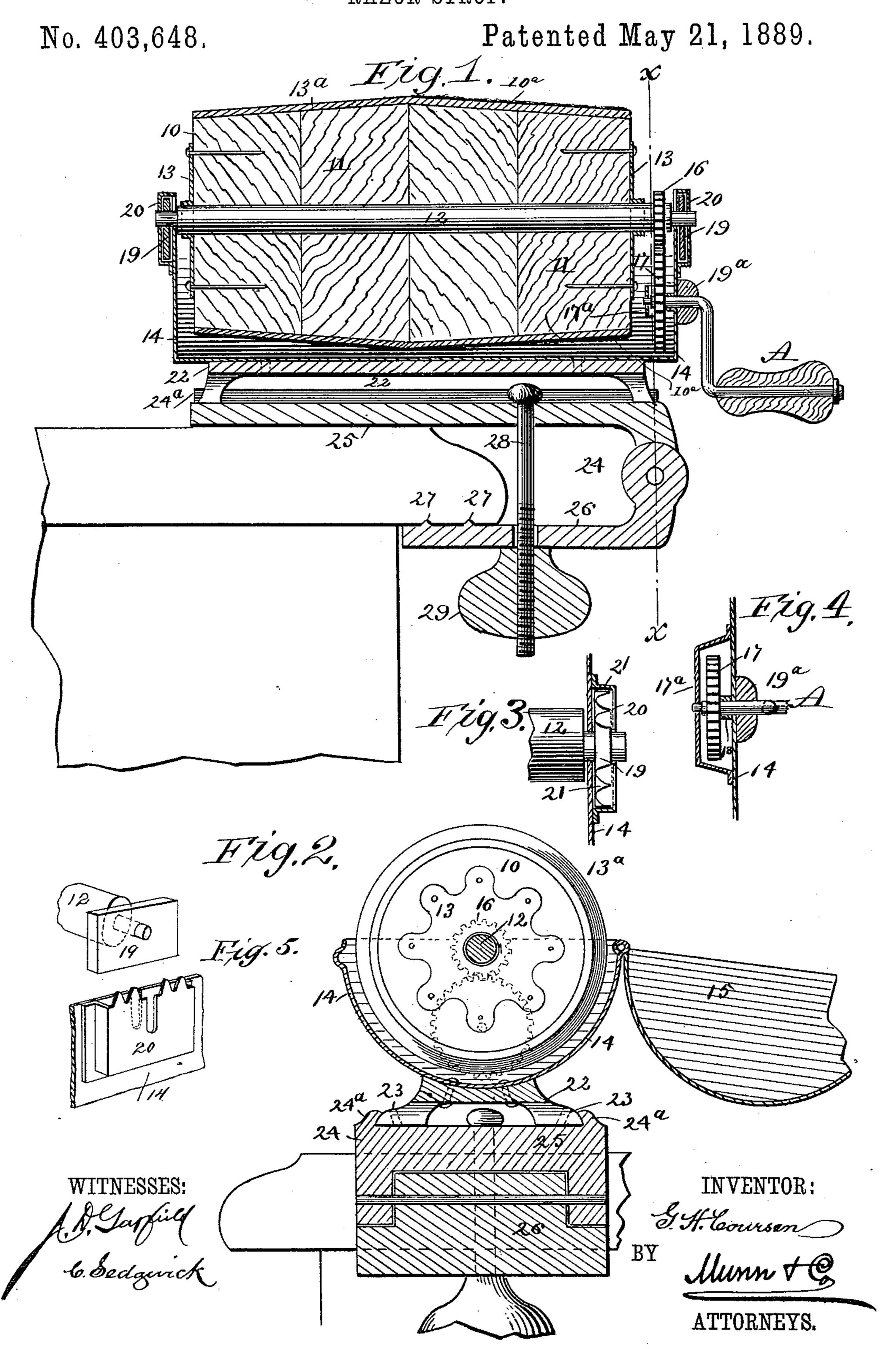
G. H. COURSEN.
RAZOR STROP.



## United States Patent Office.

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## RAZOR-STROP.

SPECIFICATION forming part of Letters Patent No. 403,648, dated May 21, 1889.

Application filed September 5, 1888. Serial No. 284,620. (No model.)

To all whom it may concern:

Beitknown that I, George Hampton Coursen, of Baltimore, State of Maryland, have invented new and useful Improvements in Razor-Strops, of which the following is a full, clear, and exact description.

My invention relates to an improvement in razor-strops, and has for its object to provide a strop capable of a rotary movement.

The object of the invention is also to provide a strop of a simple and durable construction, which may be conveniently manipulated and expeditiously attached to and detached from any suitable support; and a further object of the invention is to provide a strop whereby a razor can be more quickly and better sharpened than upon an ordinary flat strop.

