

H. J. GAISMAN.
SAFETY RAZOR.
APPLICATION FILED SEPT. 4, 1909.

1,022,729.

Patented Apr. 9, 1912.

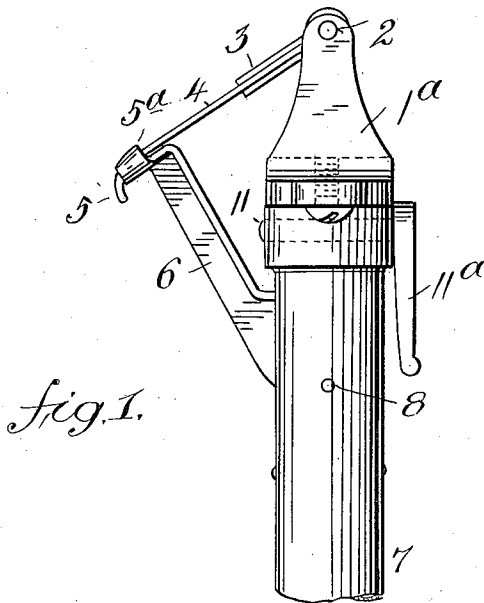


fig. 1.

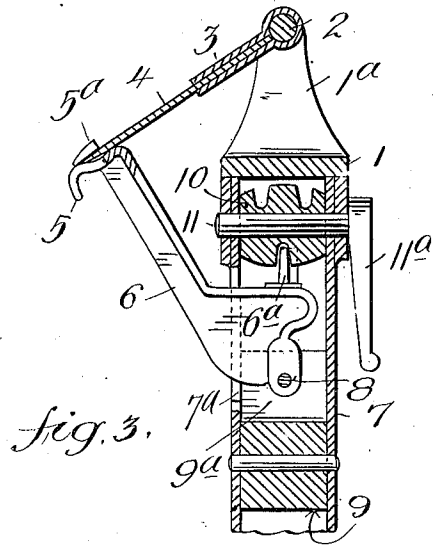


fig. 3.

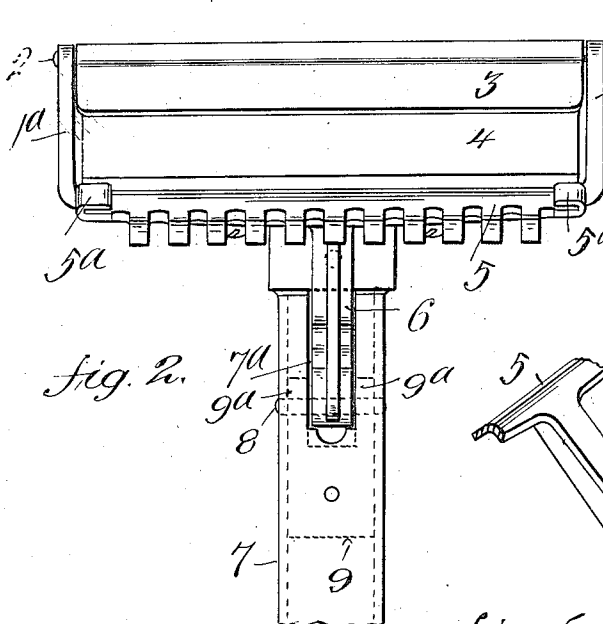


fig. 2.

