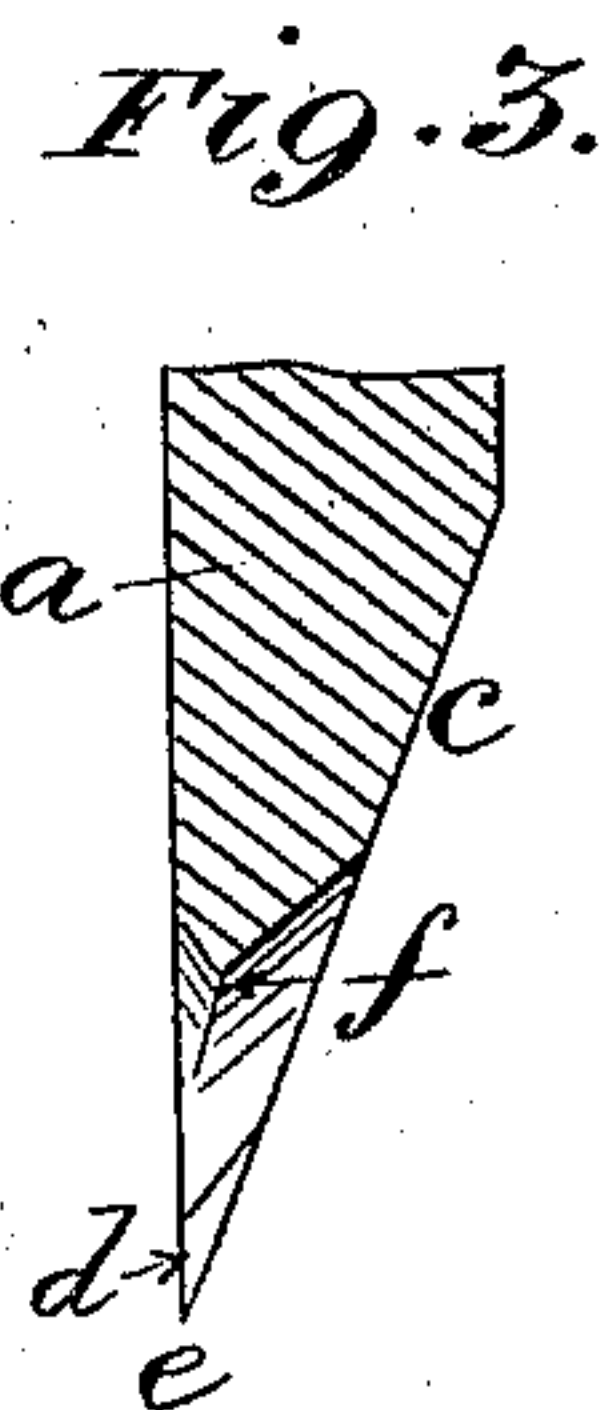
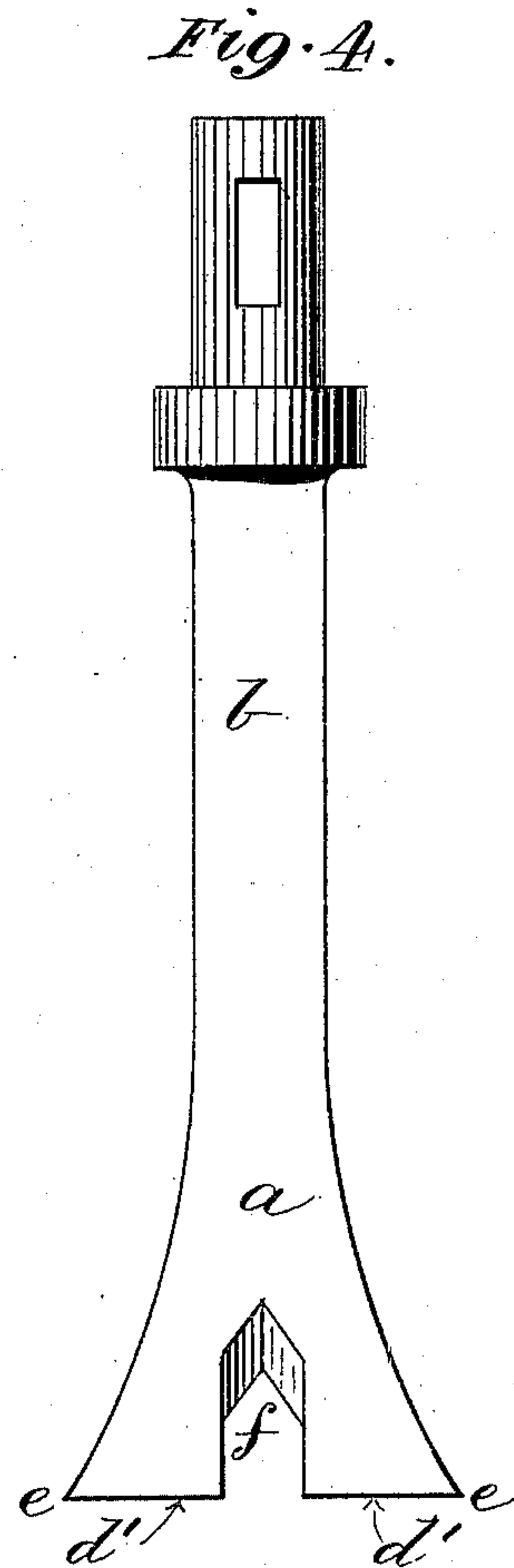
