

No. 811,798.

PATENTED FEB. 6, 1906.

H. H. A. SCHWARZ.
PENCIL SHARPENER.
APPLICATION FILED DEC. 27, 1904.

Fig. 1.

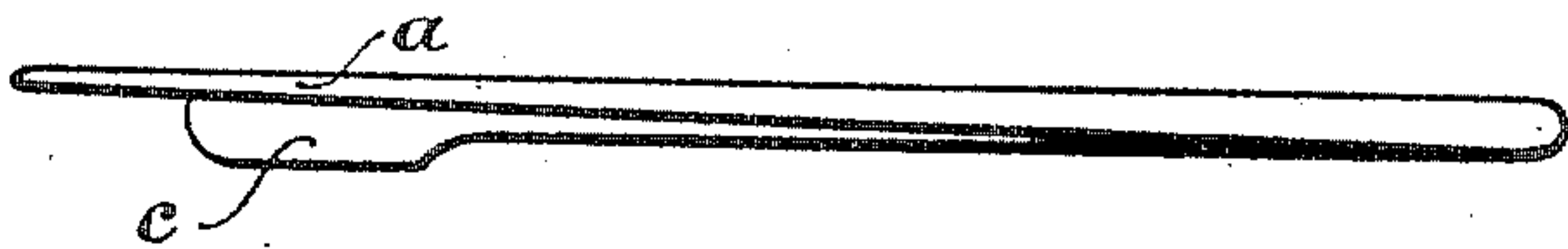


Fig. 2.

