

H. M. Hamilton,

Stone Pick,

N^o 67,875.

Patented Aug. 20, 1867.

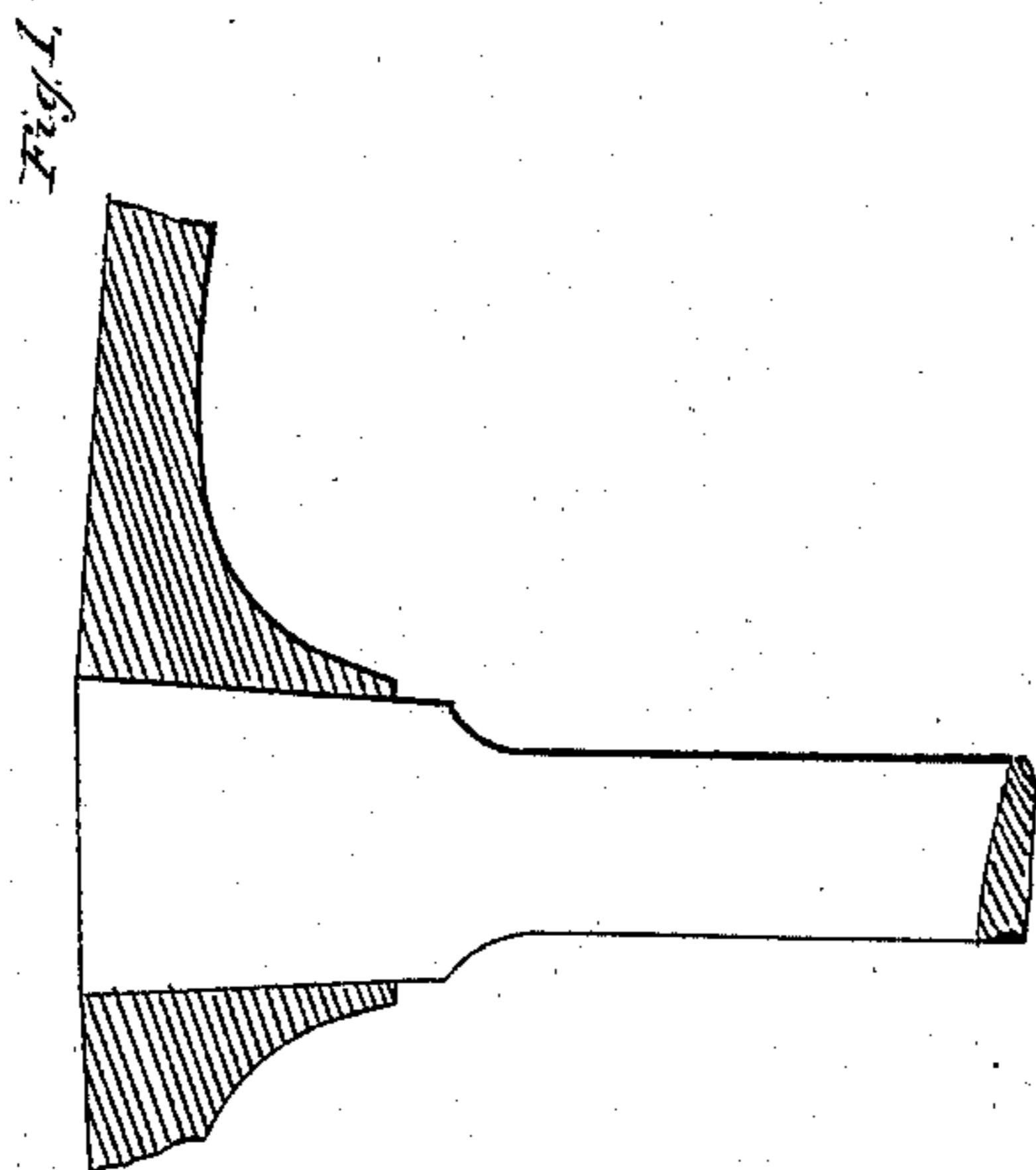
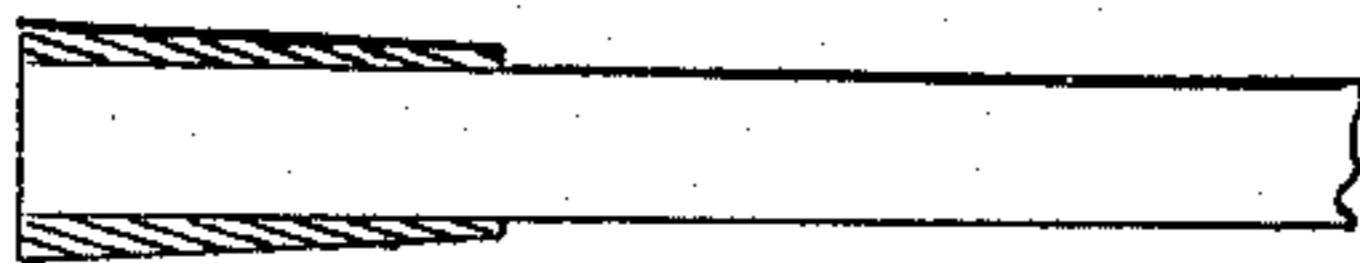
