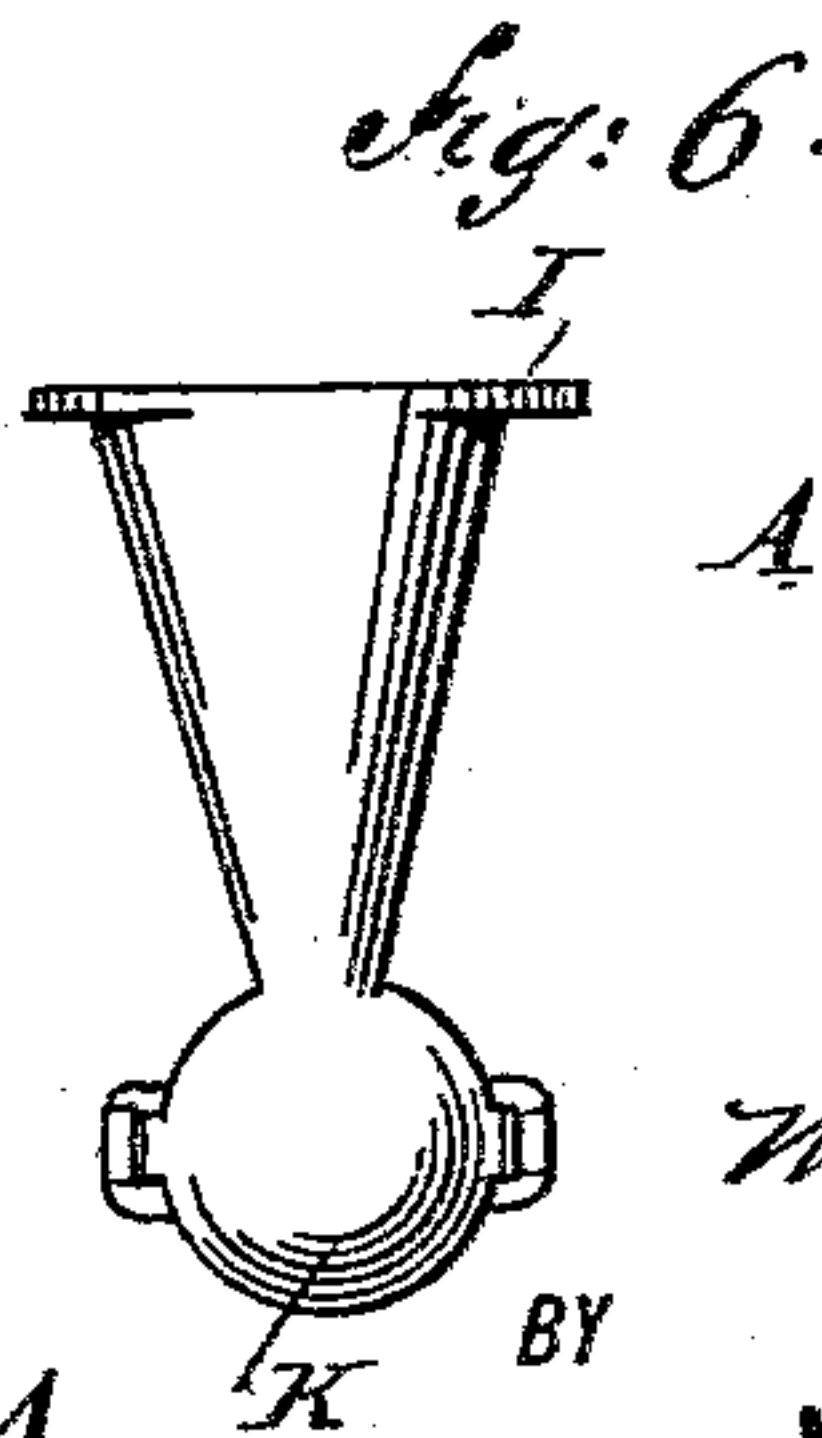