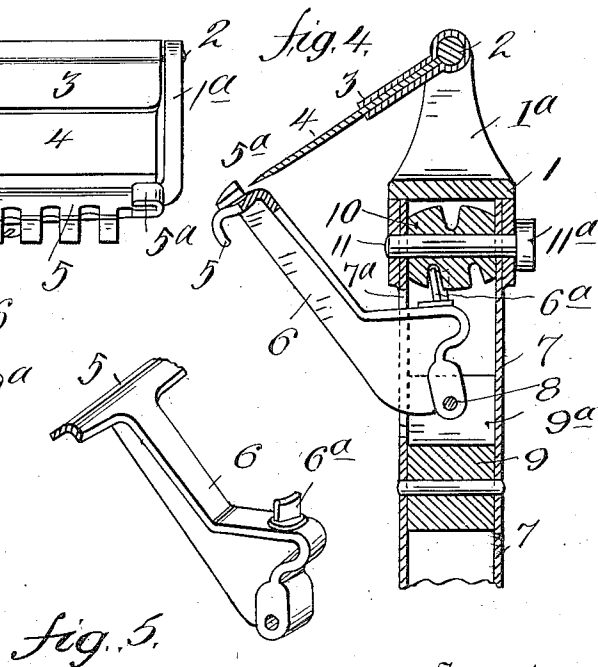


fig. 5.

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UNITED STATES PATENT OFFICE.

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SAFETY-RAZOR.

1,022,729.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HENRY J. GAISMAN, a citizen of the United States, and resident of New York city, borough of Manhattan, in the county of New York and State of New York, have invented certain new and useful Improvements in Safety-Razors, of which the following is a specification.

My invention has for its object to permit adjustment of a guard toward and from a blade edge in a safety razor, and for holding the blade in shaving position adjacent the guard, whereby the blade may be applied and released or removed.

My invention comprises a frame or support provided with a handle, a guard having an arm pivotally supported to co-act with the blade edge and provided with means, such as lugs or hooks, for holding the blade edge adjacent the guard, a worm pivotally carried by the handle adjacent the pivotal part of the guard supporting arm, and a complemental portion extending from the guard supporting arm for co-action with the worm, whereby upon rotating the worm the guard may be adjusted with respect to the blade edge.

My invention also comprises novel details of improvement and combinations of parts that will be more fully hereinafter set forth and then pointed out in the claims.

Reference is to be had to the accompanying drawings forming part hereof, wherein, Figure 1 is an edge view of a safety razor embodying my invention, part of the handle being removed; Fig. 2 is a side view looking from the left in Fig. 1; Figs. 3 and 4 are vertical sectional views illustrating the parts in different positions of adjustment, and Fig. 5 is a fragmentary detail view of part of the guard and its support.

Similar numerals of reference indicate corresponding parts in the several views.

The numeral 1 indicates a suitable frame shown provided with uprights 1^a spaced apart and at 2 is a rod or shaft carried by uprights 1^a, whereby a space is provided between the base of the frame, the uprights 1^a and shaft or rod 2, said space being open through from side to side of the frame, for the passage of a strop for sharpening the blade.

3 indicates a suitable blade holder carried by rod or shaft 2 for detachably retaining blade 4.

The guard 5 may generally be of any well known or suitable construction adapted to co-act with the blade edge, and said guard is formed on or attached to the upper end of a pivotally supported or swinging arm 6. The guard-carrying arm 6 is shown pivotally supported by the handle 7 which may be attached to frame 1 in any suitable manner. I have shown the tubular handle 7 provided in one side with an opening 7^a receiving arm 6, the inner portion of arm 6 being pivotally supported within handle 7, as upon pivot or pin 8 shown passing through said handle. I have shown a block or plug 9 secured within the bore of tubular handle 7 and provided with jaws 9^a between which the inner part of arm 6 lies, the pin or pivot 8, passing through said jaws, whereby the support for arm 6 is strengthened and said arm is properly guided for swinging movement.

At 10 is a worm journaled within the bore of handle 7, and shown carried by a shaft 11 provided with a thumb piece or extension 11^a exterior to the handle for conveniently rotating worm 10. The guard-carrying arm 6 is provided with a complemental extension or projection 6^a engaging the threads or worm 10.

