J. F. CRAVEN.

SAFETY RAZOR.

APPLICATION FILED OCT. 23, 1914.

1,135,362. Patented Apr. 13, 1915.

FIG. 1

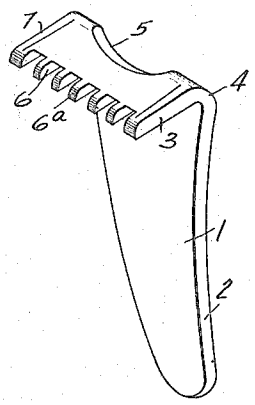


FIG. 2

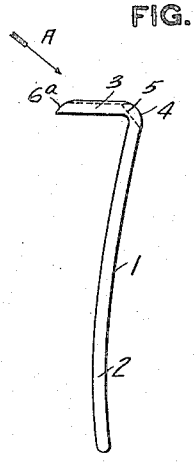


FIG. 3

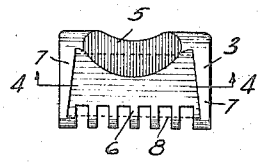


FIG. 4

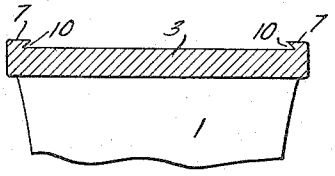


FIG. 5

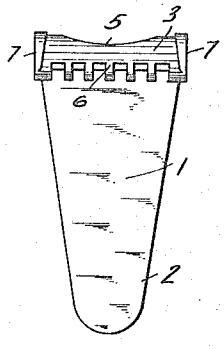
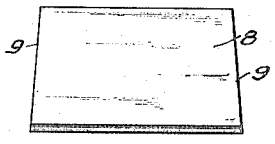


FIG. 6



WITNESSES

C. T. Holman

Elbert L. Lyde

INVENTOR

James F. Craven

By Fredk H. Winter

his attorney

UNITED STATES PATENT OFFICE.

JAMES F. CRAVEN, OF CRAFTON, PENNSYLVANIA.

SAFETY-RAZOR.

1,135,362. Specification of Letters Patent. Patented Apr. 13, 1915.

Application filed October 23, 1914. Serial No. 868,316.

To all whom it may concern:

Be it known that I, JAMES F. CRAVEN, a resident of Crafton, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Safety-Razors, of which the following is a specification.

This invention relates to safety razors.

The object of the invention is to provide an improved safety razor which may be constructed at low cost and without special machine tools or apparatus, which comprises in a single member all the necessary features of a safety razor, which holds the blade securely against the guard and prevents soap and hair from getting in between the blade and guard, which holds the blade in such a manner that the user must necessarily apply the blade to the face at the proper angle, in which the blade is secured to the outer face of the guard and lies flat against the face during shaving, thereby cutting the hair at a right angle, which would not be the case if anything were between the blade and face, which has no objectionable protuberances or projections which might contact with the skin, and which has no movable parts, so that it is clean, sanitary and can be easily washed and is not liable to collect dirt or germs.

The invention comprises the razor hereinafter described and claimed.

In the drawings, Figure 1 represents a perspective view of a razor embodying the invention; Fig. 2 is a side elevation thereof; Fig. 3 is an end elevation, looking directly at the guard and in dotted lines showing a blade therein; Fig. 4 is a cross section on the line 4—4, Fig. 3, and on a larger scale; Fig. 5 is a front view looking in the direction of the arrow A, Fig. 2; and Fig. 6 is a detailed plan view of a blade.

The razor shown in the drawings is made of a single piece of metal or other suitable material, preferably of such thickness and weight as to be rigid and inflexible, so that it is durable and is not liable to bend or break in service. The razor may be made from heavy sheet metal by stamping and pressing operations, or, if desired, may be made of die cast white metal or other suitable material, such as bakelite, celluloid or even glass.

The razor comprises a handle member 1, which is in the shape of a rather blunt tongue, with the side edges 2 which converge toward the end of the handle. Said handle is bent on a gentle curve from end to end, as shown in Fig. 2, so that its outer end portion is substantially perpendicular to the middle portion of the guard 3. This guard is continuous with the handle member 1 and is cast in the form shown if the razor is made of cast material, or if made of forged or pressed metal is formed by merely bending over the wide end of the blank into a plane substantially perpendicular to the end portion of the handle. The metal at the bend between the guard and handle is curved on a rather large radius, as shown at 4, in order to provide sufficient stock to enable the middle portion to be hollowed out, as at 5, for the purpose of removing the blade, as hereinafter more fully described.

The front edge of the guard 3 is provided with the usual teeth 6, which are formed by properly shaping the die or by sawing or slotting out the material between adjacent teeth, as will be readily understood. The teeth are preferably also beveled or rounded off, as shown at 6^a, so that no sharp edges will contact with the face. The outer face of the guard is provided at each end with a shoulder 7, preferably formed by milling out the material of the guard lying between said shoulders, although if desired the shoulders may be stamped or pressed from the original stock. These shoulders, generally speaking, are normal to the toothed edge of the guard, but, as shown in Fig. 3, converge rearwardly from the guard teeth. They form between them a socket or seat to receive the razor blade 8, which has its end edges 9 inclined in the same manner as the abutment 7. The blade is placed in the razor by slipping it in from the front between the abutments 7, and is removed therefrom by applying the thumb or finger to the rear edge of the blade where it projects over the cavity 5, and which enables the blade to be readily pushed out from its seat.

The abutments 7 are preferably undercut, as shown at 10, Fig. 4, so that the pressure on the cutting edge in shaving will force the blade tightly against the flat bottom of the blade-holding socket in the guard and consequently prevent the entrance of soap, hair, or the like between the blade and guard. This construction permits the use of a very thin blade.

The razor described is quite simple as it consists of only a single piece and has no

moving parts. Consequently it may be readily cleaned after shaving, and is not liable to collect dirt or germs. It can be manufactured cheaply and rapidly in large quantities. The outer face of the blade is exposed, and lies flat against the face during shaving, so that the best shaving effect is obtained.

What I claim is:—

1. A safety razor, comprising a handle and a toothed guard connected thereto, said guard having its outer face provided with a recess or seat for a blade, the edges of said recess being undercut and diverging toward the toothed portion of the guard.

2. A safety razor, comprising a handle and a toothed guard connected thereto, said guard having its outer face provided with a recess or seat for a blade, the edges of said recess diverging toward the toothed portion of the guard, and a blade lying within said recess and having its end edges inclined to each other.

3. A safety razor, comprising a handle and a toothed guard connected thereto, said guard having its outer face provided with a recess or seat for a blade, the edges of said recess being undercut and diverging toward the toothed portion of the guard, and a blade lying within said recess and having its end edges inclined to each other.

In testimony whereof, I have hereunto set my hand.

JAMES F. CRAVEN.

Witnesses:

WILLIAM B. WHARTON,

GLENN H. LERESCHE.