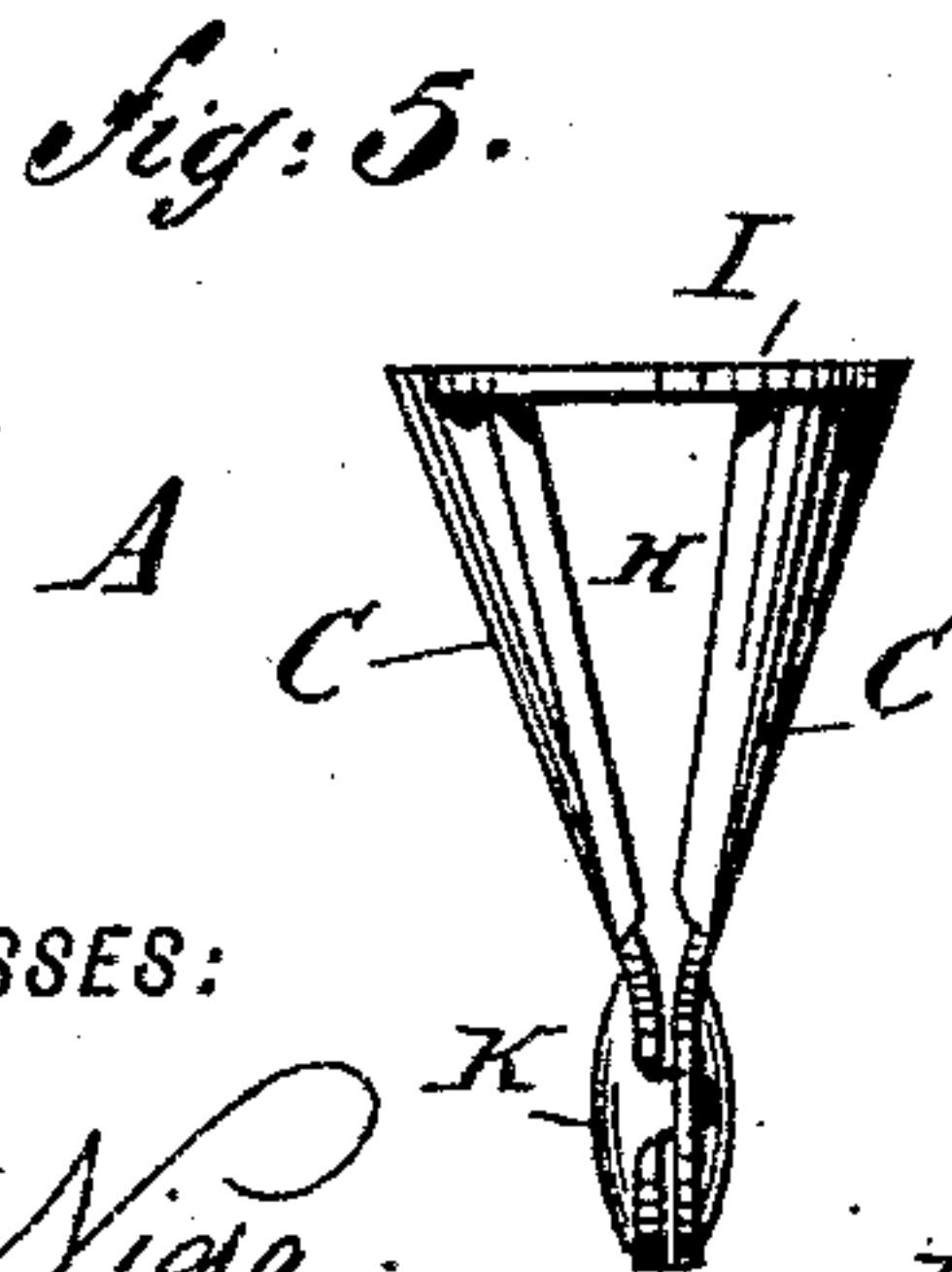
