

(No Model.)

A. C. McKINNON.

PENCIL SHARPENER.

No. 359,026.

Patented Mar. 8, 1887.

Fig. 3.

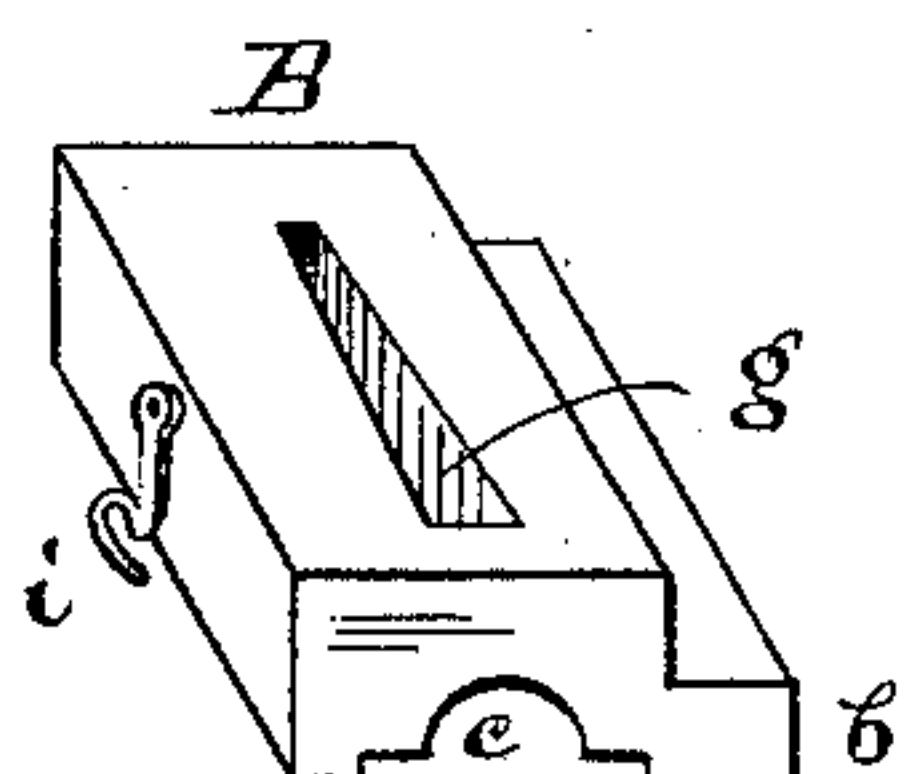


Fig. 2.

