W. H. GATES.

SAFETY RAZOR.

APPLICATION FILED NOV. 14, 1910.

1,005,193. Patented Oct. 10, 1911.

Fig. 1.

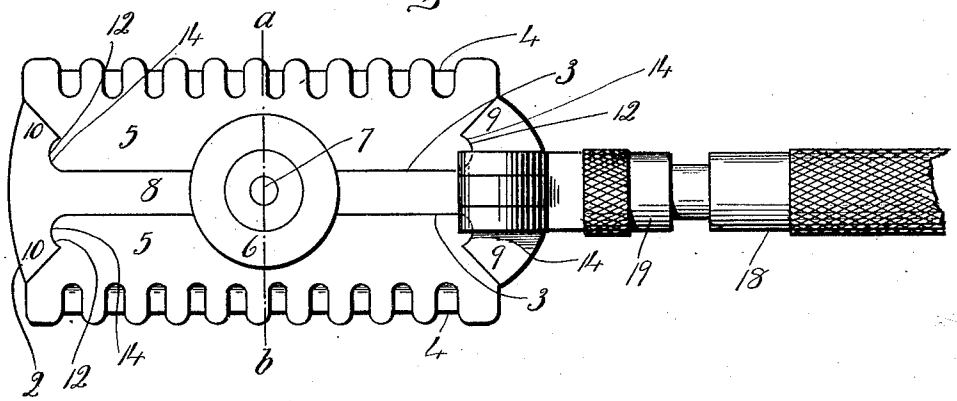


Fig. 2.

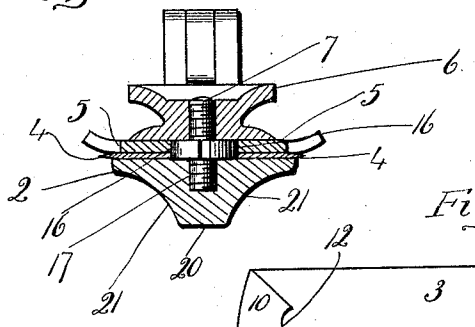


Fig. 3.

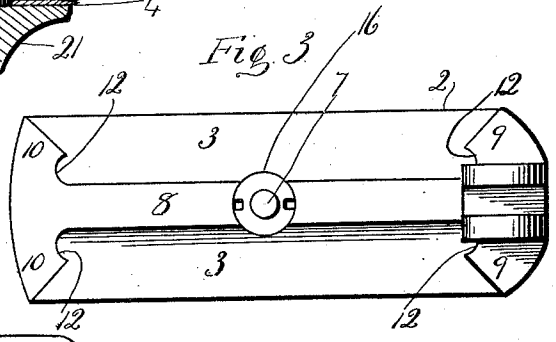


Fig. 4.

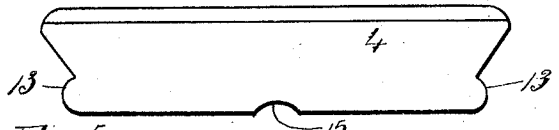
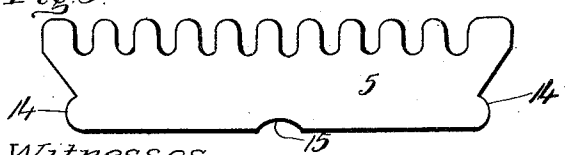


Fig. 5.



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SAFETY-RAZOR.

1,005,193. Specification of Letters Patent. **Patented Oct. 10, 1911.**

Original application filed August 31, 1910, Serial No. 579,861. Divided and this application filed November 14, 1910. Serial No. 592,265.

To all whom it may concern:

Be it known that I, WILLIAM H. GATES, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Safety-Razors; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1 a plan view of a safety razor constructed in accordance with my invention with a portion of its handle broken away. Fig. 2 a view of the razor in transverse section on the line *a—b* of Fig. 1. Fig. 3 a detached plan view of the blade-carrier from which the blades and combs have been removed. Fig. 4 a detached plan view of one of the blades. Fig. 5 a detached plan view of one of the blade-guards.

My invention relates to an improvement in safety razors, the object being to produce a simple, compact and convenient safety razor constructed with particular reference to the mounting of the blades and blade-guards.

With these ends in view my invention consists in a safety-razor having certain details of construction as will be hereinafter described and pointed out in the claims. This application is a division of my pending application filed August 31st, 1910, Serial No. 579,861.

In carrying out my invention as herein shown, I employ an oblong blade-carrier 2 of triangular form in transverse section, its flat upper face being formed with two shallow recesses 3 for the reception of two removable razor-blades 4 and two comb-like blade-guards 5 respectively superimposed upon the said blades, the said blades and blade-guards being retained in place by a single thumb-nut 6 applied to a threaded stud 7 located midway the length of a rib 8 formed upon the upper face of the said blade-carrier 2, separating the said recesses 3 thereof from each other and terminating at its ends in transverse abutments 9, 10, each of which is formed upon its inner edge with two coupling-notches 12 for the reception of coupling-lugs 13 formed at the ends of the razor-blades 4 and also for the reception of coupling-lugs 14 formed at the ends of the blade-guards 5. The inner edges of the blades 4 and guards 5 are also formed, as shown, with clearance cuts 15 for the clearance of the flange 16 of the stud 7 which on the opposite side of the said flange has a threaded stem 17 for being screwed into the body of the carrier 2. A folding handle 18 secured in its open positions by a locking-sleeve 19 is fully shown and described in my application before referred to. The lower face of the carrier 2 is angular in form and comprises a centrally arranged longitudinal positioning-rib 20 falling away on either side in concave grooves 21 to the edges of the carrier. This feature of construction, also shown in my application filed August 31st, 1910, has been made the subject matter of another application.

I claim:—

1. In a safety razor, the combination with a blade-carrier formed in its upper face with two like shallow recesses separated from each other by a longitudinal rib terminating at its respective ends in two transversely arranged abutments, of two blades respective located in the said recesses, two blade-guards also located in the said recesses in which they are superimposed upon the blades, and common means overhanging both recesses for securing the two blades and the two blade-guards in place therein.

2. In a safety razor, the combination with a blade-carrier having its upper face formed with two shallow recesses separated from each other by a rib which terminates at its ends in transversely arranged abutments formed with locking-notches, of blades adapted to be located in the said recesses and provided at their ends with coupling lugs to enter the said coupling-notches, blade-guards also adapted to be entered into the said recesses in which they are superim-

posed upon the blades and provided at their ends with coupling-lugs adapted to be entered into the said coupling-notches, and a screw-stud rising above the said rib, and a nut applied to the said stud and engaging with the blade-guards.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

WILLIAM H. GATES.

Witnesses:
CLIFFORD J. REED,
FREDERIC C. EARLE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."