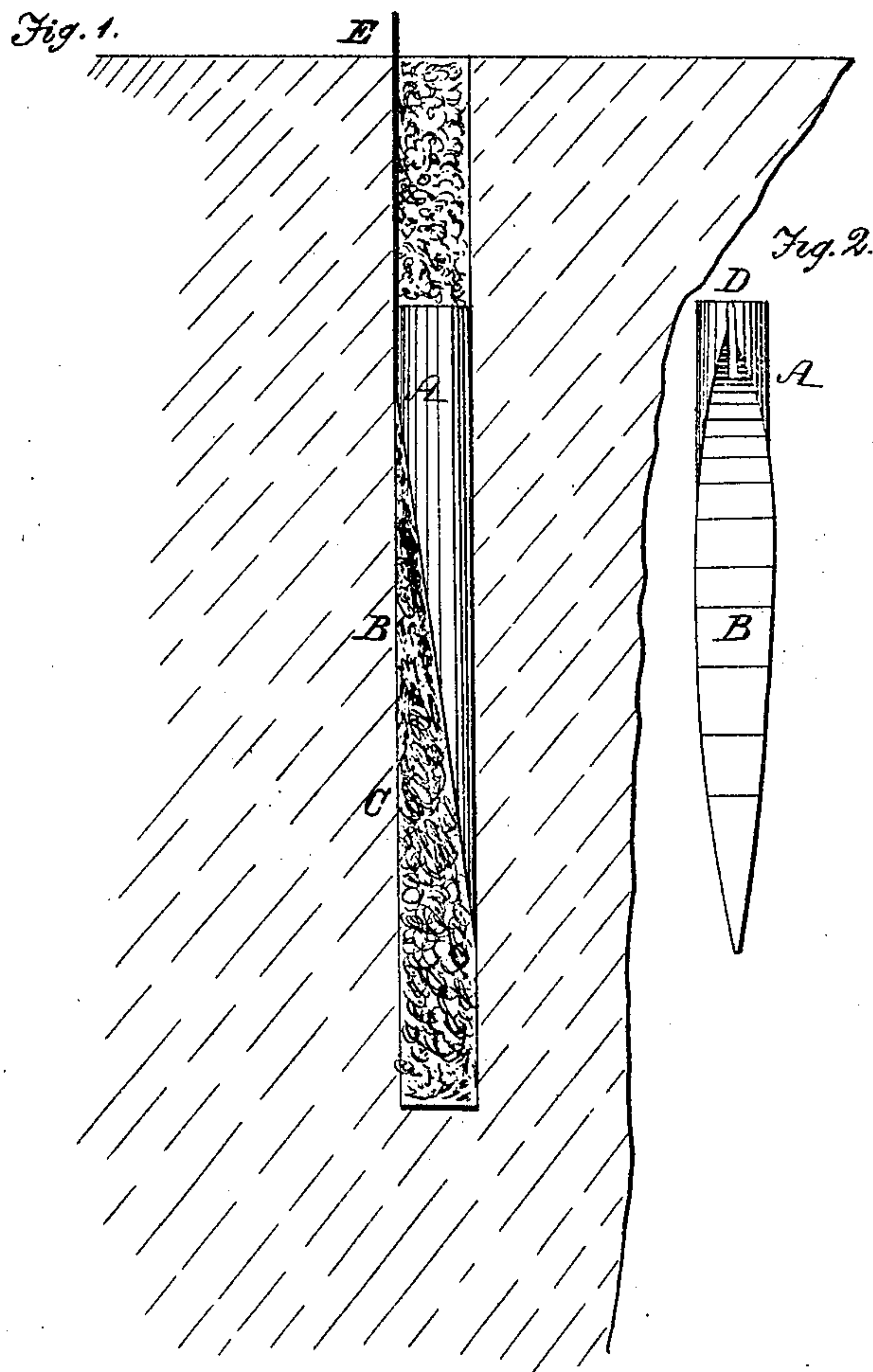


G. WERLICH.

Blasting Fuse.

No. 93,379.

Patented Aug. 3, 1869.



Witnesses.

O. S. S. S. S.
O. S. S. S. S.

Inventor
G. Werlich.

per M. M. M. M. M.

Attorneys.

United States Patent Office.

GUSTAVUS WERLICH, OF WATERTOWN, WISCONSIN.

Letters Patent No. 93,379, dated August 3, 1869.

IMPROVEMENT IN BLASTING-CHARGES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GUSTAVUS WERLICH, of Watertown, in the county of Jefferson, and State of Wisconsin, have invented a new and improved Blasting-Wedge; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

My invention relates to an improved device in use in blasting; and

It consists of a plug, having substantially the form of a half of a diagonally-cut cylinder, which is designed to be arranged in immediate contact with the powder or blasting-charge in the drill-hole, whereby the said charge will be caused to assume the same form, or nearly so, as the plug.

Figure 1 represents a sectional elevation of a drilled rock, showing the charge prepared with my improved wedge.

Figure 2 represents a face view of the wedge.

Similar letters of reference indicate corresponding parts.

I propose to provide a plug or wedge, A, shaped, at the upper end, to the size and form of the hole drilled for blasting, and, from or a short distance below the top, tapered from side to side, in the oblique form represented at B; and this wedge or plug, I insert in the hole, after placing therein the powder, so that the same

shall be caused to assume the same form as the plug C, pressing the point down by the side of the powder, as represented. I then arrange the fuse E, in groove D, along the side of the top of the plug, opening into the space occupied by the powder; or the fuse may be connected to and inserted with the plug. I then pack the hole, above the plug, with sand, brick-dust, and other matters, in the usual way.

By this arrangement, that part of the force of the explosion usually expended in an upward direction upon the packing, and which does not assist in separating the rock, is delivered laterally against the wall of the hole, as if a wedge were driven up alongside of the tapered face of the wedge, at B, thereby utilizing the whole force of the powder.

Having thus described my invention,

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

The plug A, shaped as described, and inserted in the drill-hole, with its bevelled or inclined side immediately in contact with the blasting-charge, whereby it is caused to assume the same form as the plug, a packing of sand or other suitable material being placed above the latter, as herein set forth and shown, for the purpose specified.

GUSTAVUS WERLICH.

Witnesses:

HAIMAR A. WEDEMAYER,
JOSEPH MILLER.