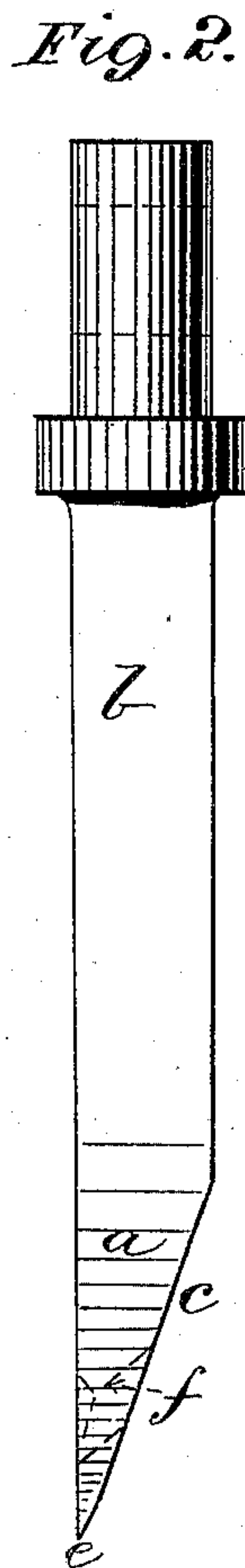
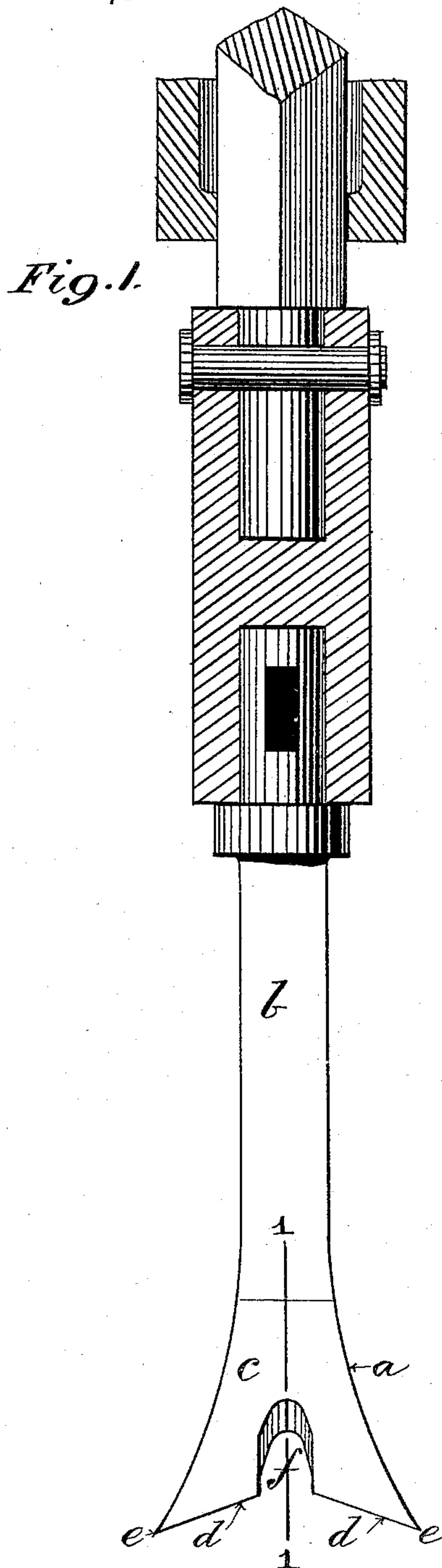


