

(No Model.)

W. E. GINN.
TOOL SHARPENER.

No. 502,459.

Patented Aug. 1, 1893.

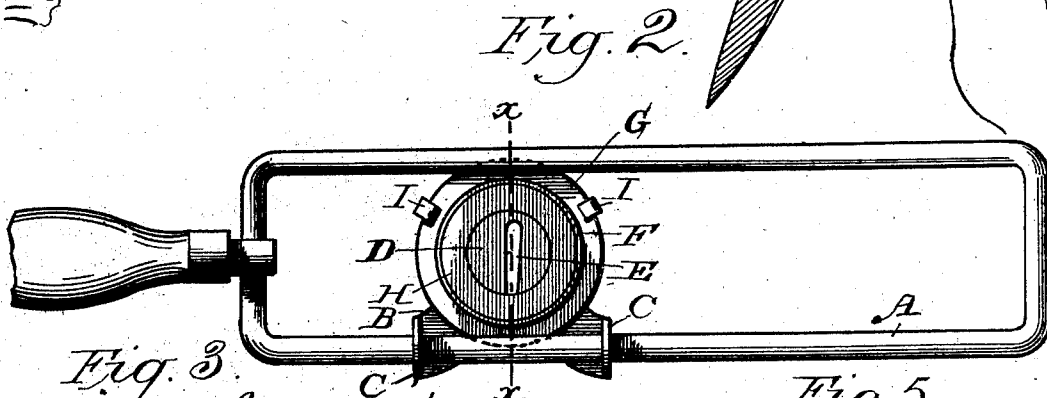
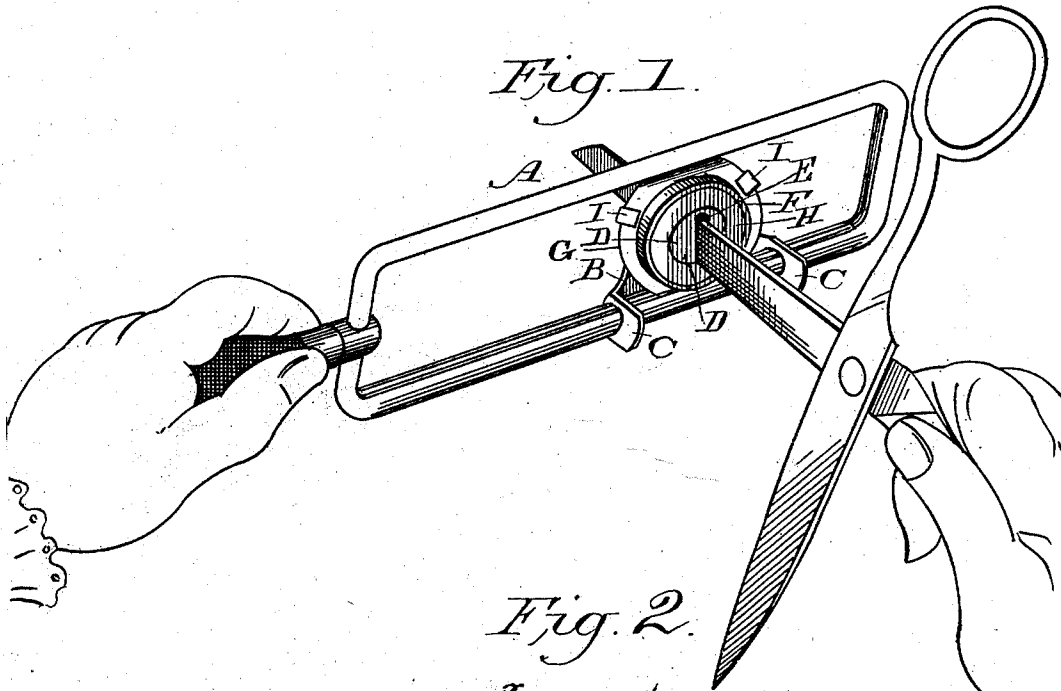


Fig. 3.

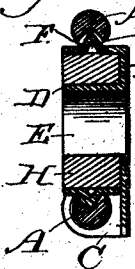


Fig. 4.

