

T. DOSWALD.
SHARPENING AND HONING DEVICE FOR RAZORS.
APPLICATION FILED JULY 1, 1909.

939,402.

Patented Nov. 9, 1909.

Fig. 1

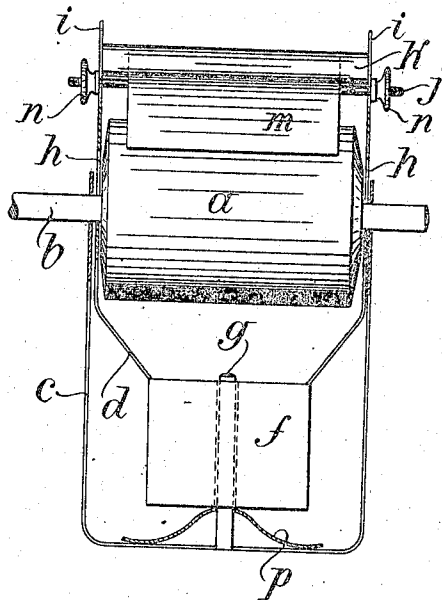
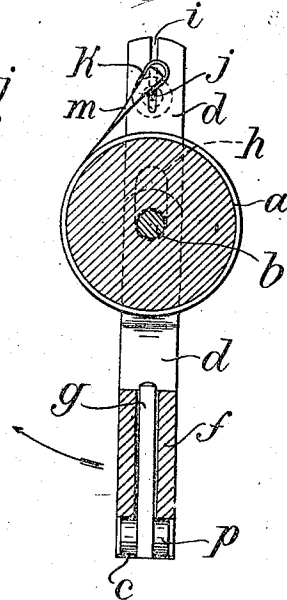


Fig. 2



Witnesses.

C. W. Hommers
Jesse H. Sutton.

Inventor.

Theodor Doswald,
by *Henry Orth* atty.

UNITED STATES PATENT OFFICE.

THEODOR DOSWALD, OF TRIEST, AUSTRIA-HUNGARY.

SHARPENING AND HONING DEVICE FOR RAZORS.

939,402.

Specification of Letters Patent.

Patented Nov. 9, 1909.

Application filed July 1, 1908. Serial No. 595,424.

To all whom it may concern:

Be it known that I, THEODOR DOSWALD, a subject of the Emperor of Austria-Hungary, residing in Triest, Austria-Hungary, have invented certain new and useful Improvements in Sharpening and Honing Devices for Razors; 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 appertain to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

15 The present invention relates to a device appropriate for sharpening all kinds of razors and similar blades, and has for its object to enable a rapid sharpening and honing of the same.

20 This device permits the blade to be set at any desired angle to the sharpening surface or to the honing medium and also to exert upon the blade a pressure that can be regulated according to requirements.

25 The device consists essentially of a stationary cylindrical sharpening body, or of a cylinder that carries the honing medium (for instance the leather strop, fabric or the like,) and of a blade holder that may be set and adjusted at any desired angle to the cylindrical body.

Both parts above mentioned are so arranged with relation to each other that the blade to be sharpened or honed is movable, the pressure of the blade edge against the sharpening or honing surface being effected by centrifugal force.

35 In the accompanying drawing Figures 1 and 2 illustrate by way of example, a form of execution of the improved device in front elevation and in cross section, respectively.

The sharpening or honing cylinder, as *a*, of this device is rigidly connected with its spindle *b* that serves as a handle. The spindle *b* passes through two hoops, *c*, *d*, of which hoop *d* serves as a holder for the blade to be honed, and is connected with a weight *f* which is guided in its movement by one or several pins *g* fixed to the hoop *c*. The blade holder *d* is capable of displacement on the spindle by means of the longitudinal slits *h*, and is provided at its extremities with incisions *i* for the reception of the spindle *j* of a clamp *k*. This clamp *k* carries a blade, as *m* that is to be sharpened or honed, and sets the same at any de-

sired angle against the cylinder *a* and may be rigidly fixed by screwing home nuts *n* upon the axle *j* of the clamp.

For the purpose of sharpening or honing 60 the blade, fixed in the above-described manner, the hoops *c*, *d* are caused to swing more or less rapidly around the cylinder *a*, which is rigidly connected to its spindle *b*. In consequence of this swinging motion the 65 weight *f* will be impelled outward by the action of the centrifugal force and will thus produce a displacement of the hoop *d* in the same direction, so that consequently the blade revolving around the cylinder will 70 come into close and secure contact with the latter. The degree of pressure of the blade against the sharpening or honing surface will thus depend upon the amount of the centrifugal force developed, and conse- 75 quently upon the velocity of rotation of the hoops *c*, *d*, and the magnitude of the weight. When one side of the blade or razor edge has been sharpened the blade is either removed from the clamp and put in again in a 80 reversed position, or the nuts *n* are unscrewed and the clamp with the blade is turned to the opposite side and the hoops are again caused to revolve around the cylinder. 85

For assuring an elastic contact of the blade edge to the sharpening or honing surface, a spring *p* is fixed either to the outer hoop *c* or to the weight *f*, and during the revolution of the hoops the weight *f* is 90 pressed against said spring *p*.

I claim—

1. A sharpening and honing device, comprising a cylindrical honing body and a blade support capable of revolving around 95 said body.

2. A sharpening or honing device, comprising a stationary cylindrical honing body and an adjustable blade support capable of revolving around said body. 100

3. A sharpening and honing device comprising a cylindrical honing body, a blade support capable of being revolved around said body, and means to adjust a blade at an angle to the latter. 105

4. A sharpening and honing device comprising a cylindrical honing body, a blade support capable of being revolved around said body, means to adjust a blade at an angle to the latter and means to regulate the 110 pressure of a blade against the body.

5. A sharpening and honing device, com-

prising a stationary cylindrical honing body, a spindle therefor, a hoop pivoted on the spindle, a blade holder adjustable on the hoop and a weight carried by the latter.

- 5 6. A sharpening and honing device, comprising a stationary cylindrical honing body, a spindle therefor, a hoop pivoted on and movable relatively to the spindle, a blade holder, a spindle for the latter adjustable in
10 slots formed in the hoop, a cooperating hoop pivoted on the spindle on the honing body, a guide on the cooperating hoop and a weight on the guide connected with the first named hoop.

- 15 7. A sharpening and honing device, comprising a stationary cylindrical honing body,

a spindle therefor, a hoop pivoted on and movable relatively to the spindle, a blade holder, a spindle for the latter adjustable in slots formed in the hoop, a cooperating hoop 20 pivoted on the spindle on the honing body, a guide on the cooperating hoop, a weight on the guide connected with the first named hoop and a spring interposed between the weight and cooperating hoop. 25

In testimony that I claim the foregoing as my invention, I have signed my name in presence of two subscribing witnesses.

THEODOR DOSWALD.

Witnesses:

JOSEF RURASCH,
ROBERT W. HEINGARTNER.