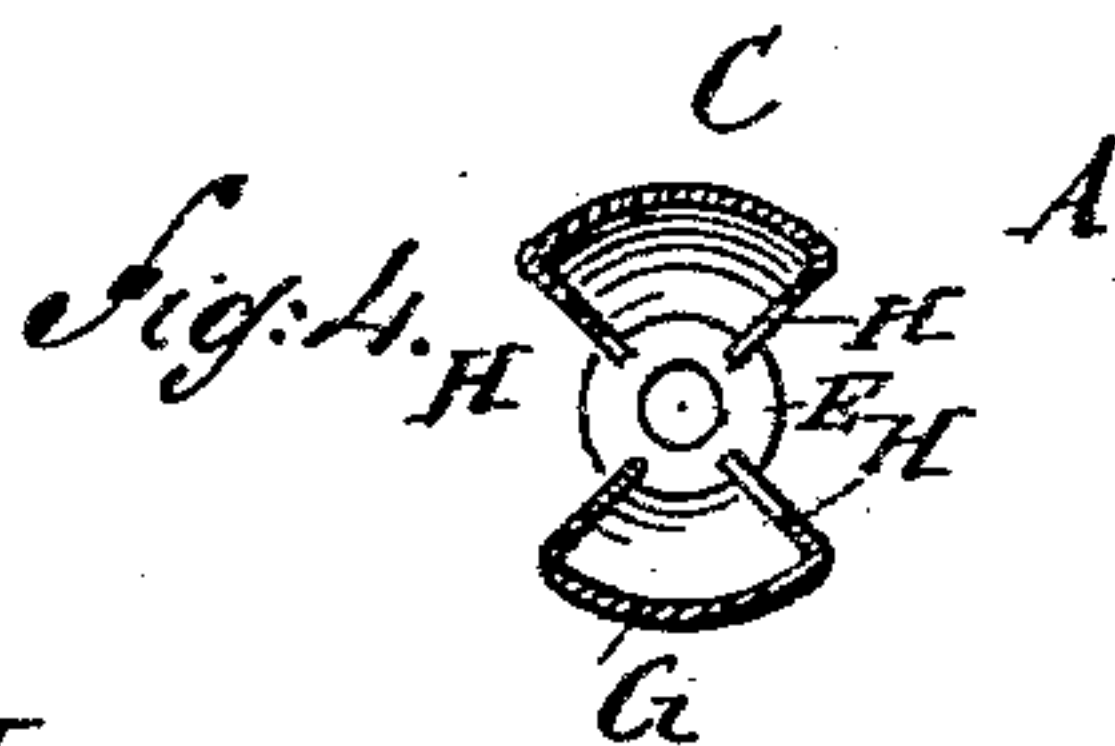
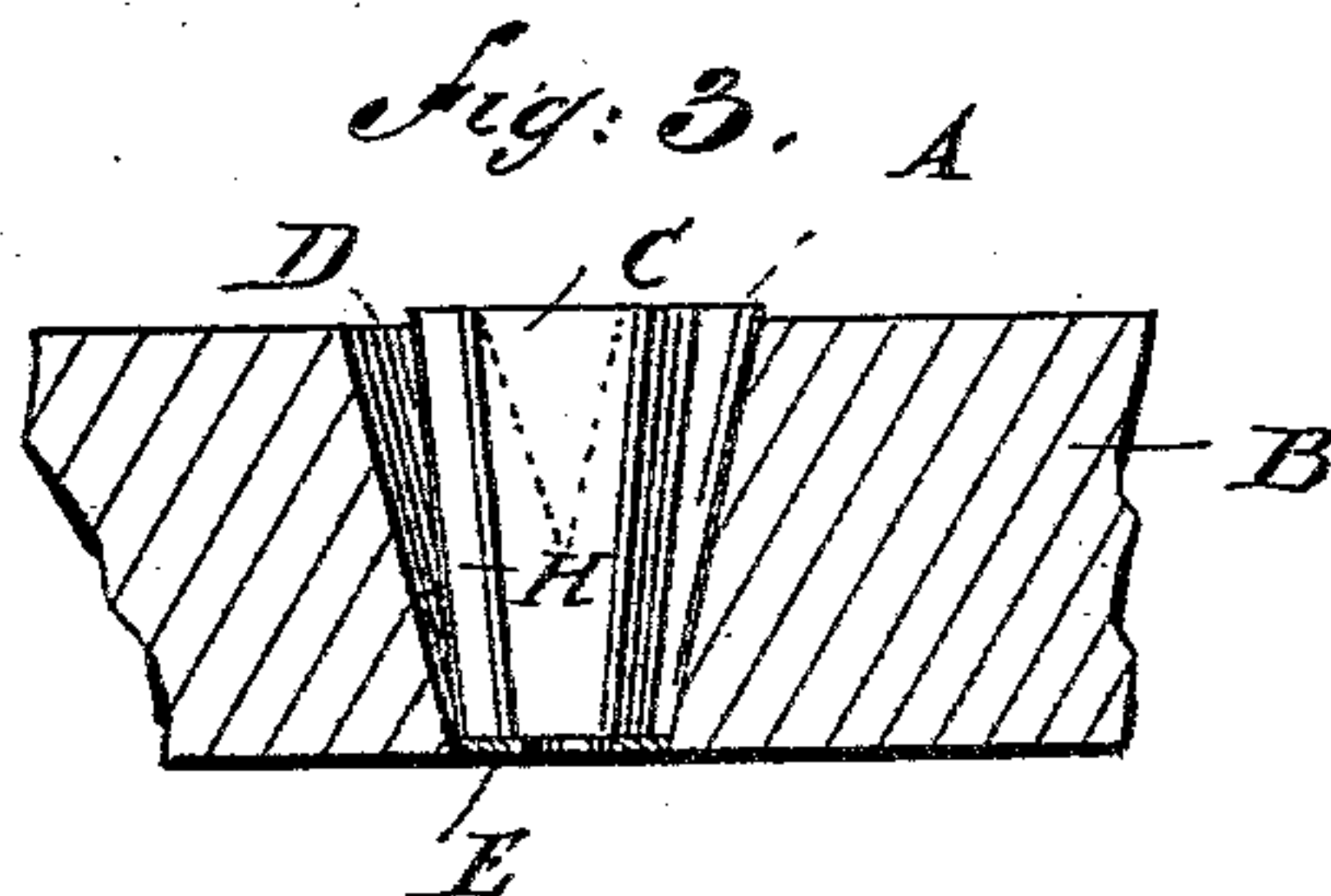