(No Model.)

G. A. BARTH.
TOOL FOR MINING PURPOSES.

No. 398,308.

Patented Feb. 19, 1889.



WITNESSES
S. L. Schrador
J. Hornsby

INVENTOR
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UNITED STATES PATENT OFFICE.

GUSTAV A. BARTH, OF ST. LOUIS, MISSOURI, ASSIGNOR TO PIERRE
CHOUTEAU, OF SAME PLACE.

TOOL FOR MINING PURPOSES.

SPECIFICATION forming part of Letters Patent No. 398,308, dated February 19, 1889.

Application filed July 23, 1888. Serial No. 280,693. (No model.)

To all whom it may concern:

Be it known that I, GUSTAV A. BARTH, a citizen of the United States, residing at the city of St. Louis, State of Missouri, have invented a certain new and useful Improvement in Chipping-Tools for Mining Purposes, of which the following is a specification.

My invention relates to an improved chipping or cutting tool applicable to a direct-acting steam, pneumatic, or other engine when used for mining operations, and has for its object to effect the disintegration of the coal, quartz, or other material to be operated upon, with greater ease and rapidity than with the chipping-tools at present used.

On the accompanying drawings, Figure 1 represents a longitudinal rear view of my improved chipping-tool as applied to the piston-rod of a direct-acting mining-engine (broken away;) Fig. 2, a side view of the tool taken at right angles to Fig. 1; Fig. 3, a section on line 1 1 in Fig. 1, and Fig. 4 a modification of my invention.

Like letters of reference denote like parts in all the figures.

The chipping or cutting end portion, *a*, of my improved tool is made wider across the cutting-face than the shank *b* and splayed on one side, *c*, only to some distance back from the cutting-edge *d*, which is flared or extended at the corners *e*, and splayed upward from the latter toward the center of the cutting-edge *d*, where it is formed for some distance backward with a slot, *f*, the inner or rear end of which is preferably *V* or *U* shaped, inclined principally upward toward the splayed side *c* of the tool, and partially upward at an opposite angle toward the face side of the tool, as shown more particularly in Fig. 3; or, if preferred, the cutting-edge *d'*, in lieu of sloping

centrally upward, as above described, may be horizontal, as shown in Fig. 4.

By this invention the corners *e*, combined with the central slot, *f*, of the tool, on striking the material effect the disintegration of the latter with greater precision and less resistance and jar to the machine than when using an ordinary-shaped chisel, as at present.

I am aware that fish-tail chisel tools splayed on one side are not new, and that a rectangular central slot in a double-splayed drill is not new, and do not herein claim the same.

I claim—

1. A chipping or cutting tool of chisel form, or having only one side splayed, said tool having a longitudinal slot with parallel sides, which slot divides the cutting-face of the tool centrally, substantially as and for the purposes described.

2. A chipping or cutting tool of chisel form, or having only one side splayed, said tool having a flared cutting-edge and a longitudinal slot with parallel sides, which slot divides the cutting-face of the tool centrally, substantially as and for the purposes described.

3. A chipping or cutting tool of chisel form, or having only one side splayed, said tool having a flared cutting-edge, and a longitudinal slot which divides the cutting-edge centrally, said slot having parallel sides and a cutting-edge at its base, substantially as and for the purposes described.

In testimony whereof I affix my signature, in presence of two witnesses, this 18th day of July, 1888.

GUSTAV A. BARTH.

Witnesses:

S. L. SCHRADER,
PAUL BAKEWELL.