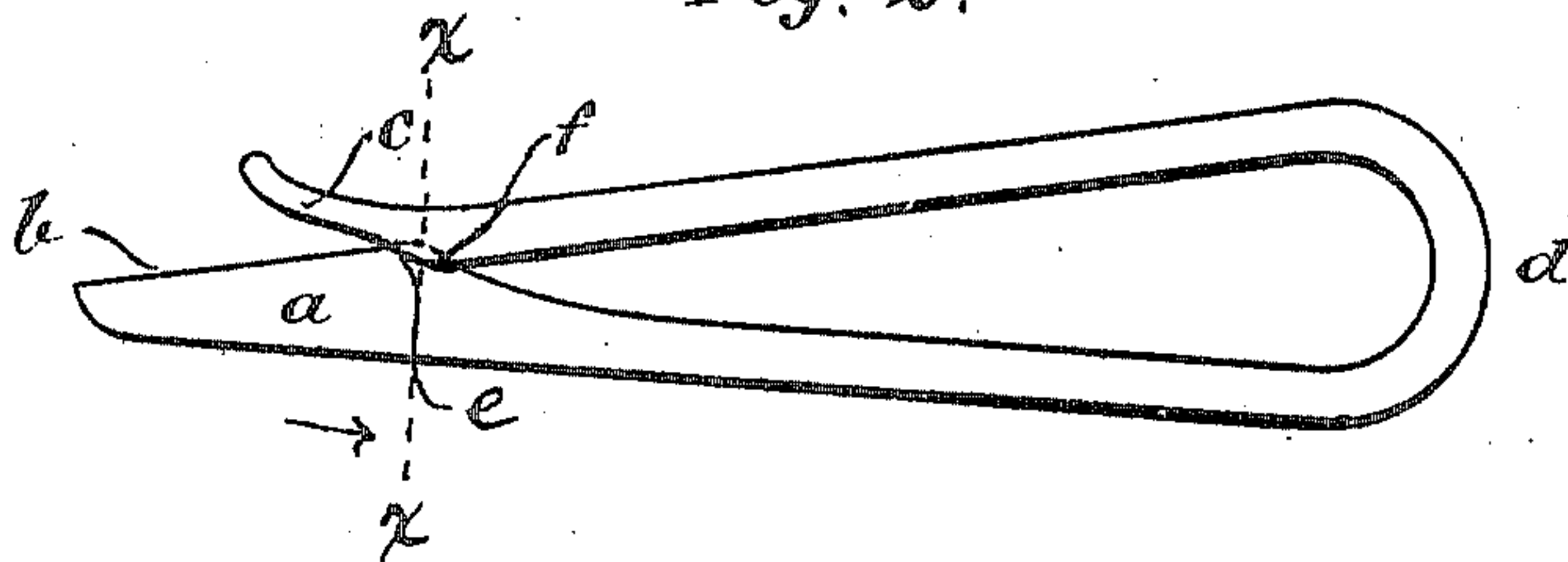


Fig. 3.

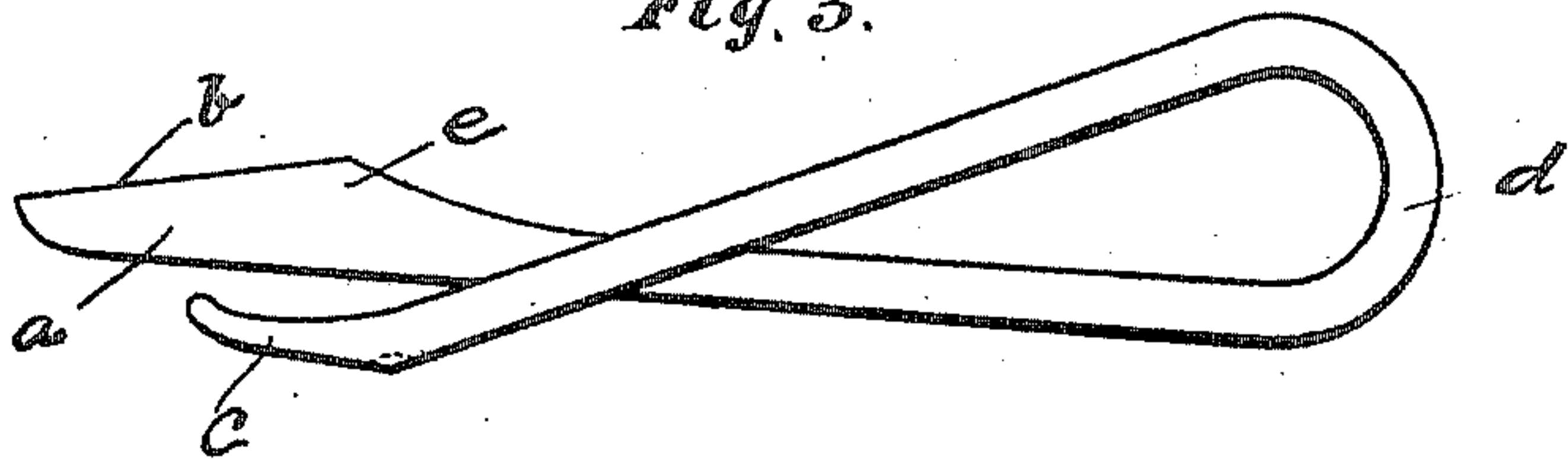


Fig. 4.