Guard 5 is provided with means for retaining the blade in shaving position, and to this end I have shown said guard provided with lugs or hooks 5^a at opposite corners of the guard, shaped or bent in such position as to properly engage the blade near its ends adjacent its cutting edge, the lugs or hooks 5 being shown extending in the general direction of the guard to permit the free sliding of the guard relatively to the blade, and whereby as the guard is swung upwardly with respect to the plane of the blade the lugs or hooks 5^a will tend to draw the blade firmly against the guard when desired.

By rotating worm 10 in one direction arm 6 will be swung toward frame or support 1 to carry guard 5 toward the blade to hold the blade, as indicated in Figs. 1, 2 and 3, and when said worm is rotated in the reverse direction arm 6 will be swung outwardly carrying guard 5 and its lugs or hooks away from the blade to release the same, as indicated in Fig. 4, whereby the blade may be removed and replaced, cleaned or sharpened, as required.

My invention is not limited to the details of construction shown and described, as changes may be made, within the scope of the appended claims, without departing from the spirit of my invention.

Having now described my invention what I claim is:—

1. A safety razor comprising a frame provided with means to support a blade and having a tubular handle, a guard, an arm extending from the guard through an opening in the handle and pivotally supported by the handle, a worm journaled to rotate within the handle, the arm being provided with a complemental portion co-acting with the worm, said guard being provided with means to retain a blade in correlation therewith, and means for rotating the worm.

2. A safety razor comprising a frame provided with a tubular handle and having means to support a blade, a guard provided with blade engaging lugs, an arm carrying the guard, said handle having an opening in one side through which said arm extends and is adapted to swing, a pivot connecting the arm with the handle, a worm journaled within the handle, complemental means on the arm engaging said worm, and means for rotating the worm.

3. A safety razor comprising a frame provided with uprights at opposite ends spaced apart and providing a passage between the uprights, a blade holder carried by said uprights, said frame having a handle, a guard provided with means to engage a blade, an arm carrying said guard and projecting through an opening in the handle and pivotally supported at its inner end within the handle, a worm journaled within the handle, said arm having complemental means co-acting with said worm, and means for rotating said worm.

4. A safety razor comprising a frame having uprights at opposite ends spaced apart and providing a space between said uprights open from side to side, a rod or shaft connected with and extending between said uprights, a blade holder carried by said rod or shaft, said frame having a handle, a guard provided with lugs to engage a blade, an arm carrying said guard and pivotally supported by said handle, a worm journaled upon the handle, said arm having complemental means co-acting with said worm, and means exterior to the handle for operating the worm.

5. A safety razor comprising a frame provided with a hollow handle, means to support a blade, a guard having means to retain a blade, an arm extending from the guard through an opening in the handle, a block within the handle and pivotally connected with said arm, a worm journaled upon the handle, complemental means on said arm engaging said worm, and means exterior to the handle for operating the worm.

6. A safety razor comprising a frame provided with a hollow handle, means to support a blade, a guard having means to retain a blade, an arm extending from the guard through an opening in the handle, a block provided with jaws and located within the handle, said arm being received between said jaws and pivotally connected therewith, a worm journaled upon the handle, complemental means on the arm co-acting with the worm, and means exterior to the handle for operating the worm.

7. A safety razor comprising a blade support, a guard or blade seat provided with blade retaining means, means for pivotally supporting the latter, said guard having an arm provided with one or more teeth extending in the general direction of movement of the arm, a worm meshing with said teeth, and means for rotatively supporting said worm.

8. A safety razor comprising a blade support, a guard or blade seat provided with an arm having a branch at its end, means for pivotally supporting said branch, the latter being provided with one or more teeth between its support and the guard, a worm meshing with said teeth, and means for pivotally supporting said worm.

9. A safety razor comprising a blade support, a handle, a guard provided with an arm having a branch located within said handle, a support within the handle for pivotally supporting said branch, said arm being provided with one or more teeth, a worm meshing with said teeth, and means for pivotally supporting said worm.

Signed at New York city, in the county of New York, and State of New York, this 3rd day of September, A. D. 1909.

HENRY J. GAISMAN.

Witnesses:

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