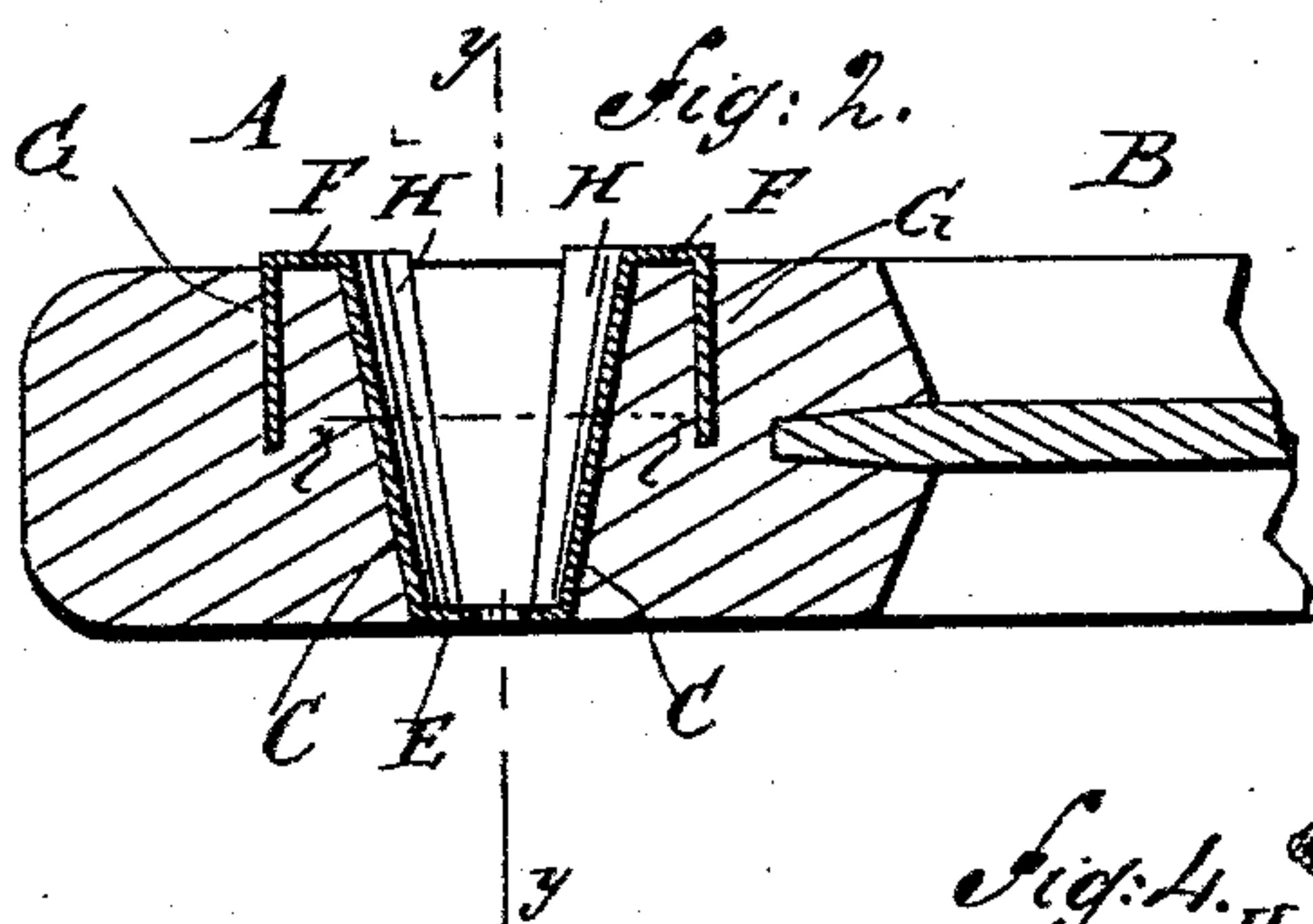