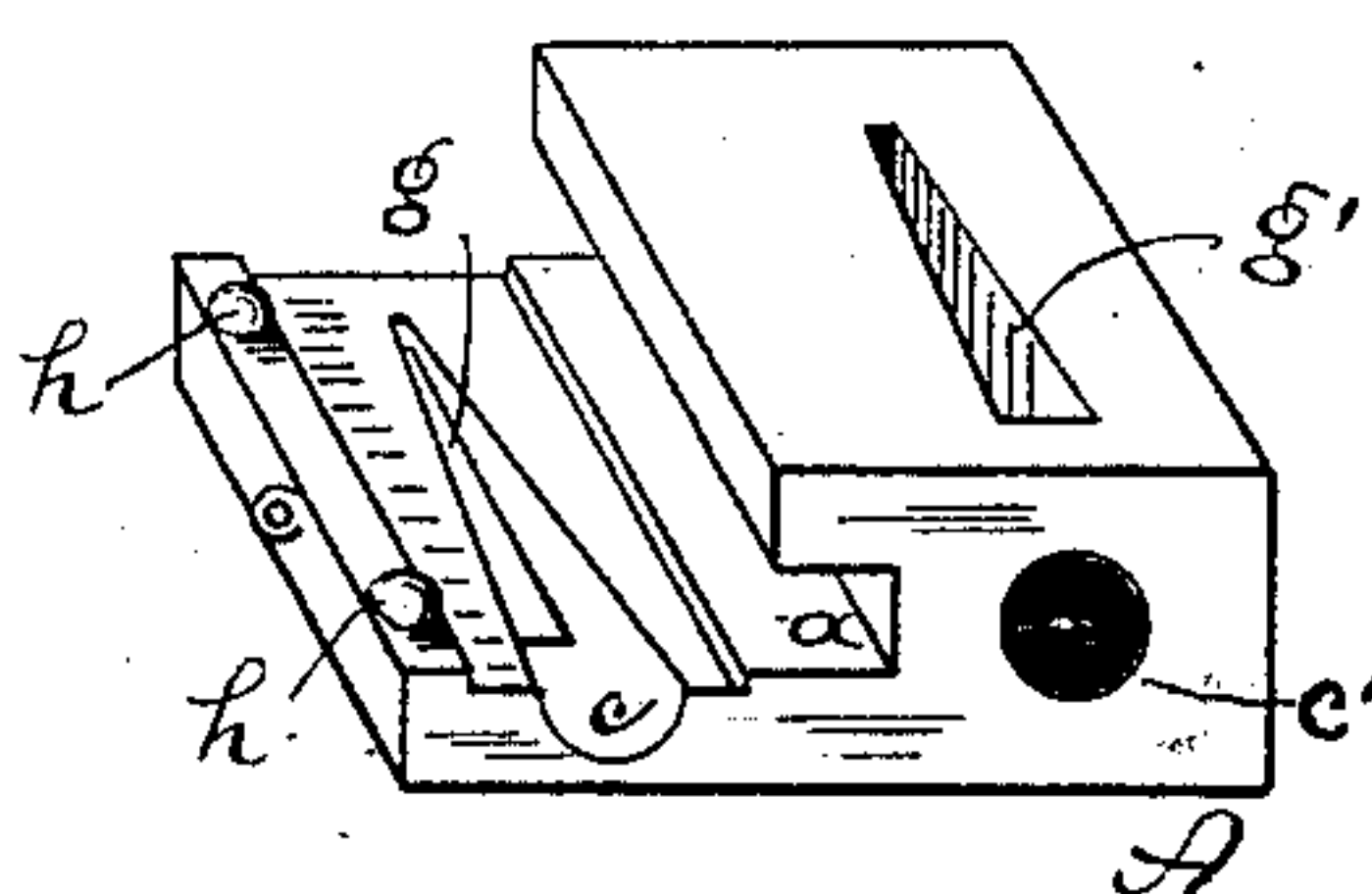


Fig. 4.

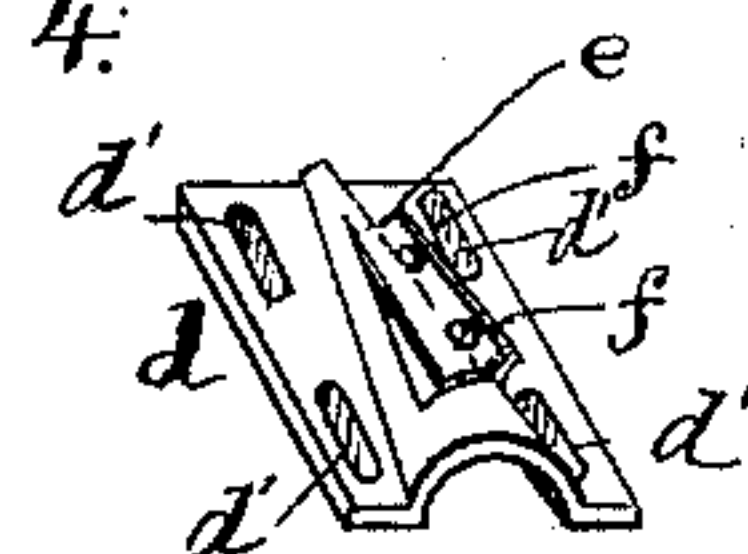


Fig. 5.

