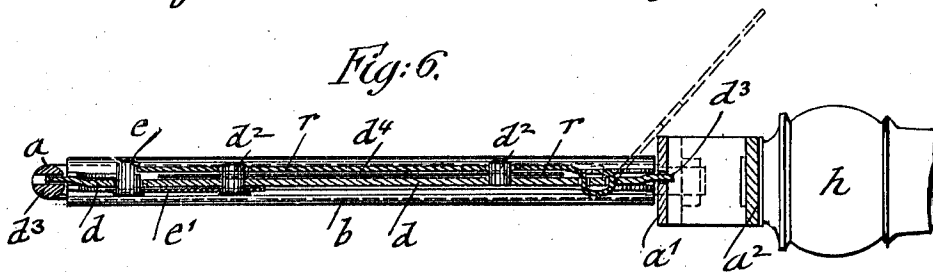
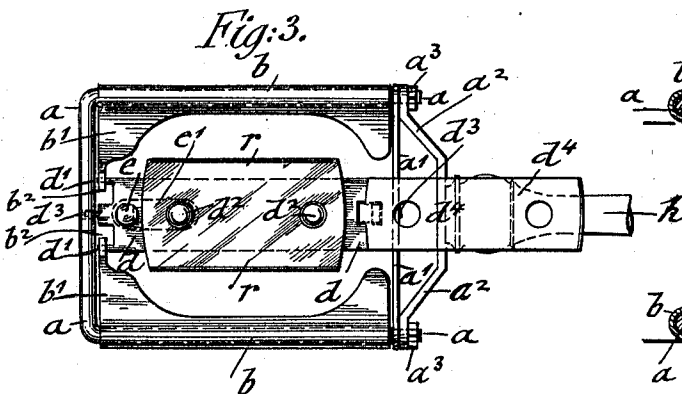
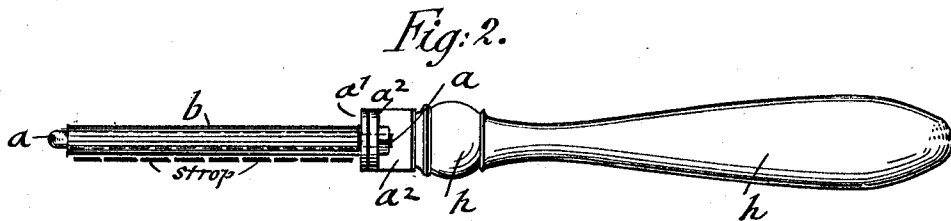
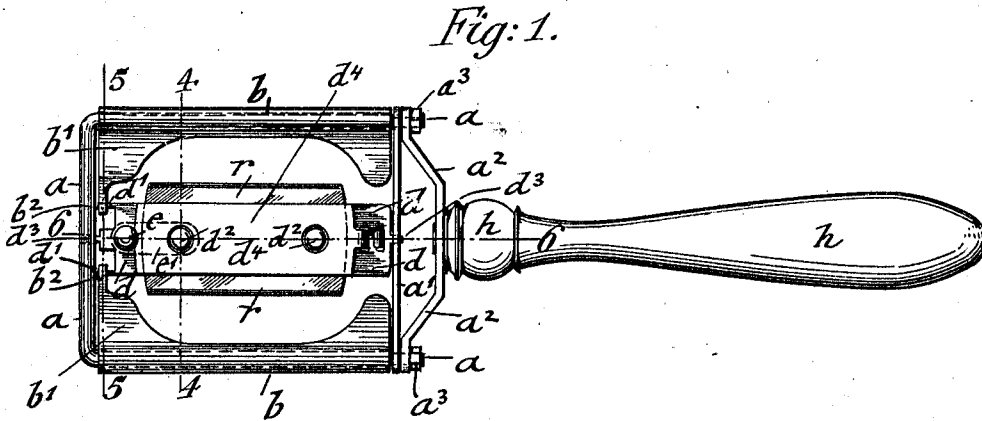


F. H. HOFFMANN.
 APPARATUS FOR STROPPING RAZOR BLADES.
 APPLICATION FILED MAR. 29, 1910.

982,722.

Patented Jan. 24, 1911.



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FREDERICK H. HOFFMANN, OF HOBOKEN, NEW JERSEY.

APPARATUS FOR STROPPING RAZOR-BLADES.

982,722.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FREDERICK H. HOFFMANN, a citizen of the United States of America, residing in Hoboken, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Apparatus for Stropping Razor-Blades, of which the following is a specification.

10 This invention relates to an improved apparatus for stropping razor-blades in a quick and effective manner, and more especially the thin, double-edged razor-blades for safety-razors, one edge being stropped
15 by the forward and the other edge by the backward movement of the blade over the strop, and for this purpose the invention consists of a stropping apparatus which comprises a supporting frame, friction-sleeves,
20 one at each side of said frame, provided with inwardly-extending lugs having forked ends, and independent oscillating blade-holder pivoted to the frame centrally between the sleeves and in the same plane with the lugs
25 of the sleeves, said blade-holder being provided at one end with projecting pins engaged by the forked ends of the lugs, and with a hinged cover provided with openings registering with pins on the main-plate of the blade-holder for holding the blade in
30 position and a locking device for the cover, said blade-holder being oscillated by the friction of the sleeves with the strop, so that when the stropping apparatus is moved over the strop in one direction one edge of the blade is stropped and when it is passed over the strop in the other direction the other edge of the blade is stropped.