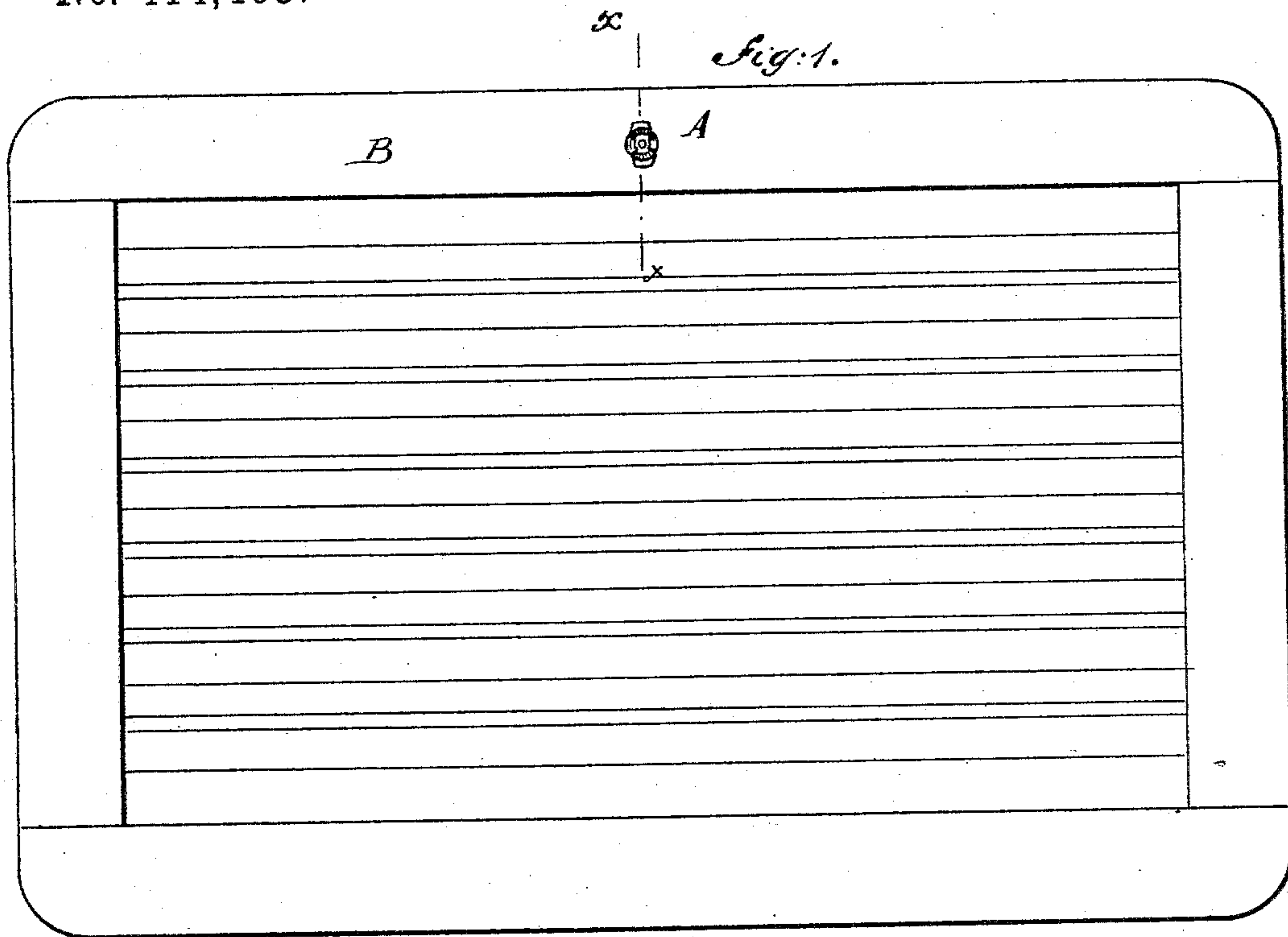