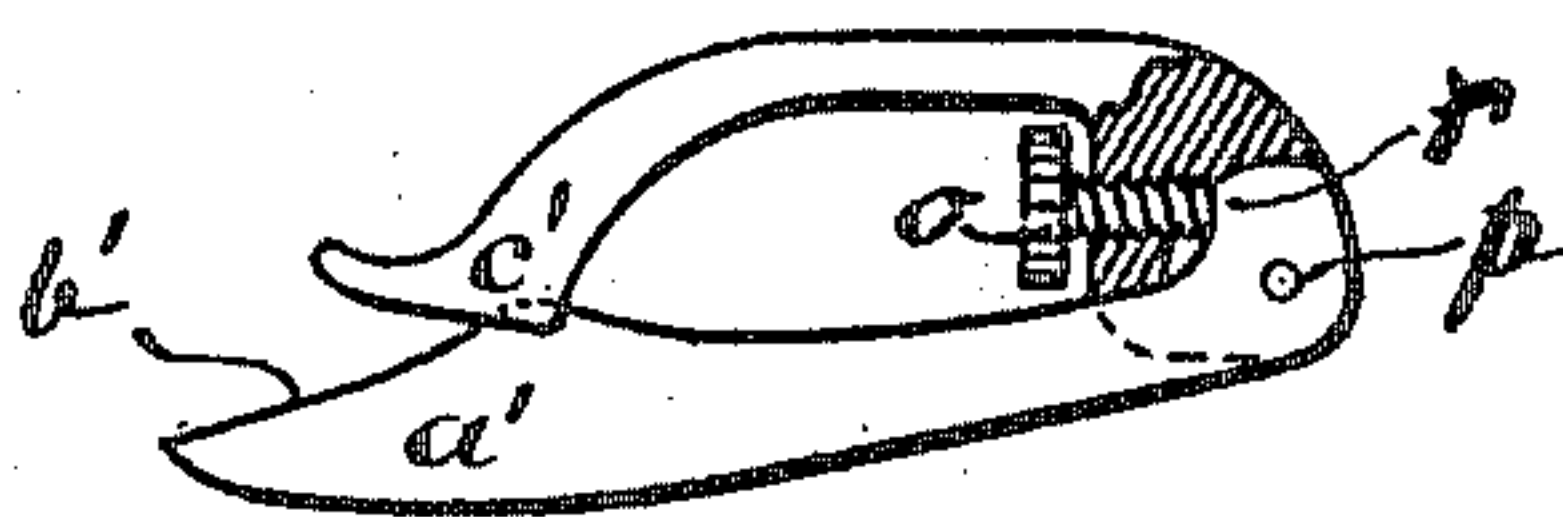


Fig. 7.

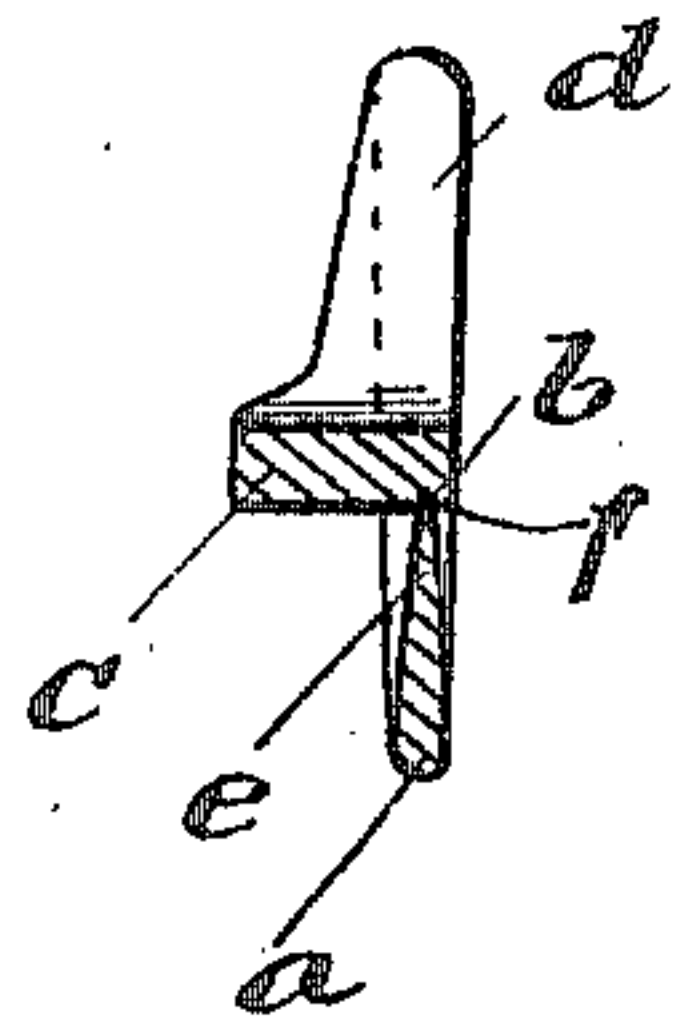


Fig. 5.

