E. D. CHADWICK.

SAFETY RAZOR.

APPLICATION FILED JAN. 21, 1919.

1,357,222. Patented Nov. 2, 1920.

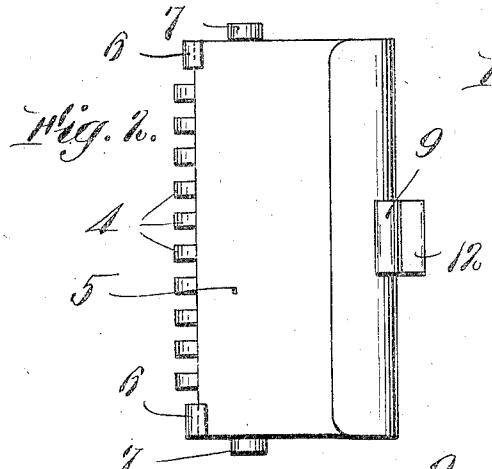


Fig. 2.

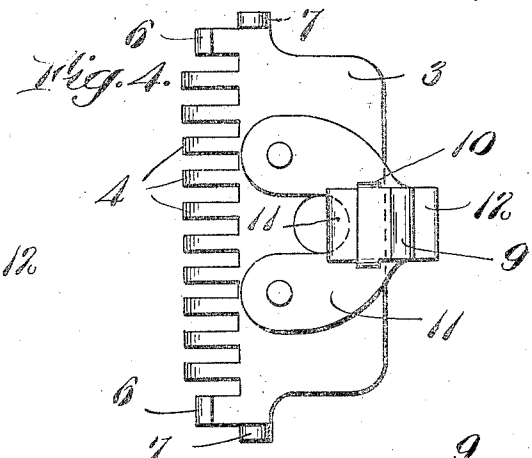


Fig. 4.

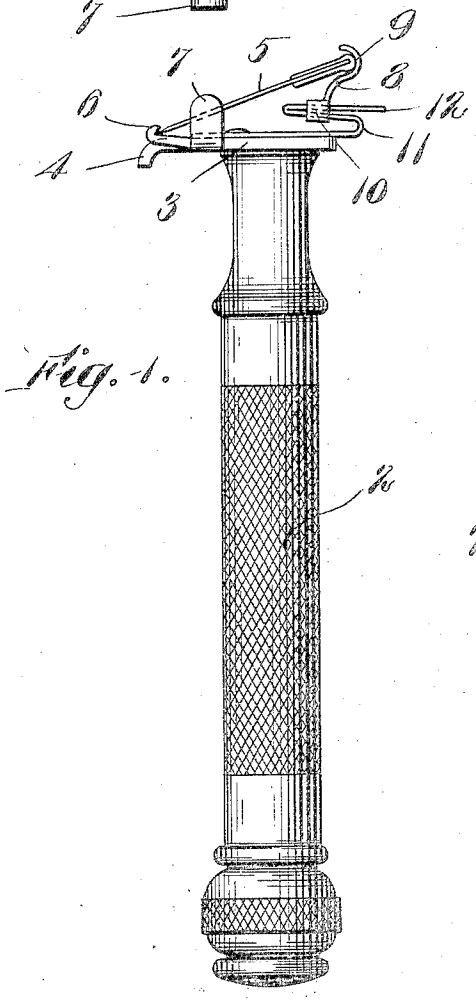


Fig. 1.

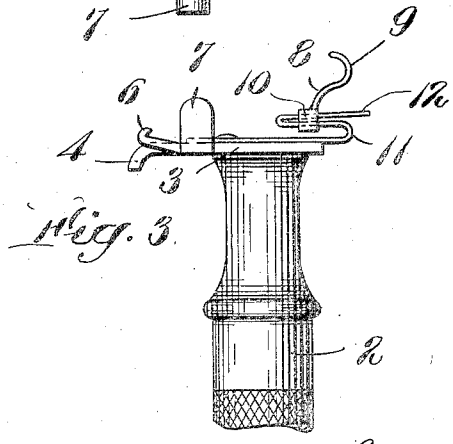


Fig. 3.

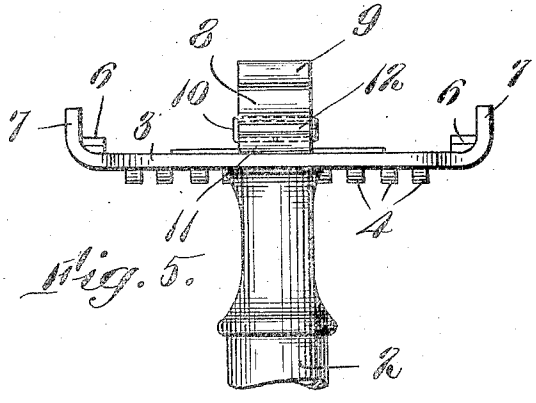


Fig. 5.