The invention consists in the construction and arrangement of parts, as will be herein-

20 after described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a central vertical longitudinal section through the complete device. Fig. 2 is a transverse vertical section on line xx of Fig. 1, and Figs. 3 and 4 are detail sectional views. Fig. 5 is a detail view, on an enlarged scale, of one of the guards 20 with its points in the position they occupy prior to being turned down, one of the plates 19 being also shown detached.

In carrying out the invention the wheel or rotatory body 10 of the strop is made to par35 take of the contour of two truncated cones united at their base, and is preferably constructed of wood. In order to prevent the said wheel from splitting, it is made of several circular pieces, 11, glued or otherwise cemented together, the grain of the wood in any two adjacent pieces being at a right angle with each other.

The wheel 10 is traversed by an axle, 12, carrying end plates, 13, which are secured to the wheel by nails or pins around their edges. The wheel is provided with a circumferential covering or jacket, 13<sup>a</sup>, of leather or equivalent material or canvas, or canvas and leather, the said jacket being firmly glued or cemented to place, having first been stretched by rolling or stretching along the center, so as to

of the wheel. By so shaping the jacket any sharpening composition, 10<sup>a</sup>—such as an emery paste—may be spread upon the jacket-section covering one cone, and the other jacketed cone be allowed to remain plain. By reason of this arrangement the razor may be applied on either side of the wheel without any possibility of coming in undesired contact with 60 the other.

allow it to conform to the double conical form

The wheel 10 is contained in a short metal case, 14, preferably semicircular, and provided with a hinged cover, 15, and the said wheel is rotated by means of a pinion, 16, secured upon 65 the axle within the casing meshing with a gear-wheel, 17, journaled below in the said casing, as best illustrated in Fig. 1.

The inner end of the axle of the gear-wheel 17, which is bent at the outer end to form a 70 crank-arm, A, constituting a handle, is supported by a metal bracket, 17°, secured to the inner face of the casing at the end, as shown in detail in Fig. 4. A washer, 18, is placed between the gear and the casing, and a button, 75 19°, is attached to the outer face of the said casing to provide a bearing for that end of the axle. The gear 17 is keyed or otherwise secured upon the axle.

The ends of the axle of the sharpening- 80 wheel 10 turn in metal plates or journals 19, as best shown in Fig. 3, which fit snugly between the ends of the casing 14 and outer guards, 20, secured to the same, the said guards being finished with small tongues 21, 85 integral with the upper edges.

The plates or journals 19 having been placed on the ends of the axle 12 are dropped into their seats between the casing and guards 20, which latter are slotted to allow the axles to descend. 90 When the journal-plates 19 are in proper position, they are retained in such position by turning down the tongues 21. The object of this arrangement is to facilitate the ready removal of the wheel when worn and the substitution of a new one at any time, should it be desirable to do so, as the remaining portions of the device will outwear the sharpening-wheel, and to that end the wheels may be supplied separately.

The casing 14 is secured by rivets or otherwise to a metal base, 22, preferably provided

with a hole, 23, at each corner, whereby the strop may be nailed or screwed permanently to a dressing-table or other convenient support, if desired. When, however, a clamp, 24, 5 is used in connection with the device, the base 22 is made to fit between inwardly-inclined beads 24a, formed longitudinally with the bed of the clamp, which beads may slightly converge toward the inner end of the clamp; so 10 as to firmly engage with the said base 22. The clamp consists of an upper and lower member, 25 and 26, hinged together at one end, as best illustrated in Fig. 1, and the lower member, which is preferably the shorter, has teeth 15 27 in the upper face to engage with the under surface of a table or like article.

A headed bolt, 28, passes loosely through both members of the clamp 24, which are forced together by a nut, 29, on the lower end

20 of the bolt.

Having thus fully described my invention, I claim as new and desire to secure by Let-

ters Patent—

1. A sharpening-wheel inclined in opposite directions from its center and formed of a series of circular sections secured face to face, with the grain of the wood in any two sections at right angles to each other, and a yielding circumferential cover or jacket for the roller, substantially as set forth.

2. The combination, with a rotatable wheel

consisting of a series of united sections formed to the contour of two connected truncated cones of greatest diameter in the center, of a yielding peripheral jacket secured to the 35 wheel, having one portion of the surface provided with a coating of a sharpening composition, substantially as shown and described.

3. The combination, with a casing and guards attached to the same, said casing and 40 guards provided with aligning slots, of a rotatable sharpening-wheel, an axle passing through the wheel, and detachable journal-plates receiving the said axles, located between the casing and guards, said guards pro-45 vided with a series of flexible tongues, sub-

stantially as shown and described.

4. The combination; with a casing and guards attached to the same, said casing and guards provided with aligning slots and flexible tongues, of a rotatable sharpening-wheel, an axle passing through said wheel, a detachable journal-plate receiving said axle, located between the casing and guards, and means, substantially as shown and described, for rotating the wheel and securing the casing to a support, as and for the purpose specified.

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Witnesses:

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