purpose of trimming out the hole made by the drill and, in Fig. 5, is illustrated a scraper T' which may also be attached to the section C for removing the material loosened by the drill and trimmer.

The operation of our invention will be readily understood and is as follows:— After the hole has been drilled, the tools shown in Figs. 4 and 5 may be utilized for trimming and cleaning out the hole, preparatory to inserting the charge of explosive therein, which, when being inserted therein, may be tamped by the wooden head which is attached to one of the telescoping sections, the fuse passing through the groove or channel.

By the provision of a tamping head made as shown and described, the likelihood of accident incident to tamping the high explosive is reduced to a minimum and, by the provision of the detachable tools designed to be connected to the inner telescoping section, an all around convenient tool is afforded for miners' use. The sections telescoping one within the other afford means as a measuring tool in determining the depth of the hole drilled and also as a means for determining the height at which it is desired to form props for supporting the roof of the mine.

What we claim to be new is:—

A miner's tool comprising a handle made up of two sections, one of which is hollow with one closed end and the other telescoping therein, a pin for holding the sections in adjusted positions, one end of one of the telescoping sections being threaded and a

union fitted to said threaded end and having a contracted portion forming a socket with interior threads, and a tool adapted to be fitted in said socket portion and adapted to bear against the end of the telescoping section upon which the union is held, as shown and described.

In testimony whereof we hereunto affix

our signatures in the presence of two witnesses.

LEWIS SHAFFER.
ALFRED W. SHAFFER.

Witnesses:

A. L. HOUGH,
ARTHUR JONES.