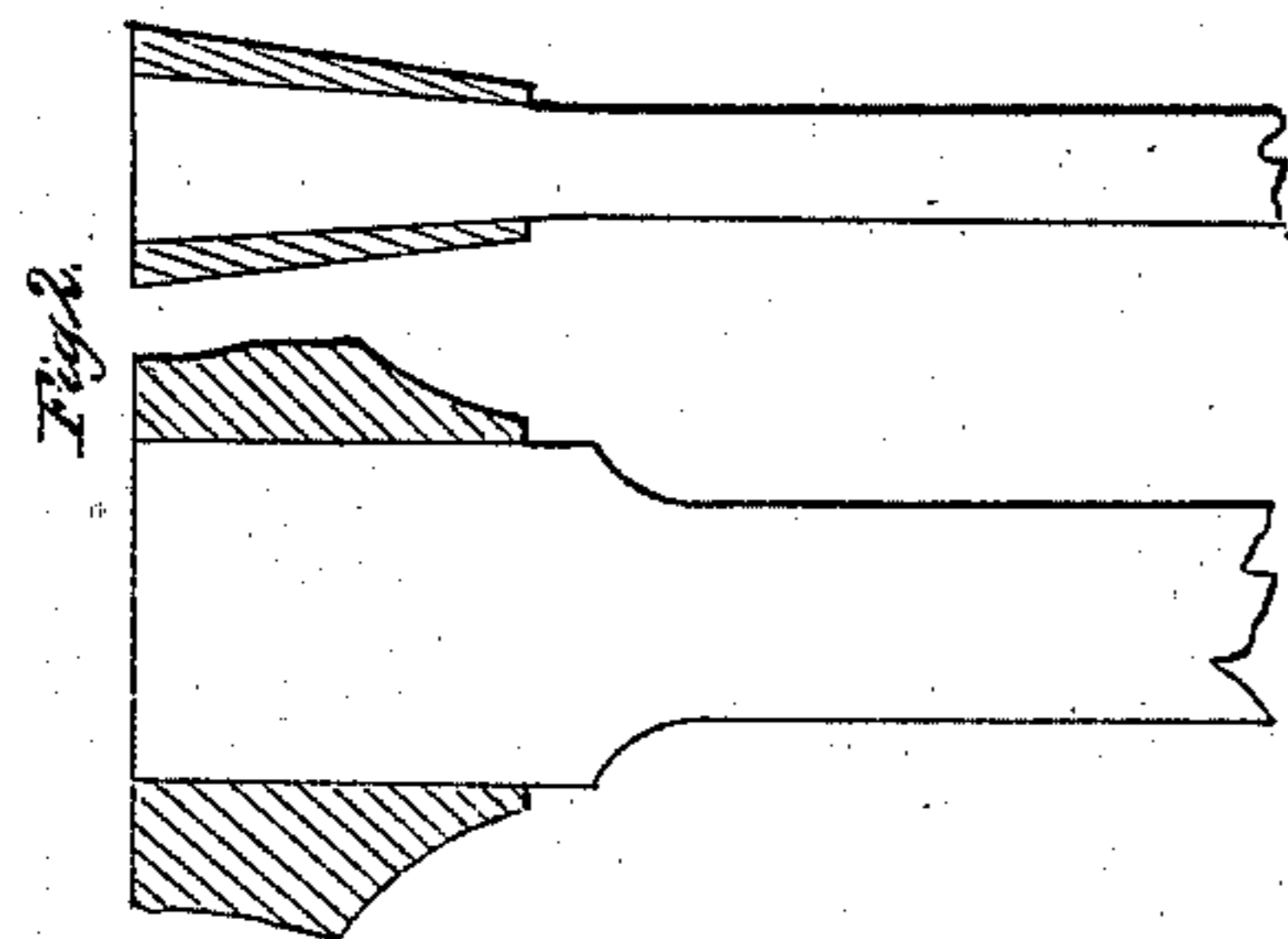
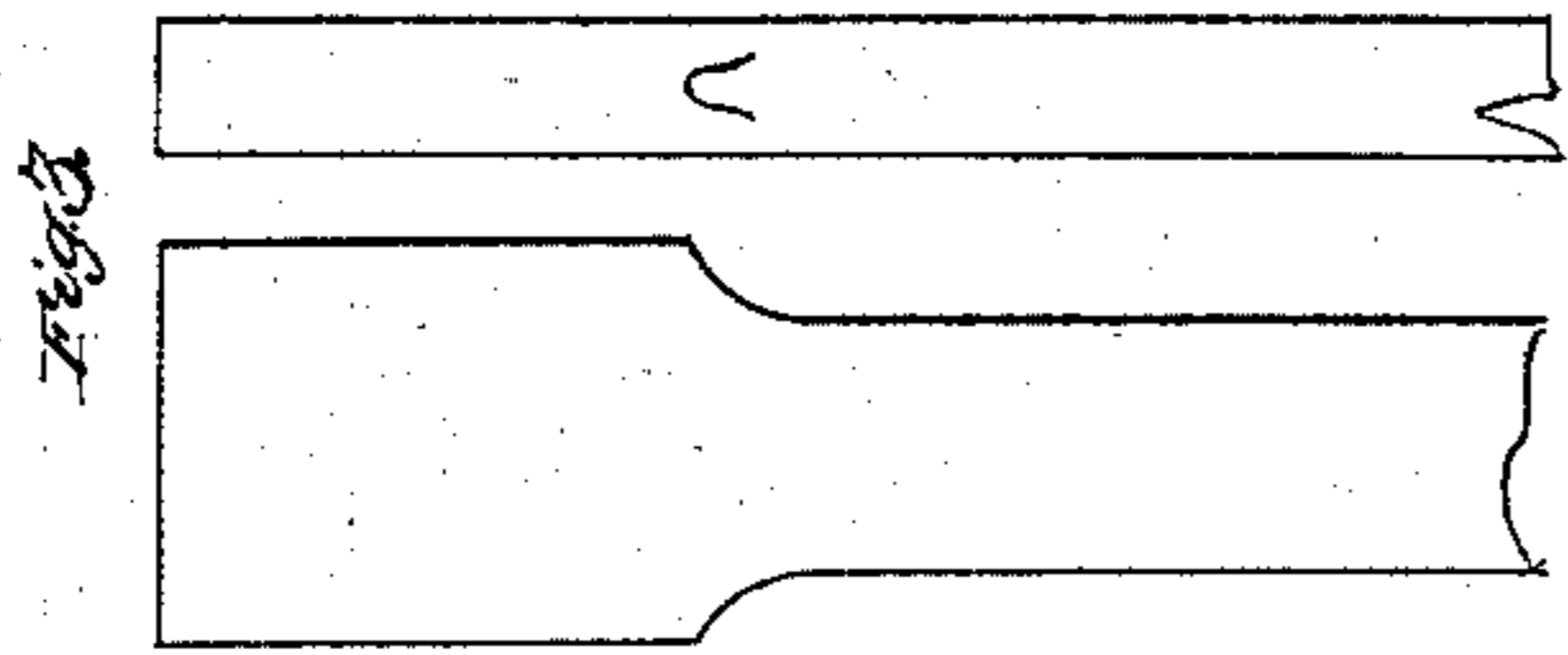


