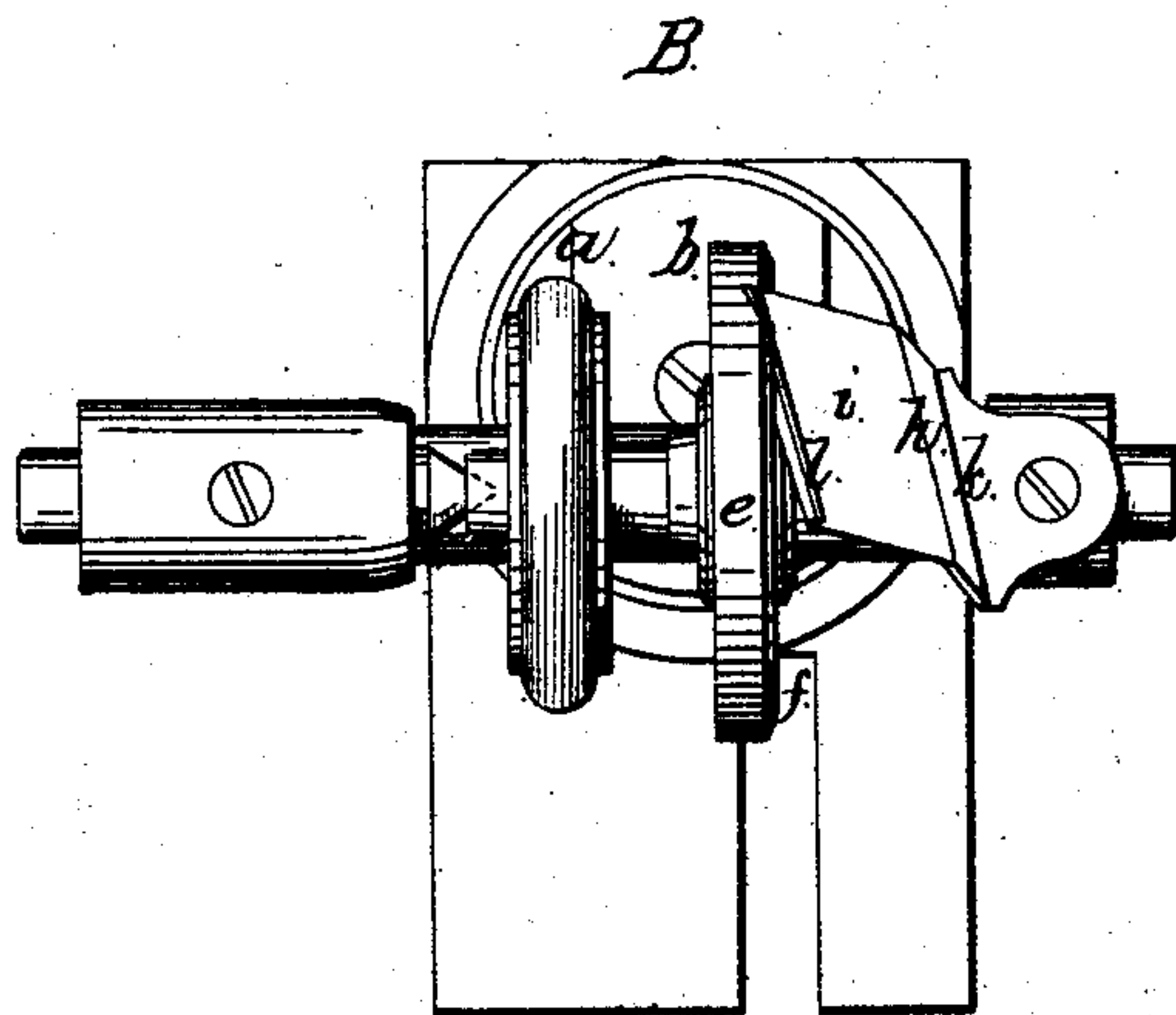
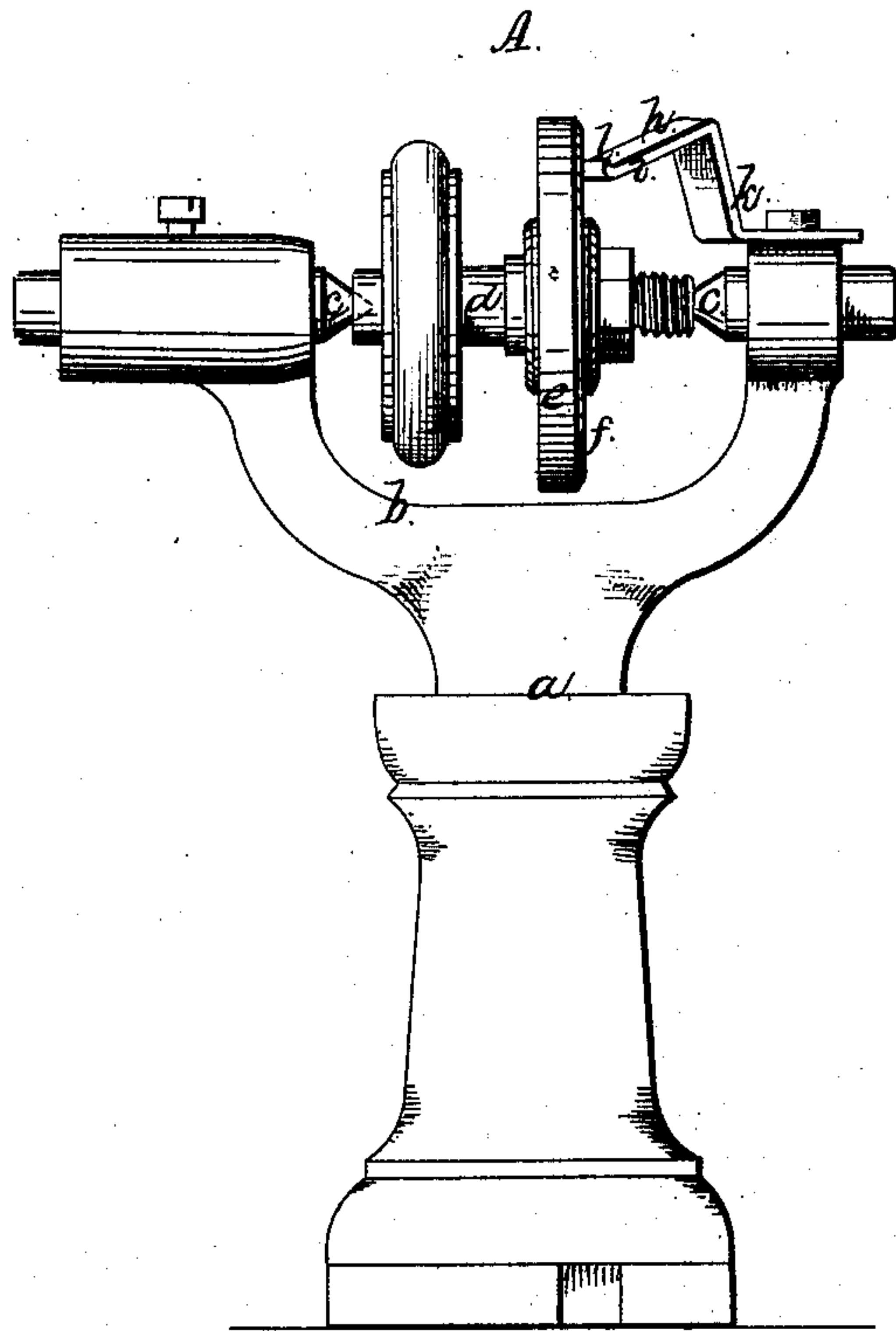


