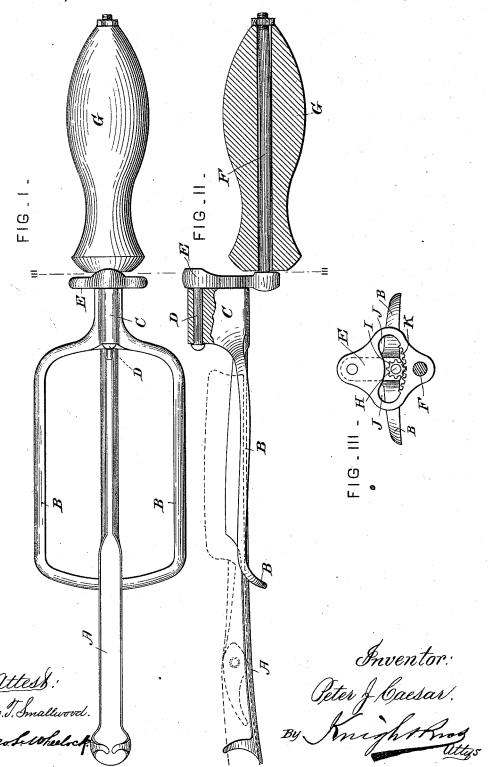
P. J. CAESAR.
DEVICE FOR SHARPENING RAZORS.

No. 455,165.

Patented June 30, 1891.



## UNITED STATES PATENT OFFICE.

PETER J. CAESAR, OF FERGUS FALLS, MINNESOTA.

## DEVICE FOR SHARPENING RAZORS.

SPECIFICATION forming part of Letters Patent No. 455,165, dated June 30, 1891.

Application filed July 18, 1890. Serial No. 359,161. (No model.)

To all whom it may concern:

Be it known that I, Peter J. Caesar, a citizen of the United States, residing at Fergus Falls, in the county of Otter Tail and 5 State of Minnesota, have invented certain new and useful Improvements in Devices for Sharpening Razors, of which the following is a specification.

This device relates to the class of razor-10 sharpeners shown and described in my applications numbered 288,899,320,261, and 349,093, filed, respectively, October 23, 1888, August 9, 1889, and April 23, 1890, the essential difference being that the frame herein seeks to 15 return the razor-holder to normal position by reason of its own weight, the frame moving in an arc of a circle, of which the pivot, which is parallel therewith, constitutes the center on which it swings.

In order that my invention may be fully understood, I will now proceed to describe the same with reference to the accompanying drawings, in which-

Figure I is a plan view of my device. Fig. 25 II is a side view, parts being shown in section. Fig. III is a transverse section on line III III, Figs. I and II.

Referring to the drawings, A represents the blade or razor holder, and B the frame, both 30 of which are formed and arranged as described and shown in my last above-named application. At the inner end of the frame B is formed an upwardly-extending projection or shoulder C, by means of which the frame is hung from a pin D, parallel with the frame and projecting from a vertical transverse support E, extending upwardly from the shaft or axis F, journaled in the handle G. The shaft is slightly bent, so that the 40 handle will not turn too freely on the shaft. The pivot H of the razor-holder passes through the base of the projection or shoulder C and has fixed at its end the pinion I. Formed transversely in the support E is a curved slot 45 J, concentric with the pin D. This slot receives the pinion I, which works therein and engages the teeth K at the under side of said slot.

The friction-frame B for vibrating the de-50 vice and causing the razor to turn being below its pivot, pressure on the handle tends to

E being above its shaft F the tendency is the reverse and pressure on the handle tends to keep the support E vertical at all times. It 55 will further be seen that the bearing-surface of the frame B is above the plane of the axis F, and therefore when the frame reaches the limit of its vibration and the movement of the device as a whole is continued for sharp- 60 ening the blade the pressure on the handle still retains the support E in vertical position and the frame in proper position on the strop.

In this device no spring or other special means is required for returning the razor- 65 holder to normal position, inasmuch as the frame is supported eccentrically—that is, from above—and this causes it to return by reason of its own gravity to central position and with it return the razor-holder.

The object in bending the shaft is to prevent the handle turning so freely as that when the device is lifted off the strop the frame will swing around with the shaft as its

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

1. The combination of a suitable support, a swinging frame pivoted eccentrically upon 80 said support, a reversible razor-holder mounted in said frame, and means in connection with the razor-holder and support for reversing said holder, substantially as explained.

2. The combination of the handle, the sup- 85 port, and the razor-holder and reversing mechanism carried by the support, said support being pivoted eccentrically to the handle, substantially as and for the purposes set forth.

3. The combination of a reversible razor- 90

holder, a gravitating support, means in connection with said holder and support for automatically reversing the holder, a bent shaft carried by said support, and a handle in which said shaft is journaled.

4. The combination of a handle, a shaft on which it is fitted, a support projecting up-wardly from the shaft, a gravitating frame hung from said support, a razor holder, and means for reversing the holder automatically, 100 substantially as and for the purpose set forth.

5. In combination with a handle and a support, a frame having an upward projection or assist the vibration; but the vertical support | shoulder, a pivot-pin extending from the sup-

port and passing through the projection above | and parallel to the frame, a reversible razor-holder carried by the frame and having a pivot, a pinion on said pivot, and teeth on said support concentric with said pin and engaged by the pinion, substantially as and for the purpose set forth.

6. The combination of a handle, a vertical

support swiveled to the handle and extend-

ing upward, a gravitating frame hung from 10 the support, and a razor-holder carried by the frame, said frame and holder being all above the swivel of the vertical support, as and for the purpose set forth. PETER J. CAESAR.

Witnesses: WILLIAM L. PARSONS, James A. Brown.