Fig. 6

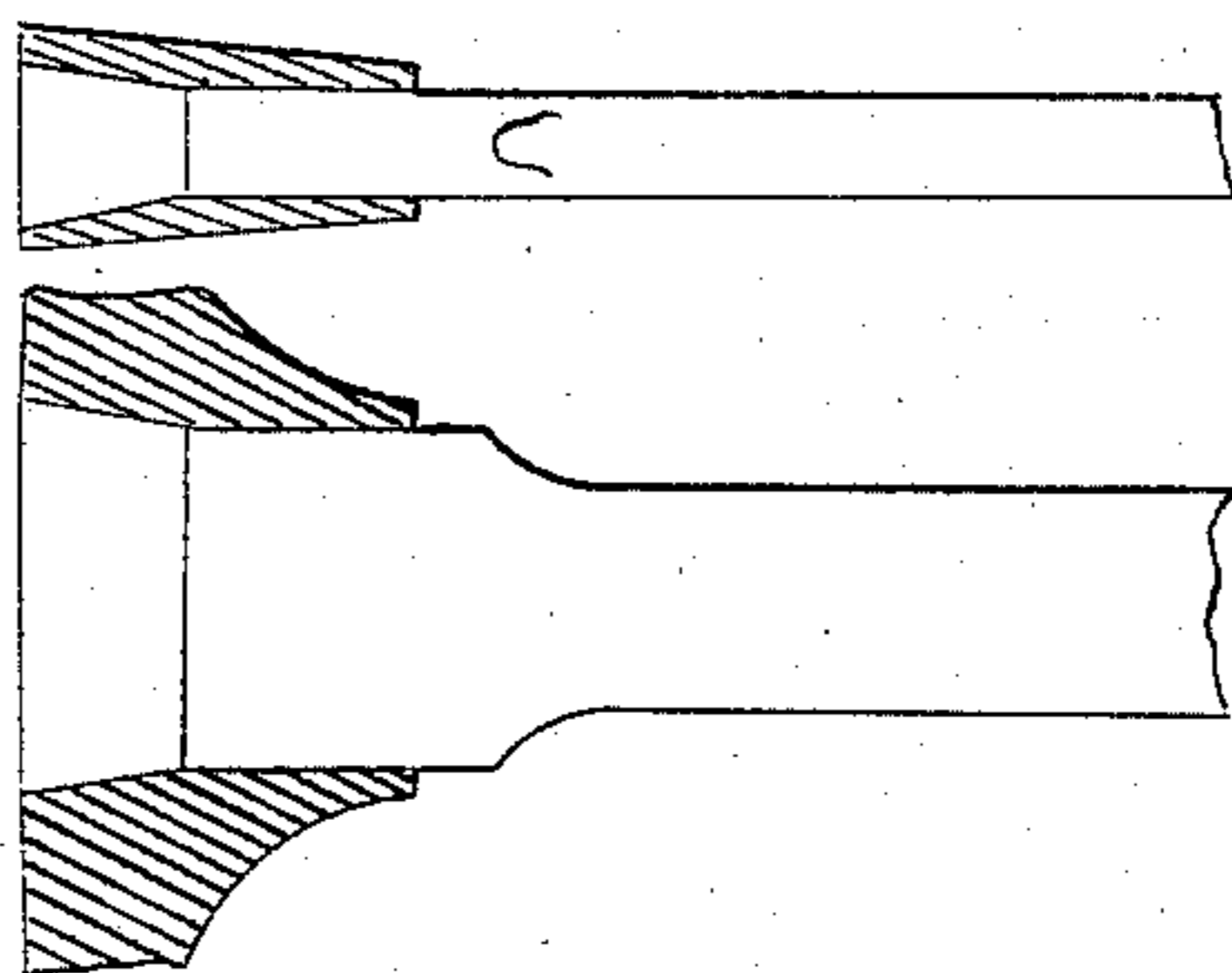


Fig. 5

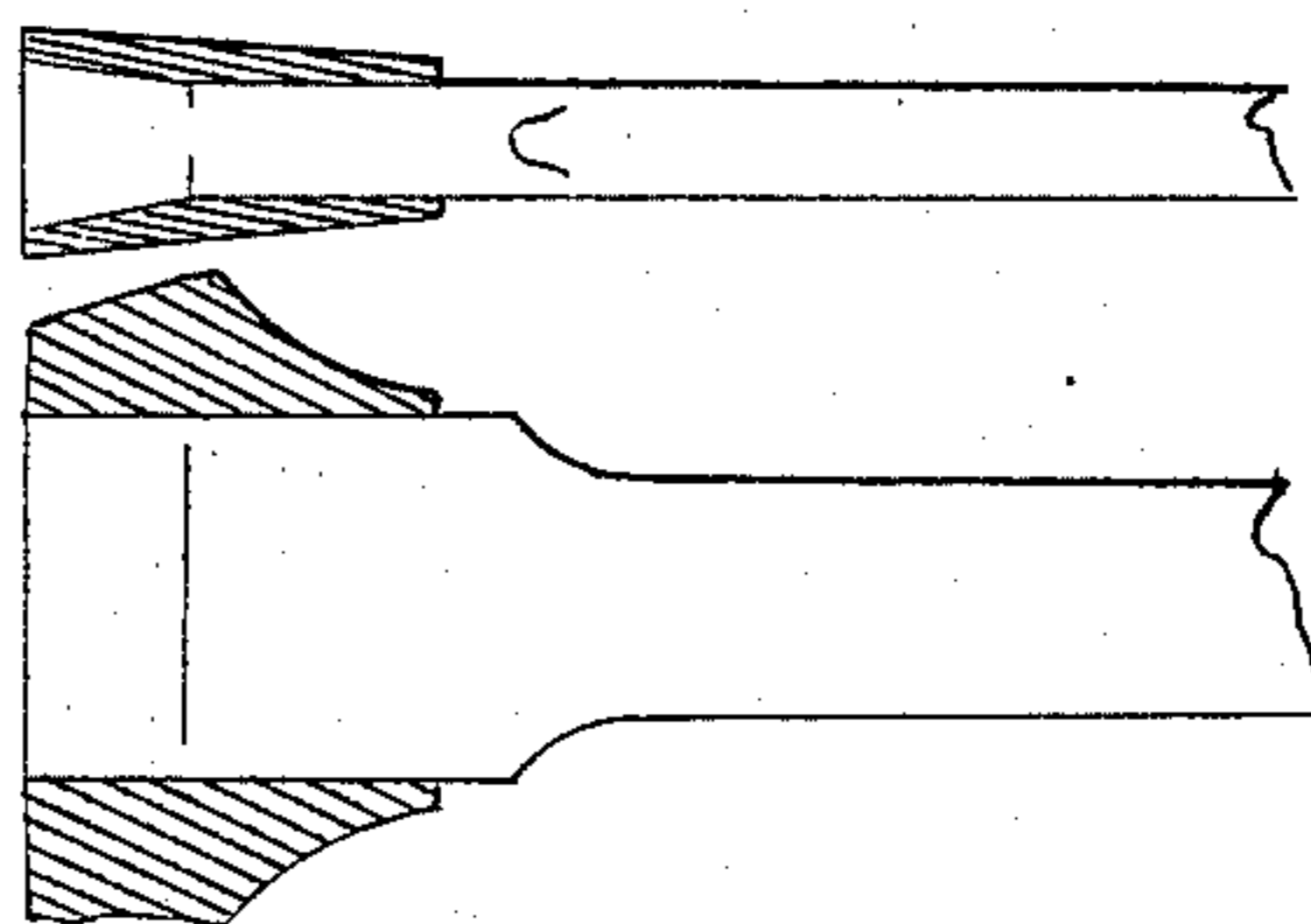