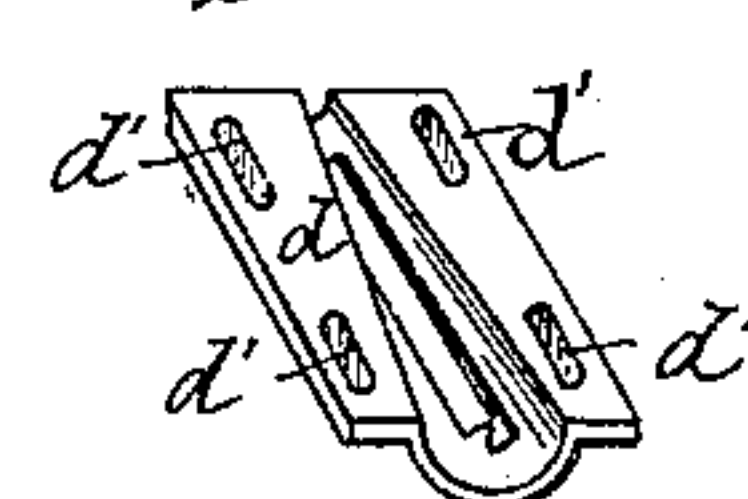
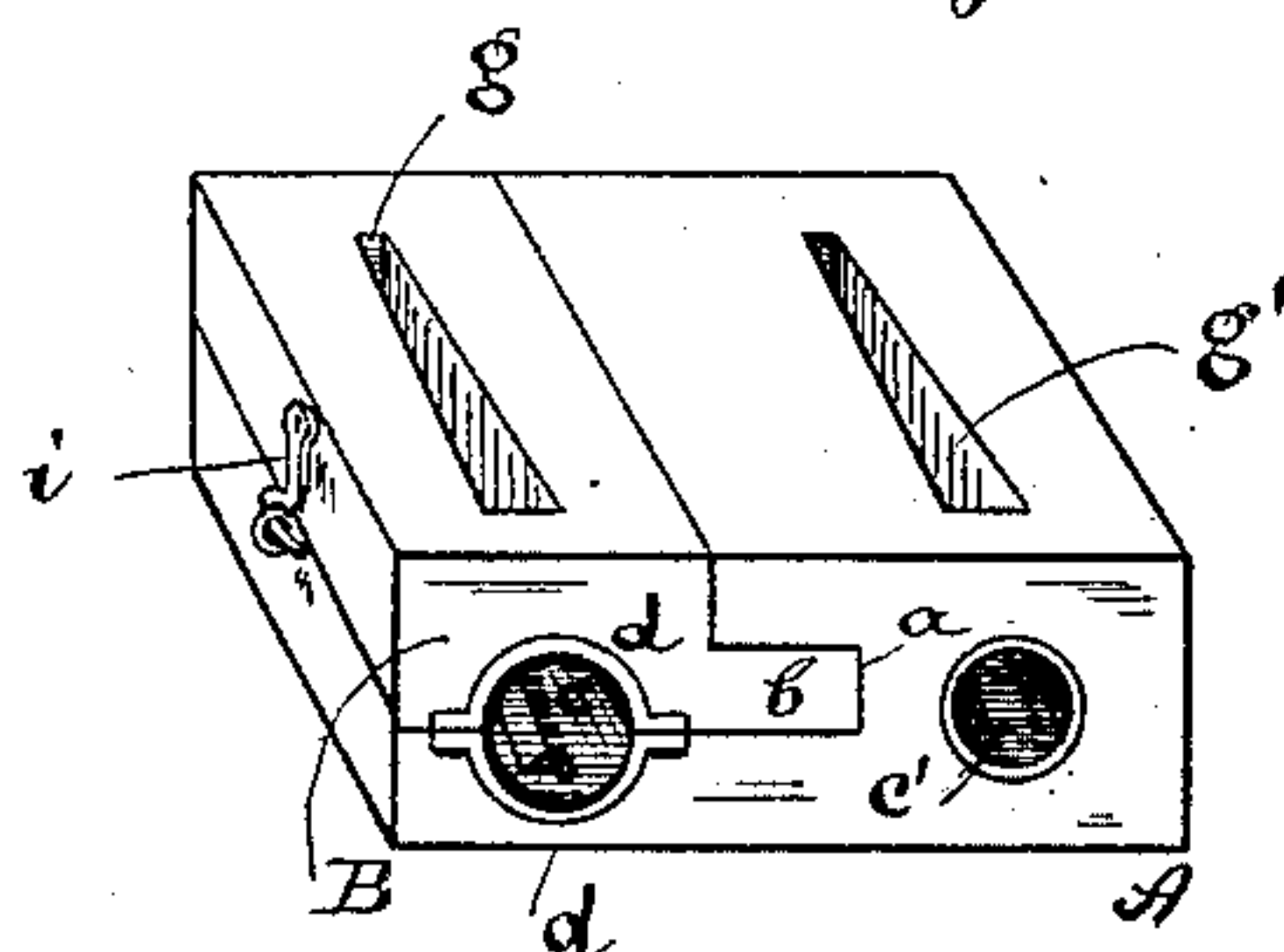


Fig. 1.



