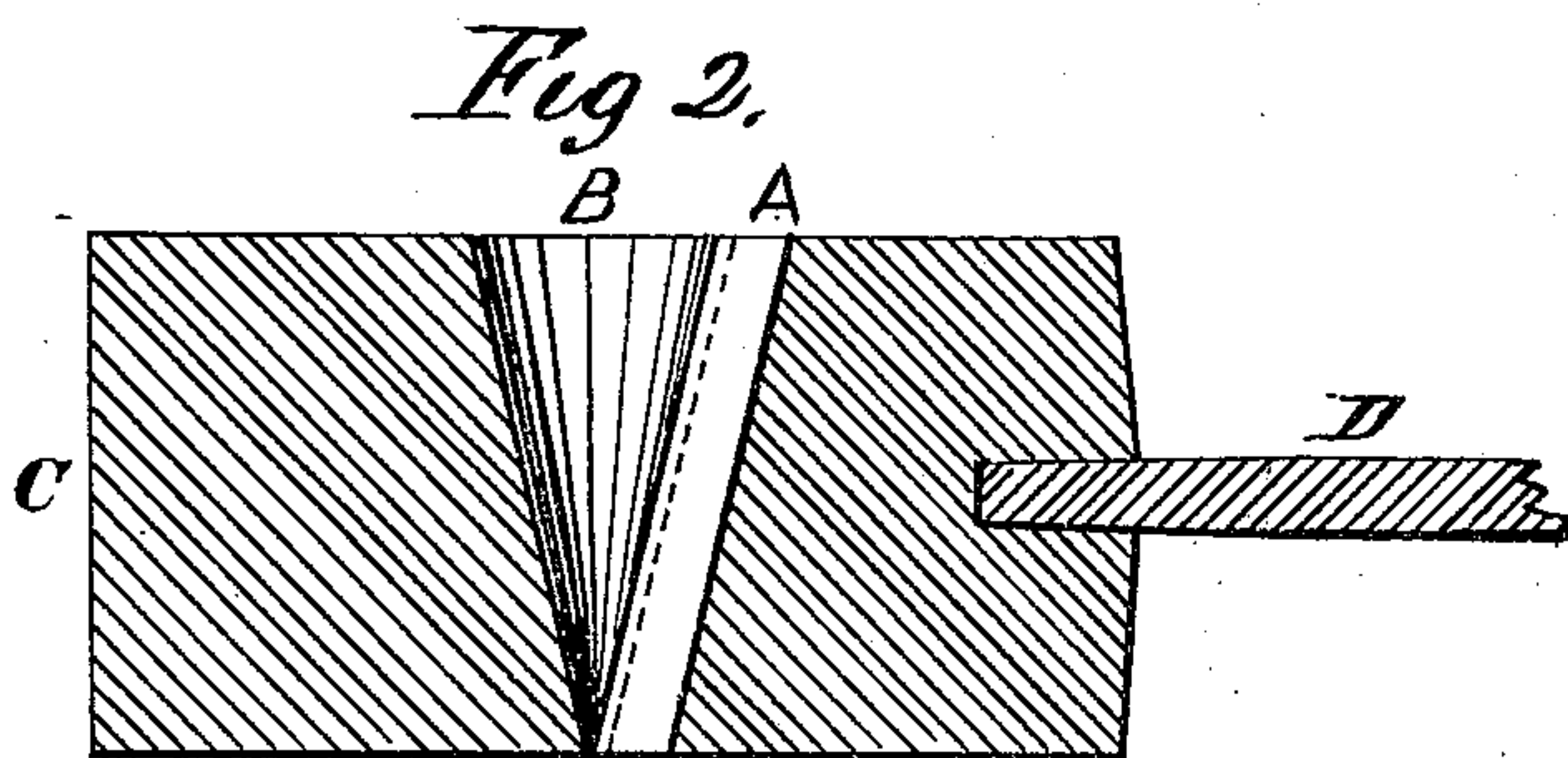
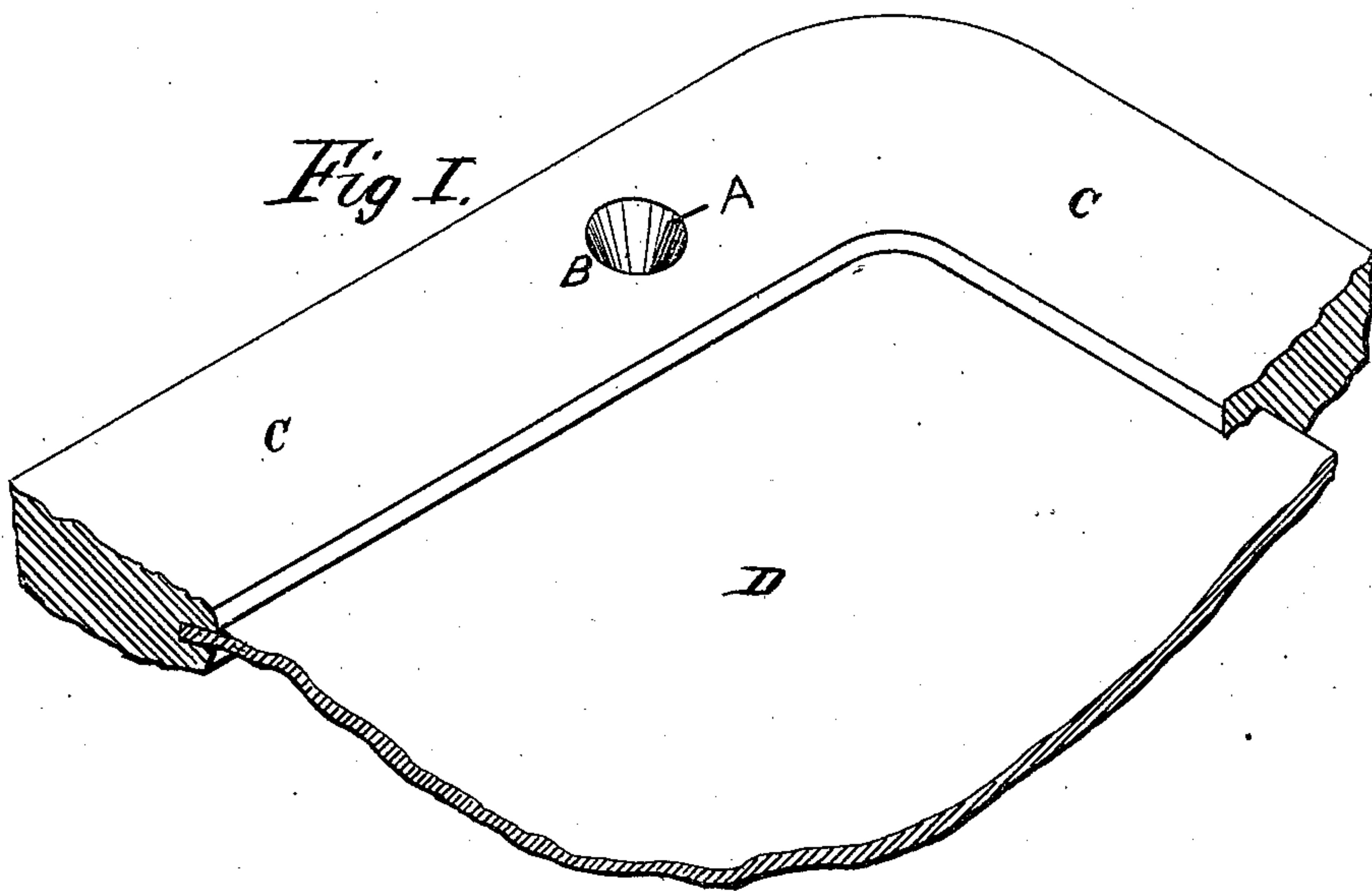