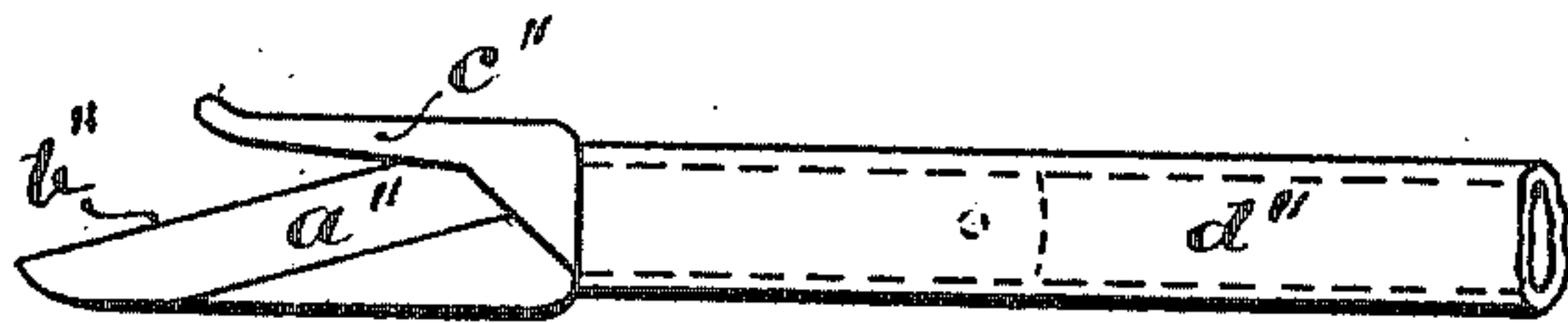
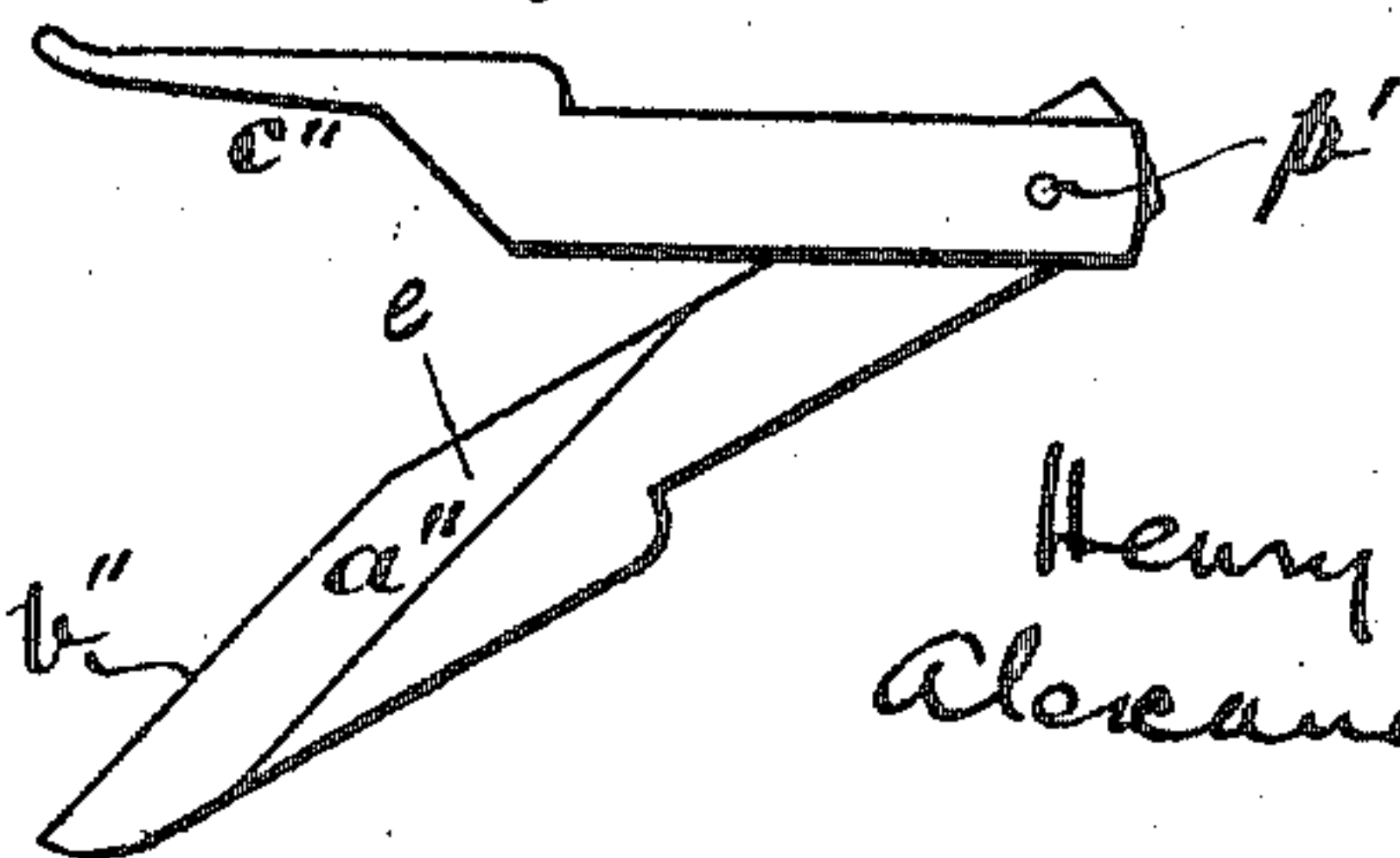