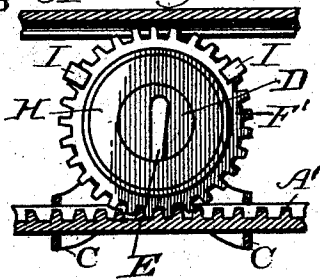
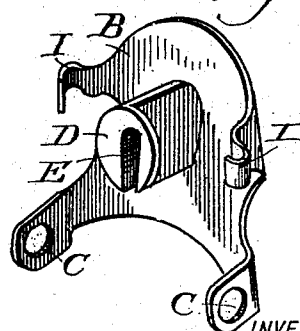


Fig. 5.



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WILLIAM E. GINN, OF BALTIMORE, MARYLAND, ASSIGNOR OF TWO-THIRDS
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TOOL-SHARPENER.

SPECIFICATION forming part of Letters Patent No. 502,459, dated August 1, 1893.

Application filed January 25, 1893. Serial No. 459,759. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. GINN, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Tool-Sharpener; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in tool sharpeners, and is especially designed to furnish a device by means of which scissors, shears and other like cutting instruments can be readily and conveniently sharpened. These objects I attain by the means illustrated in the accompanying drawings, in which—

Figure 1. represents a perspective view of my improved device, showing the method of using it. Fig. 2. represents a side elevation of the device. Fig. 3. represents a transverse vertical sectional view taken on the line xx of Fig. 2. Fig. 4. represents a detail sectional view of a modification of my invention, and Fig. 5. a perspective view of a portion of the device, detached.

Referring to the drawings, the letter A indicates a rectangular metallic frame constructed of preferably wire, grooved on the inner sides as clearly shown in Fig. 1. of the drawings.

The letter B indicates a frame or carriage, which is provided at its lower corners with laterally projecting brackets C, which over-set the lower rail of the frame A, loosely, so as to travel thereon. D indicates a boss projecting inwardly from said frame or carriage B. The said boss is diametrically slotted as indicated by the letter E, the slot being open at the bottom and approximately of the shape, of the member of a pair of scissors or other tool to be sharpened.

The letter F indicates an annular frame of

a diameter, about equal to the width of the frame A. It is provided with a peripheral rim G which is preferably, conical in cross section, and which travels in the grooves of the frame A. Within said annular frame is located a grinding annulus H which may be made of natural stone, emery composites or other abrasive material. The grinding annulus is of such character and so arranged that when in place, its inner face will rotate close up to the periphery of the boss on the frame, so as to bear against the tool to be sharpened, and by rotating against it, produce a sharp cutting edge.

The annular casing carrying the grinding annulus is confined loosely in the carriage by means of the lugs I, which over-set the annular peripheral rim of the frame F, so as to permit the said frame to freely rotate.

In the modification shown in Fig. 4. of the drawings, the annular rim on the frame F' is provided with cog teeth and the lower rail of the frame A' is provided with similar teeth, with which the teeth on the periphery of the frame F' intermesh. The upper rail of the frame in this modification is simply grooved longitudinally so as to guide the frame F' and at the same time permit the grinding annulus to rotate, freely.

The operation of my invention will be readily understood in connection with the above description and is as follows:—One member of the scissors, or the tool to be sharpened is placed in the slot in the boss of the carriage as shown in Fig. 1. of the drawings. The frame A is held by the handle, by one hand of the operator and the carriage, moved back and forth by the other hand in which the scissors or tool is held, as shown in said figure. The reciprocating movement given to the carriage causes the annular disk to rotate so as to abrade and sharpen the edge of the tool. To properly sharpen the entire length of the edge of the tool it is advanced from time to time, through the slot in the boss of the carriage.

Having thus described my invention and

the method of operating the same, what I claim, and desire to secure by Letters Patent, is—

5 The combination with the rectangular frame, of the carriage having lateral brackets over-setting one of the rails thereof, the annular frame arranged to rotate in said carriage and the grinding annulus, confined in said frame, substantially as specified.

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

WILLIAM E. GINN.

Witnesses:

JOHN Q. BOYER,
WILLIAM H. PAUL.