F. S. ALLEN.
SLATE-FRAME ATTACHMENTS.

No. 194,883.

Patented Sept. 4, 1877.



ATTEST:

Chas H. Campbell
J. H. Wood.

INVENTOR:

Fredman S. Allen

PER, *C. M. Palky*

$$A\tau\tau^{\dagger}\gamma.$$

UNITED STATES PATENT OFFICE.

FREEMAN S. ALLEN, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR
TO ISAAC H. WOOD, OF LITTLE FALLS, NEW YORK.

IMPROVEMENT IN SLATE-FRAME ATTACHMENTS.

Specification forming part of Letters Patent No. **194,883**, dated September 4, 1877; application filed
June 5, 1877.

To all whom it may concern:

Be it known that I, FREEMAN S. ALLEN, of Washington, District of Columbia, have invented an Improvement in Slates; and I do hereby declare the following to be a full and correct description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of part of a slate and frame containing my improvement, and Fig. 2 is a vertical section of the frame, showing the pencil-sharpener.

The object of my invention is to improve a slate, such as is used in schools, by having within easy access a pencil-sharpener, which improvement will not materially increase the cost of the slate, but greatly increase its utility.

My invention consists in boring or reaming a conical hole in a slate-frame, and inserting, preferably in line with the grain of the wood of the frame, a steel blade or knife, in such a position that that portion of the blade which projects will be at right angles with the side of the conical hole in the slate-frame.

In the drawings, C represents the frame, and D the slate, constructed in the ordinary manner. In the frame C, at any desirable place, is bored or reamed the conical hole B, having its greater side or base on one side, and its smaller end or apex at the other side, of the frame. The apex is sufficiently large to receive the point of the pencil-sharpener.

The operation of my invention is as follows: A slate having been finished in the usual manner, and a conical hole having been made in its side, and a blade inserted in line with the grain of the wood, a pencil is inserted in the greater end of the conical hole, and as the pencil is rotated the edge of the blade scrapes a portion of the pencil off, until the end of the

pencil has assumed the shape of the conical hole, and is ready for use.

The advantages of my invention are that no separate conical metal or other case is necessary to guide and shape the pencil, as the hole in the frame is a sufficient guide, and, secondly, as the pencil, when sharpened, is to be used on a slate, it is clear that in the frame of the slate is the most convenient place for the sharpener to be located; thirdly, the improvement can be applied at a trifling cost to slates already made, and greatly increase their usefulness, and augment their sale.

It is clear that my pencil-sharpener may be applied to a desk or other article, or to a section of a slate-frame. It is equally clear that the blade may be inserted across the grain of the wood.

I am aware that pencil-sharpeners have been inserted in slate-frames where a metal casing was placed in the conical hole; but I am not aware that the knife has ever before been inserted directly in the wood.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

A slate the frame of which is provided with a conical hole, with a blade inserted in the walls of said hole, and entering the wood of the frame, substantially as and for the purpose set forth.

The above specification of my said invention signed and witnessed at Washington this 5th day of June, A. D. 1877.

FREEMAN S. ALLEN.

Witnesses:

THOMAS C. CONNOLLY,
C. M. PARKS.