C. TIETIG.

TAMPING DEVICE.

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1,131,876.

Patented Mar. 16, 1915.

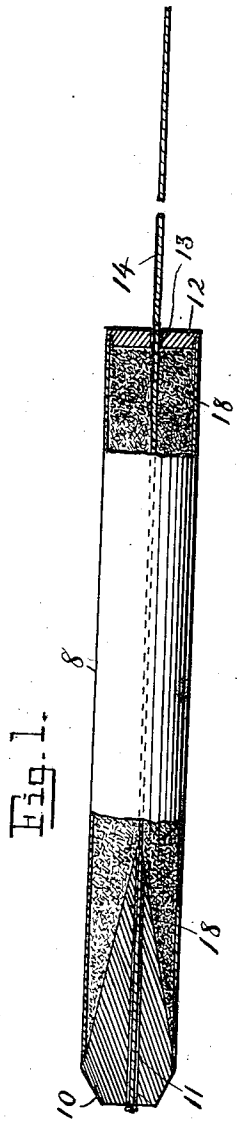


Fig. 1.

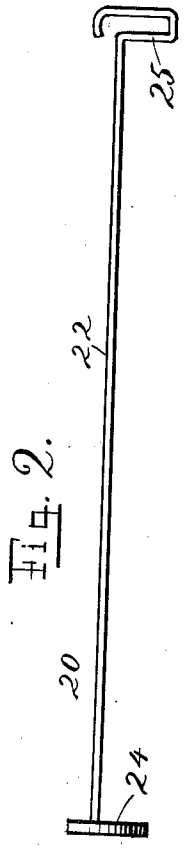


Fig. 2.

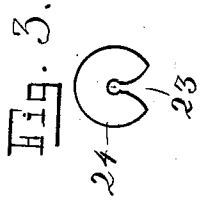


Fig. 3.

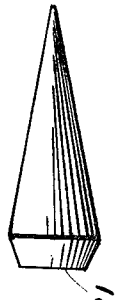


Fig. 4.



Fig. 5.

Witnesses

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UNITED STATES PATENT OFFICE.

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TAMPING DEVICE.

1,131,876. Specification of Letters Patent. Patented Mar. 16, 1915.

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To all whom it may concern:

Be it known that I, CHESTER TIETIG, a citizen of the United States, residing at No. 2402, Ohio avenue, Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Tamping Devices, of which the following is a specification.

This invention relates to devices for blasting out earth, coal, rock etc., but it is especially adapted for blasting out coal; and in this application it is shown to be applied to this use of it.

The object of this invention is to provide a means of tamping for explosive charges contained in bore holes. It is designed particularly to prevent the striking of the detonator, or the explosive proper, by the tamping stick, such as is used when clay or similar substance is the sole tamping material.

A secondary object of the invention is to provide a secure tamping such as will prevent the ignition of mine gases when used with "permissible" explosives, by preventing what is known as a "blow out shot." For this, and for other purposes, this invention may be used with clay behind it, as the auxiliary tamping material.

The invention is fully illustrated in the accompanying drawings, in which—

Figure 1, is a longitudinal view of a portion of the device partly in section. Fig. 2 is a longitudinal view of the holding implement employed. Fig. 3 is a plan view of the front face of the holding implement. Fig. 4 is a side elevation of a modification of the plug, and Fig. 5 is a face view of the plug, showing another modification.

The various features of the device are referred to by the numeral characters, similar numerals denoting corresponding parts in the several views.

The numeral 8 designates a tube, made of thin pasteboard or other easily worn material, and which has a diameter slightly less than the bore hole. A plug 10, tapering both ways, closes the lower end of the tube and is provided with a longitudinal opening 11. A rigid cap 12, covers the upper end of the tube 8 and has a central perforation 13.

A cord 14, secured to the lower end of the plug 10, passes through the plug, the tube and the cap.

The tube 8 is tightly packed with a filling 18, which is preferably composed of spun blast furnace slag, commonly known as mineral wool.

20 designates a cap retaining implement, comprising a stock 22, with a rigid disk 24, on one of its ends, and a handle 25, on its other end. This disk is centrally perforated for the passage of the cord 14, and has a slot, extending from its outer edge to its central perforation, to admit the cord. The diameter of this disk is slightly less than the diameter of the cap 12. For convenience in carrying, the stock may be jointed intermediate of its ends.

A modification of the plug is shown in Fig. 4, in which the forward taper of the plug, is cut off to form a truncated cone, and a further modification is shown in Fig. 5, in which the front face shown in Fig. 4, is dished, or recessed as at 26. The object of these modifications is to reduce the quantity of air space between the detonator and the end of the plug.

The operation of this invention is as follows; The tube with its plug, cap and cord, are assembled, and carefully adjusted upon the charge, which has been placed in the bottom of the boring. The holding implement 20, is then inserted with its disk 24, firmly held against the cap 12, of the tube 8. The cord is then pulled steadily back, drawing the plug into the tube, which breaks apart, and the filling tightly fills up the space between the tube and the wall of the boring. The holding implement is now withdrawn and if it is desired clay may be put into the boring and tamped tightly upon the cap, without fear of igniting the charge with the tamping stick.

Having now described the invention, what I claim is,—

1. In a tamping device a tube, filling material in said tube, a plug in the lower end of said tube, a perforated cap on the upper end of said tube, and a cord secured to said plug and extending through said plug, said tube and said cap.

2. In a tamping device an easily torn tube, non-combustible filling in said tube, a longitudinally perforated plug closing the lower end of said tube, a centrally perforated cap on the upper end of said tube, and a cord secured to said plug and passing through said plug said tube and said cap.

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

CHESTER TIETIG.

Witnesses:
BENNETT S. JONES,
G. DITTMAR.