WITNESSES:

D. W. Mott
C. Sedgwick

INVENTOR:

A. C. McKinnon
BY Munn & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

ARCHIBALD CAMPBELL McKINNON, OF SAN FRANCISCO, CALIFORNIA.

PENCIL-SHARPENER.

SPECIFICATION forming part of Letters Patent No. 359,026, dated March 8, 1887.

Application filed June 8, 1886. Serial No. 204,461. (No model.)

To all whom it may concern:

Be it known that I, ARCHIBALD CAMPBELL McKINNON, of San Francisco, in the county of San Francisco and State of California, have
5 invented new and useful Improvements in Pencil-Sharpener, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

10 Figure 1 is a perspective view of my improved pencil-sharpener. Figs. 2 and 3 are detail perspective views of the principal parts. Figs. 4 and 5 are perspective views of the steel cutters or knives.

15 Similar letters of reference indicate corresponding parts in the different figures of the drawings.

The object of my invention is to provide a pencil-sharpener for sharpening both the lead
20 and wood of ordinary lead-pencils by means of a steel cutter, and afterward finishing the work of sharpening by the application of sand-paper.

My invention consists of a block provided
25 with two conical cavities, one of the cavities being lined with metallic plates provided with knives or cutters, the other cavity being lined with sand-paper.

30 The block A, of wood or other suitable material, forming the body of my improved pencil-sharpener, is rabbeted and provided with a groove, *a*, for receiving the tongue *b*, formed on the edge of the part B, which is fitted to the block A, and renders the sharpener symmet-
35 rical in form.

On the dividing-line of the block A and part B is formed a conical cavity, *c*, one half of which extends into the block A and the other half into the part B. The block A and part
40 B on their contact-surfaces and adjoining the halves of the conical cavity are rabbeted to receive metallic plates *d*, which are swaged or bent so as to fit into the conical cavities of the block A and part B. Each plate *d* is slotted
45 longitudinally through a portion of its length and provided with an adjustable knife, *e*, clamped in place on the plate *d* by screws *f* and extending through the slot of the plate in

position to cut the wood and lead of the pencil when the pencil is inserted in the conical
50 cavity and turned therein.

Opposite the slots of the plates *d* in the block A and part B are formed slots *g*, for the escape of the chips cut from the pencil. The block A is provided with short dowels *h*, which are
55 received in corresponding holes in the part B and prevent the parts from sliding upon each other.

The part B is secured in place upon the block A by an ordinary hook and eye, *i*. In
60 the body of the block A is formed a conical cavity, *c'*, which is lined with sand-paper, and with which slots *g'*, formed in opposite sides of the block, communicate for the escape of
65 dust produced by the abrasive action of the sand-paper.

The plates *d* are each provided with slots *d'* near opposite edges for receiving the screws
70 by which the plates are held in their places in the blocks.

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

1. In a pencil-sharpener, the combination of the block A and part B, having conical cavities *c* *c'*, formed therein, the cavity *c* being provided with knives *e* and the cavity *c'* being lined with sand-paper or similar abrasive material, substantially as herein shown and described.
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2. The combination, with the block A and part B, provided with the conical cavities *c* *c'*, of the metal plates *d*, fitted to the conical cavity *c* and provided with cutters *e*, and a lining of sand-paper secured in the conical cavity *c'*,
8 substantially as described.

3. The combination, with the block A and part B, provided with the slots *g* and the conical cavity *c*, of cutters *e*, secured in the conical cavity *c*, substantially as shown and described.
9

ARCHIBALD CAMPBELL McKINNON.

Witnesses:

J. DEWING,
F. K. SHAWHAN.