35 The invention consists further of certain details of construction of the blade-holder which will be fully described hereinafter and finally pointed out in the claims.

In the accompanying drawings, Figure 1 represents a plan-view of my improved apparatus for stropping razor-blades, Fig. 2 is a side-elevation of the same, Fig. 3 is a plan-view showing the hinged cover of the blade-holder in open position, Figs. 4 and 5 are vertical transverse sections respectively, on
45 lines 4, 4, and 5, 5, Fig. 1, and Fig. 6 is a vertical longitudinal section on line 6, 6, Fig. 1.

Similar letters of reference indicate corresponding parts throughout the several figures.

55 Referring to the drawings, a represents the frame of my improved apparatus for

stropping two-edged blades for safety-razors. The frame a is composed of a main U-shaped portion, which is preferably made of brass wire of suitable thickness and strength, and which is connected at the ends by a straight cross-bar a^1 and by a bent bar a^2 , the bars a^1 and a^2 being attached to the threaded ends of the U-shaped part a by screw-nuts a^3 . To the bent bar a^2 is attached the handle h of the stropping device in any suitable manner. To the sides of the U-shaped main-portion a are applied friction sleeves b , which are provided with inwardly-extending lugs b^1 having forked inner ends b^2 that engage projecting pins d^1 at the ends of a blade-holder d , which is centrally pivoted to the main-frame a and cross-bar a^1 . The blade-holder d consists of a base-plate provided with short stud-pins d^2 and center-pivots d^3 at the ends, said pivots turning in center-bearings of the transverse portion of the frame a and cross-bar a^2 . The stud-pins d^2 on the main-plate of the blade-holder serve for receiving razor-blades r of that kind which are used with some of the well-known safety-razors and which have cutting edges at both sides, and are provided with openings for being placed on the holding pins of the razor-frame. One of these razor-blades r is placed by its registering holes on the stud-pins d^2 of the blade-holder and held firmly in position thereon by a cover-plate d^4 , which is hinged at one end to the main-plate adjacent to the transverse bar a^1 , and also provided with openings registering with the stud-pins and the openings in the razor-blade r . The cover-plate d^4 is attached at its opposite end to the main-plate of the holder d by means of a recessed catch c , which is applied to a flat steel-spring c^1 , the catch springing over the end of the cover-plate so as to lock it over the main-plate and hold thereby the razor-blade firmly in clamped position between the main and cover-plates. In place of the spring-catch for holding the cover-plate of the blade-holder, any other means may be employed for locking the same to the main-plate of the holder.

My improved apparatus for stropping razor-blades is operated by passing the same over the strop first in one and then in the opposite direction. The frictional contact of the sleeves when moved over the strop imparts a slight oscillating motion to the sleeves and by the same to the blade holder

and produces the contact of one edge of the blade with the strop so as to sharpen one edge of the same. By the return motion of the device over the strop, the blade-holder is again tilted slightly but in the opposite direction, so that the opposite edge of the blade is stropped. When the opposite edges bearing on the strop are sufficiently stropped, the cover-plate is opened and the blade removed and placed in reversed position on the main-plate of the blade-holder and clamped again in position by the cover-plate. The apparatus is again moved over the strop, first in one and then in the opposite direction, so that thereby the edges are stropped again but on their opposite sides. The double-edged safety-razor blades, instead of being thrown away after becoming dull, can be used for a considerable length of time by repeatedly stropping the same.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In a razor stropping apparatus, the combination of, a supporting frame comprising rod-like side-pieces, an oscillating blade-holder pivoted to the ends of the supporting frame and provided with projecting pins, and sheets of metal bent upon themselves to form sleeves surrounding said rod-like sides, adjacent corners of the plates being slightly spaced apart and receiving said projecting pins therebetween.

2. In a razor stropping apparatus, the combination of, a supporting frame comprising rod-like side pieces, an oscillating blade-holding plate pivoted to the ends of the supporting frame and provided with

projecting pins, sheets of metal bent upon themselves to form sleeves surrounding said rod-like sides, adjacent corners of the plates being slightly spaced apart and receiving said projecting pins therebetween, a pair of short stud-pins secured to said blade-holding plate, a cover plate pivoted at one end to the blade-holding plate and provided with openings receiving said stud-pins and guiding said cover plate, and a device for locking the cover plate to the blade-holding plate.

3. In a razor-blade stropping apparatus, the combination of a supporting frame comprising a piece of wire bent to form rod-like sides, an oscillating blade-holder pivoted to the ends of the supporting frame, friction-sleeves surrounding said rod-like sides, and connections between the friction-sleeves and the blade-holder for oscillating the latter.

4. In a razor-blade stropping apparatus, a blade-holder composed of a main-plate having pivots at opposite ends and stud-pins, a cover-plate hinged to one end of the main-plate and provided with openings registering with the stud-pins for holding the blade, a flat spring attached to the lower face of said main-plate, and a catch secured to said plate, projecting through said plate and provided with a recess for locking the opposite ends of the cover-plate to the main-plate.

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

FREDERICK H. HOFFMANN.

Witnesses:

PAUL GOEPEL,
FANNIE FISK.