(No Model.)

M. W. WALKER.  
PENCIL SHARPENER.

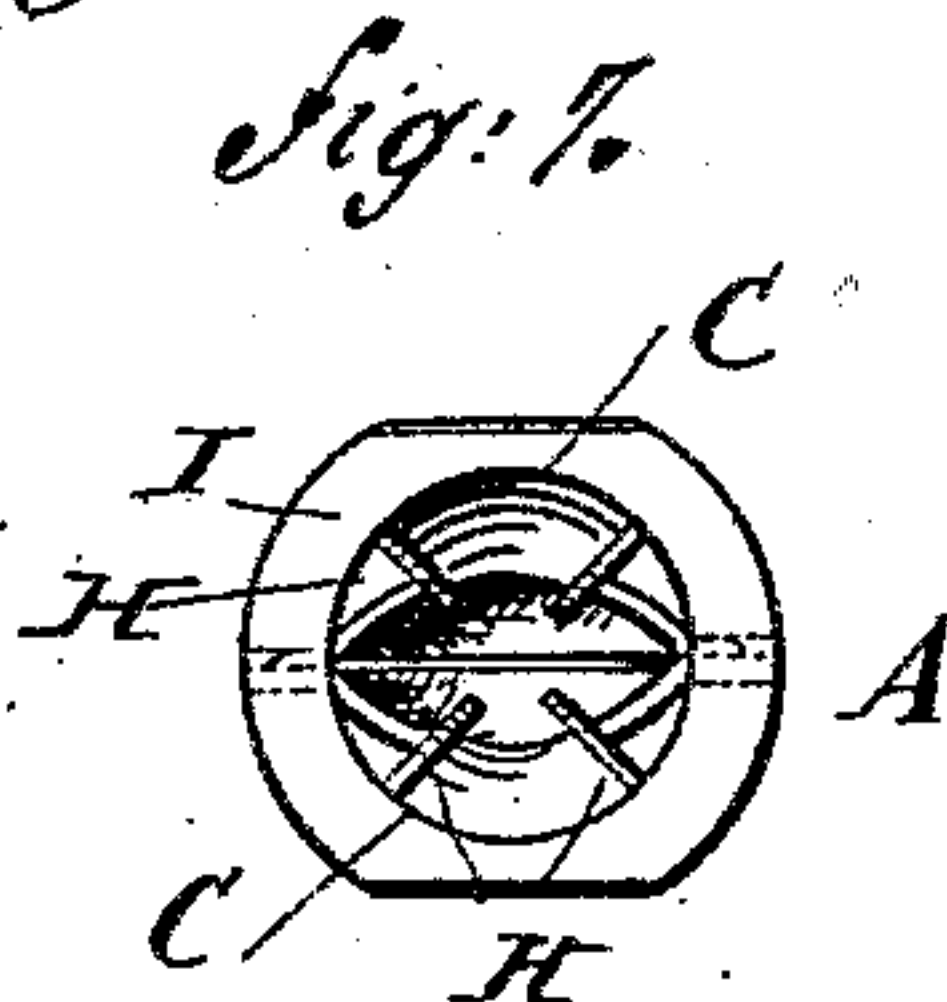
No. 414,463.