Fig. 6.



Witnesses,
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PENCIL-SHARPENER.

No. 811,798.

Specification of Letters Patent.

Patented Feb. 6, 1906.

Application filed December 27, 1904. Serial No. 238,553.

To all whom it may concern:

Be it known that I, HENRY HERMAN ALEXANDER SCHWARZ, a citizen of Great Britain, residing at 61 Queen's Park Terrace, Brighton, in the county of Sussex, England, have invented an Improved Pencil-Sharpener, of which the following is a specification.

This invention comprises a novel form of sharpening device for pencils, pastels, drawing-charcoal, and the like.

The device embodying the invention consists, primarily, of two essential parts—namely, a blade and a guiding-surface arranged at an angle, preferably an acute angle, to the cutting edge of the blade.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is a top plan view of a device embodying the invention. Fig. 2 is a side elevation. Fig. 3 is a side elevation, the blade having been forced out of the way of the guide to admit of sharpening of the cutting edge of said blade. Fig. 4 is a side elevation, partially in section, showing a modification of the invention. Fig. 5 is a side elevation of a further modification of the invention in which a removable handle is provided. Fig. 6 is a side elevation of the blade and guide parts shown in Fig. 5. Fig. 7 is a sectional view on the line X X of Fig. 2.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference character.

Referring to the drawings and specifically describing the invention, the blade is indicated at *a*, and the guide coacting with the blade is denoted at *c*, the cutting edge of the blade *a* being arranged at an acute angle to the guiding-surface of the guide *c* aforesaid. The blade *a* and the guide *c* may be fixedly or adjustably connected, and in the construction shown in Figs. 1 to 3, inclusive, the parts *a* and *c* are formed at one end with a handle *d*, said handle *d*, with the blade *a* and the guide *c*, being formed from a single length of wire bent into suitable shape and admitting of turning the blade *a* away from the guide, as shown in Fig. 3, to facilitate sharpening of the cutting edge *b* of the blade. The heel of the blade *a* is indicated at *e*, and this heel por-

tion is preferably received or engaged in a groove or depression formed in the adjacent face of the guide *c* at *f*. This affords an interlocking connection between the heel of the blade and the guide which effectively resists lateral stress tending to separate these parts. The stress mentioned might under some conditions detract from the efficiency of the device as a sharpener by causing the blade and guide to separate if it were not for the peculiar connection afforded by the depression *f*, receiving the heel of the blade *a*. The guide *c* is somewhat flat in its formation, both of its longitudinal edges being blunt, and said guide is preferably arranged in a plane approximately at a right angle to the plane passing through the body of the blade *a*.

In operating the device an end of the pencil is placed between the guide *c* and the blade *a*, the cutting edge *b* of said blade resting on the guide. By imparting a thrusting movement to the sharpener longitudinally of the pencil and toward the extremity to be sharpened the wood of the pencil will be besliced off readily with a clean cutting action. Charcoal or other drawing material may be pointed in the same general manner.