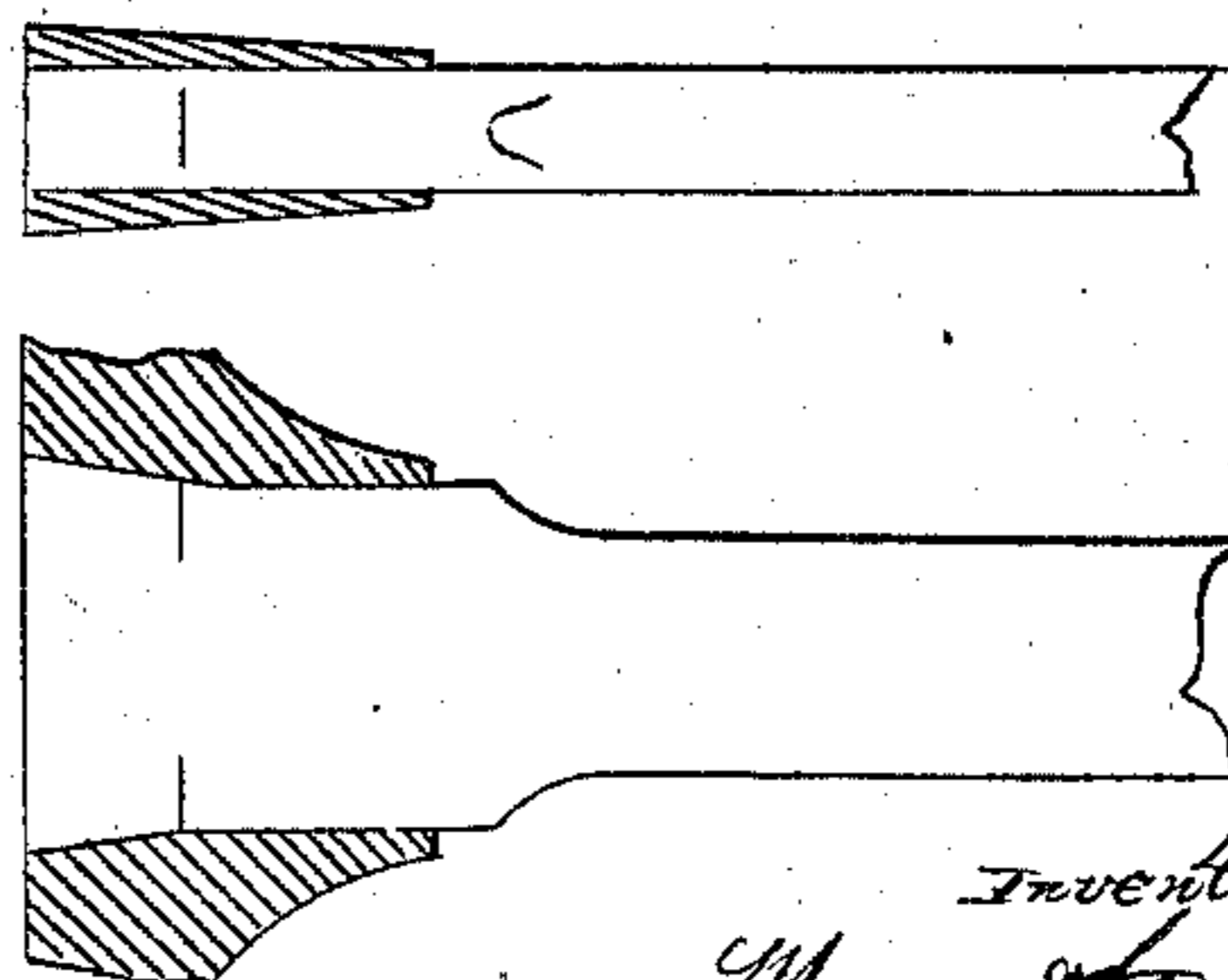


Fig. 4



Witnesses

Geo. W. Rothwell

John C. Kemm

Inventor

Wm. A. Allen

Attorney for

Henry M. Hamilton

By Oakes & Co.

