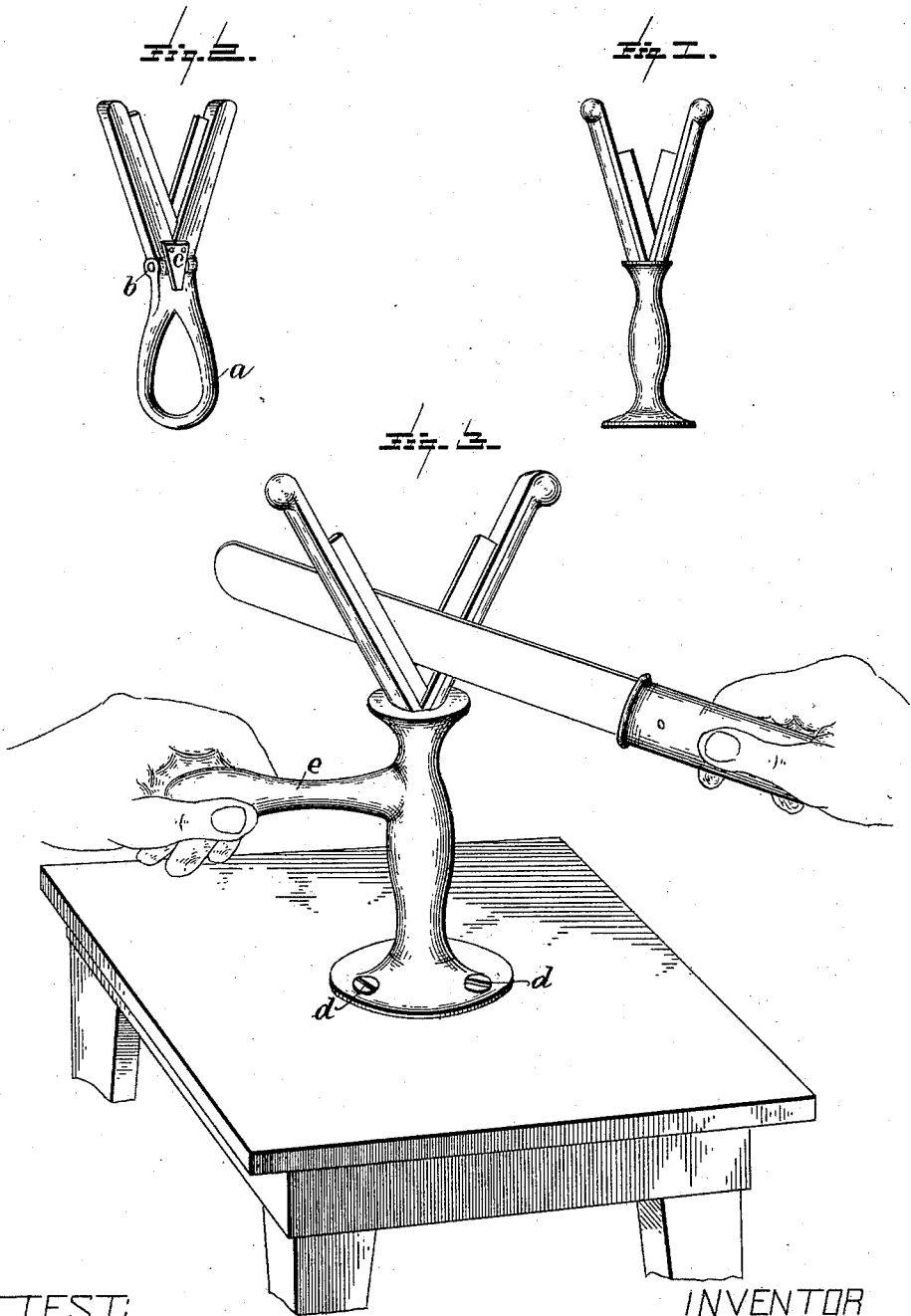


(No Model.)

F. CHAILLY.
KNIFE SHARPENER.

No. 468,472.

Patented Feb. 9, 1892.



ATTEST:
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UNITED STATES PATENT OFFICE.

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KNIFE-SHARPENER.

SPECIFICATION forming part of Letters Patent No. 468,472, dated February 9, 1892.

Application filed November 16, 1891. Serial No. 411,978. (No model.)

To all whom it may concern:

Be it known that I, FRANÇOIS CHAILLY, a citizen of the Republic of France, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Knife-Sharpeners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to knife-sharpener of the kind where the blades of knives or scissors are drawn along the edge of a tempered steel plate.

The object of my invention is to produce an instrument which is very low in price and which answers all demands for domestic use—to sharpen the knives used in a household, as well as butcher-knives and all blades of larger size.

I make my knife-sharpener in three forms—a small one for ordinary use, another of the same dimensions, but arranged with a hinge, so as to clasp together and to be carried in the pocket, and a third larger form provided with a foot to be fastened upon a table, a butcher-block, or elsewhere, in order to give full resistance when long blades are drawn through the instrument.

I am aware that for the purpose of sharpening the edges of knives or scissors steel plates have been used, which were fastened to a support by means of screws or wedges or other mechanical means, and I do not claim this as my invention; but I consider as new that the said steel plates are cast in their support and that no other mechanical means are used for fastening them, the process of casting offering the means to secure the steel plates and at the same time to temper them, as will be described hereinafter.

Figure 1 in the accompanying drawings shows my instrument in elevation in its simplest form for household use. Fig. 2 is the elevation of the folding instrument, and Fig. 3 is a knife-sharpener for large-sized blades arranged to be placed on a table, &c.

In casting my instrument I proceed in the following manner: I ordinarily make use of metal molds, and I preferably cast in zinc the small knife-sharpener and only the larger instruments in iron, as in the latter the sharpening-edges of the steel plates are far enough away from the poured-in metal and are not

in danger to be annealed by the heat. I lodge the steel plates in depressions of the molds provided for that purpose, and I insert into the said steel plates at different places little pins or pegs, so that they will hold better in the substance, which is run all around the back of the steel plates, thus holding them firmly in position. The tempering of my steel plates is very easy, for when heated to a lively red I simply throw them in cold water, and the tendency to break easily after such hardening is much decreased by the successive casting, as the whole back part of the steel plates is tempered by the heat of the liquid metal and the sharpening-edge alone remains hard.

Fig. 2 shows a hinged knife-sharpener, which may be clasped together and carried in the pocket without any danger. The handle *a* is provided with a hinge *b*, by which it is connected to the part carrying the steel plates in a sharp angle or a *V*. *c* is a stop, being riveted to the latter part or being cast on it. This stop prevents the opening beyond an angle of one hundred and eighty degrees, so that the parts of the instrument when open are in a straight line.

Fig. 3 is an instrument for sharpening large knives. It is provided with perforations in the foot, through which screws *d* may be passed and screwed into a table or a block, thereby fastening the instrument solidly to the said table or block, so as to give the desired resistance when a blade is drawn across the steel plates arranged in a *V*. A lateral handle *e* is provided for the left hand to attribute to the resistance of said knife-sharpener.

Having described my invention, what I desire to secure by Letters Patent is—

1. A knife-sharpener having steel plates arranged in the form of an acute angle or *V* and having a foot or handle hinged thereto, being provided with a stop to limit the opening movement to a stretched angle of one hundred and eighty degrees.

2. A knife-sharpener having its sharpening steel plates secured in the supporting-bars by casting them therein, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

FRANÇOIS CHAILLY.

Witnesses:

I. ASSINOULLO,
EUGENE CHEVALLIER.