Patented Nov. 5, 1889.



WITNESSES:

Chas. Nida  
C. Bedgwick



INVENTOR:

M. W. Walker

ATTORNEYS.



# UNITED STATES PATENT OFFICE.

MARTIN W. WALKER, OF SING SING, NEW YORK.

## PENCIL-SHARPENER.

SPECIFICATION forming part of Letters Patent No. 414,463, dated November 5, 1889.

Application filed July 3, 1888. Serial No. 278,955. (No model.)

*To all whom it may concern:*

Be it known that I, MARTIN W. WALKER, of Sing Sing, in the county of Westchester and State of New York, have invented a new and Improved Pencil-Sharpener, of which the following is a full, clear, and exact description.

The object of the invention is provide a new and improved pencil-sharpener which is very simple and durable in construction and easily fastened to a slate.

The invention consists of a pencil-sharpener provided with two inclined sides, each having its side edge turned inward radially.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the improvement as applied to a slate. Fig. 2 is an enlarged sectional elevation of the same on line *x x* of Fig. 1. Fig. 3 is a like view of the same on the line *y y* of Fig. 2. Fig. 4 is a sectional plan view of the same on the line *z z* of Fig. 2. Fig. 5 is a sectional elevation of a modified form of the improvement. Fig. 6 is a front elevation of the same, and Fig. 7 is a plan view of the same.

The improved pencil-sharpener A is preferably secured to one side of the frame of a slate B, as is plainly shown in Fig. 1. The improvement is provided with two sides C C, inclined toward each other and fitted into a conical aperture D, formed in the side of the frame of the slate B. The lower ends of the sides C C are connected with each other by a perforated bottom plate E, and from the upper edge of each side C extends horizontally a flange F, continuing into a downwardly-extending point G, adapted to be driven into the side of the slate-frame, as is plainly shown in Fig. 2. The length of each side C corresponds to the thickness of the respective side of the slate-frame, so that the bottom plate E of the sharpener is flush with the under side of the slate-frame, and the

flanges F rest on top of the slate-frame and are almost flush with the same, as is shown in the drawings. Each of the sides C has its side edges turned radially inward a suitable distance to form the cutting-edges H H. The entire device is preferably made of sheet metal, so that the cutting-edges H are very thin, and when a slate-pencil is to be sharpened it is inserted into the open end, pressed downward against the cutting-edges H, and turned so that the cutting-edges sharpen the pencil. The part of the pencil ground off falls downward and through the apertured bottom plate E.

Instead of attaching the device to the slate, I may form the sharpener in such a manner that it can be held in the hand, as shown in Figs. 5, 6, and 7. In this case I secure to the upper ends of the sides C an apertured top plate I, and I dispense with the apertured bottom plate E. The lower ends of the sides C are extended downward and connected with each other at K in any suitable manner. The flanges F and the points G are also dispensed with.

The pencil to be sharpened is introduced through the apertured top plate I, so as to come in contact with the cutting-edges H, after which the pencil is turned so as to grind off on the cutting-edges. As the latter are inclined toward each other, the pencil is sharpened conically, the pointed end passing through the apertured bottom plate E or into the extended part K, as shown in Figs. 2 and 5.

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

A pencil-sharpener comprising two sides inclined toward each other, cutting-edges formed radially and inward on the said sides, an apertured bottom plate connecting the lower ends of the said inclined sides, and downwardly-extending points secured to the upper ends of the sides, so as to fasten the device to the frame of a slate, substantially as shown and described.

MARTIN W. WALKER.

Witnesses:

JAMES W. MYERS,

WILLIAM F. MEZGER, Jr.