United States Patent Office.

HENRY M. HAMILTON, OF NEW YORK, N. Y.

Letters Patent No. 67,875, dated August 20, 1867; antedated August 1, 1867.

IMPROVEMENT IN MINERS' PICK.

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, HENRY M. HAMILTON, of the city, county, and State of New York, have invented a new and improved Miners' Pick; and I do hereby declare the following to be a full, clear, and exact description of the same, sufficient to enable one skilled in the art to which the invention appertains to make use of it, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 shows two views of a pick, the eye of which has parallel sides and flaring ends.

Figure 2 shows the converse, the sides being flaring and the ends parallel.

Figure 3 is introduced as a diagram, showing the form of helve adapted to a pick whose sides are all parallel, that is, of equal size and even shape throughout its length.

Figure 4 shows views in which the sides of the eye are parallel throughout, and a part, say the upper one-third of the ends, is flaring.

Figure 5 shows an arrangement, the converse of fig. 4, the ends of the eye being parallel, and the sides for their upper one-third being flaring.

Figure 6 shows views in which the upper one-third of the eye is flaring both on the sides and ends, and the other being parallel portions of the walls.

This pick has an eye in which the sides are partly parallel and partly flaring. The parallel opposite portions of the eye adhere to the helve and give it stability to resist jarring loose, while the flaring portion becomes jammed in the eye and sets the pick firmly without wedges. A definite object is accomplished by the parallel portions, and by the flaring portions of the eye. By the parallelism a certain stability is gained which prevents the helve becoming loosened so readily as when the head of the helve is flaring all round, and by giving a flare to a portion of it a certain decisive tightness is gained which obviates the necessity of wedges. In the ordinary construction of miners' picks the eye is made flaring, so that the bulging head of the helve becomes jammed therein, but it is readily started loose unless wedged, and a start of a sixteenth of an inch makes it entirely loose and unfits it for its duty.

When the eye of the pick is made as represented in fig. 3, with all the sides parallel, unless the helve exactly fits it and fully fills it, the pick is not secure without wedging, though it is not so easily jarred loose as a helve in which the eye is made flaring all round. It is the purpose of this invention to unite both advantages by making a portion of the eye with parallel sides or walls, and a portion flaring, and the figs. 1, 2, 4, 5, 6 are illustrations of different modes of accomplishing this result, the distinguishing differences having already been stated.

The eye of the pick may be round or elliptical, or a modification of the latter, in which the section shows two bounding curves. It is my object to construct the eye so that the handle may be readily attached and detached by force applied in the direction of the length of the handle, but retain its place with all possible stability when in use. The conditions of its use as a mining tool require that the tool shall be unhelved several times a day for resharpener, and the use of wedges to spread its end, as commonly practised, soon destroys it. Handles are valuable and not readily replaced in many mining sections, and I have constructed the eye so that it admits of a handle whose sides are partly parallel, to give the pick security against jarring loose and carrying their own wedges by giving some portion of the handle in the eye a flaring shape, which binds against the sides of the eye of counterpart form.

Having described my invention, what I claim therein as new, and desire to secure by Letters Patent, is—

A pick or mattock constructed with an eye open at each end, and whose sides are partly parallel and partly flaring, and adapted to the introduction of a handle whose sides are of counterpart form, and whose flaring sides are adapted to wedge in said eye, substantially as described and represented.

To the above specification of my improved miners' pick I have signed my hand this 28th of December, 1866.

H. M. HAMILTON.

Witnesses:

SOLON C. KEMON,

GEO. W. ROTHWELL.