It will be obvious that the bow or handle portion *d* may be of circular form or of like construction.

The modification in Fig. 4 illustrates a short construction of the sharpening device in which the cutting-blade *a'* is formed with a short arm *r*, extending at a right angle thereto at the end opposite that provided with the cutting edge *b'*. The guide (indicated at *c'*) is arranged in substantially the same position relatively with regard to the blade *a* as in the construction in Fig. 1; but in this instance the guide *c'* is pivoted to the blade *a'*, as at *p*, and a set-screw *o*, carried by the guide *c'*, is adapted to engage the short arm *r* to hold the guide *c'* in proper adjustment with regard to the blade *a'*. The set-screw *o* may be manipulated so as to permit separation of the guide *c'* from the blade *a'* for the purpose of sharpening the blade when necessary.

Fig. 5 shows the blade *a''* pivotally connected with the guide *c''*, each of which parts, however, being formed with shanks adapted to be received in a tubular handle *d''*. The handle *d''* when it receives the shank portions of the parts *a''* and *c''* holds these parts in proper relative position with regard to each other in a manner which will be evident. Re-

movement of the handle d'' will permit separating movement of the parts a'' and c'' and will permit sharpening of the former. The pivot connecting the parts a'' and c'' in Figs. 5 and 6 is indicated at p' in Fig. 6. The shape of the blade and guide used, as above described, may be varied, though the blade is always approximately in the same plane as the handle.

10 The sharpening device comprised in the invention is more efficient than the sharpeners operating by rotary action, owing to the draw cut secured by my invention admitting of advantageous use in operating upon soft
15 materials, such as charcoal sticks, which are very likely to break.

Having thus described the invention, what is claimed as new is—

1. A sharpening device of the class described embodying a guide provided with a suitable flat guiding-surface, and a cutting-blade having the cutting edge thereof arranged at an acute angle to and longitudinally of said guide and disposed at one side
20 thereof, said guide comprising a flat body extending from the blade at approximately a right angle thereto, the heel of the blade be-

ing in contact with the adjacent side of the guide.

2. A sharpening device consisting of a cutting-blade, and a guide for said blade arranged at an acute angle to the cutting edge thereof, the heel of the blade being interlocked with the guide, whereby these parts are reinforced against lateral movement relative to one another. 35

3. A sharpening device consisting of a cutting-blade, and a guide for said blade arranged at an acute angle to the cutting edge thereof, the guide comprising a flat body located in a plane approximately at a right angle to the plane including the cutting-blade, the body of the guide being formed with a recess or depression receiving the heel of the blade and affording interlocking connection
40 between these parts. 45

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 8th day of December, 1904.

HENRY HERMAN ALEXANDER SCHWARZ.

Witnesses:

HARRY PULLEN,

LEWIS BENJAMIN STANNARD.