C. E. Palmer.

Scissors Sharpener.

N^o 93,831.

Patented Aug. 17, 1869.



Witnesses.
J. B. Kidder.
M. W. Frothingham

Inventor.
C. E. Palmer
by his Atty.
Croby Halsted & Foulke

United States Patent Office.

CHARLES E. PALMER, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 93,831, dated August 17, 1869.

IMPROVEMENT IN SCISSORS-SHARPENER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, CHARLES E. PALMER, of Boston, in the county of Suffolk, and State of Massachusetts, have invented an Improved Instrument for Sharpening Scissors; and I do hereby declare that the following taken in connection with the drawings, which accompany and form part of this specification, is a description of my invention, sufficient to enable those skilled in the art to practise it.

My invention relates to the construction of an instrument or mechanism by which, without particular skill, the edges of scissors-blades may be accurately ground or sharpened.

The invention consists in combining with a rotary grinding or emery-wheel, (having a bevelling grinding-edge,) a lipped guide provided with an opening through which the grinding-edge projects, the lip serving as a guard in presenting the edge, and it and the main surface forming a guide for presenting the blade at the proper angle, and for maintaining the blade in proper angular position as it is reciprocated against the edge of the grinding-wheel.

The drawing represents an instrument embodying my invention.

A shows a side view, and

B, a plan of it.

a denotes a post, supporting a pivot-frame, *b*, which has mounted in it pivots, *c c*, that support a rotary arbor, *d*, said arbor carrying a grinder-wheel, *e*.

This wheel, which is preferably an emery-wheel, has one corner of its peripheral edge bevelled, as seen at *f*, and across this grinding-corner, one edge of the guide *h* extends.

This guide consists of a flat or plane face, *i*, having a shank or tail-piece *k*, by which it is fastened to one of the pivot-posts, as seen in the drawing.

The face *i* sits at a vertical angle to the grinder-wheel, as seen at A, and at its edge it has an up-turned lip, *l*, which sets at a lateral angle relatively to

the wheel, as seen at B, the lip being cut away so as to let the corner of the wheel through.

When a scissors-blade is to be ground, the flat inner face of the blade is laid upon the face *i*, and the cutting-edge is pressed up against the lip *l*, which will bring the edge against the grinder-wheel, and at an angle to the reducing-face of the wheel, such as will grind off the edge of the blade at the proper angle to the inner face of the blade, so that as the wheel rotates, the whole length of the edge may be rapidly and accurately sharpened by moving the blade back and forth, and holding the edge up to the grinder.

The instrument is made with particular reference to its application to a sewing-machine, to be driven by the driving-wheel thereof, and for this purpose the arbor may be provided with a grooved wheel, *m*, into the groove of which is stretched or sprung a rubber ring, *n*, which, being held up to the periphery of the sewing-machine wheel, is driven by frictional contact therewith.

The arbor may be driven, however, by the driving-wheel of a knitting, or other domestic machine, or may be connected with a treadle-shaft, or other shaft especially designed for actuating it.

The skill necessary to evenly grind a scissors-blade, and to bring the edge to the requisite angle in common grinding, is not required with this instrument, as the edge is kept from being otherwise than evenly reduced by the lip *l*, while the inclination of the guard insures the necessary angularity of the cutting-edge. Hence a lady, or any person unskilled in sharpening tools, can sharpen scissors-blades as perfectly and as easily as can be done by a practised cutler.

I claim, in combination with the rotary grinder-wheel, the inclined guide *h* and its lip *l*, substantially as described.

Witnesses:

CHARLES E. PALMER.

FRANCIS GOULD,

FRANK J. PLUMMER.