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UNITED STATES PATENT OFFICE.

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SAFETY-RAZOR.

1,357,222. Specification of Letters Patent. **Patented Nov. 2, 1920.**

Application filed January 21, 1919. Serial No. 272,243.

To all whom it may concern:

Be it known that I, EVERETT D. CHADWICK, a citizen of the United States, residing at Winchester, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Safety-Razors, of which the following is a specification.

The object of my invention is to provide a simple and inexpensive safety razor in which blades of different widths can be employed with equal facility, thus making it possible to use commercial blades of various makes in the same holder. This object is accomplished in the manner hereinafter described in connection with the accompanying drawing, in which;

Figure 1 is a side elevation of a razor embodying my invention, as preferably constructed;

Fig. 2 is an end view of the same;

Fig. 3 is a side elevation of the upper portion of the holder with the blade removed; and

Figs. 4 and 5 are an end view and a rear elevation, respectively, of the parts shown in Fig. 3.

The razor illustrated comprises a handle 2, a blade-supporting head 3 secured to one end of the handle and extending transversely thereto, a guard 4 formed on the front edge of the head 3, a blade 5, stops 6 located at the ends of the guard and adapted to engage the cutting edge of the blade and hold it in proper relation to the guard, and a pair of lugs 7 extending upwardly from the ends of the head 3 and serving to position the blade in an endwise direction. The parts just referred to are of familiar construction and are to be regarded as typical of any functionally-equivalent parts so far as the present invention is concerned, which resides primarily in the means employed for holding the blade against the stops 6 and maintaining it in position for use. For this purpose I employ an upright support 8 provided at its upper end with a seat 9 adapted to receive the rear edge of the blade and at its lower end with a socket 10 which can be slid toward and away from the guard 4 on the free portion of a resilient member shown as consisting of a spring 11 secured at one end to the head 3. Preferably, for reasons hereinafter explained, the free portion of the spring 11 has the form of a flat strip doubled upon itself as shown, with its doubled edge pointing toward the guard and its free end 12 extending rearward beyond the other parts of the spring, but these details are not essential. The configuration of the socket 10 is such that if the upper end of the support 8 is pressed backward, or away from the guard 4, the socket will bind on the spring 11 and thereby render the support incapable of further movement away from the guard.

To insert a blade the support 8 is moved away from the guard by sliding the socket 10 backward on the spring 11, the front edge of the blade is engaged with the stops 6, and the support is then moved forward on the spring until the seat 9 receives and engages the rear edge of the blade, whereupon the socket 10 is pushed still farther forward until it binds on the spring by reason of the inclined position which the support is thus caused to assume. This final movement of the socket also causes the free portion of the spring to be elevated slightly against the action of the spring itself, due to the fact that the support 8 pivots on the rear edge of the blade after the forward movement of the seat 9 has been arrested, and hence the spring holds the support in the position thus reached, thereby maintaining the blade in operative position in the holder. To release the blade the user presses downward on the rearwardly-projecting extremity of the spring 11 and thereby elevates its free portion slightly, which destroys the binding engagement of the socket 10 with the spring and permits the support 8 to be slid rearward until the seat 9 is disengaged from the rear edge of the blade, leaving the latter free to be removed.

When there is no blade in the holder the support 8 is retained on the free portion of the spring 11 by frictional engagement of the socket 10 with the folds of the spring, which tend to separate sufficiently to cause them to exert a moderate pressure on the upper and lower walls of the socket. The support 8 can be removed, however, by sliding it forward until the socket 10 passes off the end of the free portion of the spring, so that it can be readily replaced by another in case it becomes bent or broken.

It will be seen that the support 8 can be

pushed forward until it engages the rear edge of any blade capable of being placed in the holder, whatever the width of the blade may be, and that all such blades will be maintained in the holder with equal security. The main advantage of my razor resides in this capacity, since it enables the user to employ any one of a number of blades differing slightly in width which are now on the market. Another advantageous feature resides in the simplicity of the construction illustrated, but it will be understood that the details can be varied to a considerable extent without departing from my invention, particularly as regards the resilient member on which the support for the rear edge of the blade is mounted and the means employed for maintaining said support in operative position.

I claim:—

1. In a safety razor, the combination with a guard and stops at its ends to position the cutting edge of blade, of a spring-supported member extending transversely to the length of the guard, a support movable on said spring-supported member, lengthwise of the latter, and provided with a seat adapted to engage the rear edge of the blade, and means for locking the support to said member to maintain the blade in operative position.

2. In a safety razor the combination with a guard and stops at its ends to position the cutting edge of a blade, of a spring-supported member extending transversely to the length of the guard, and a support provided at its upper end with a seat adapted to engage the rear edge of the blade and at its lower end with a socket adapted to slide on the spring-supported member and to bind thereon when the support is tilted with respect thereto.

3. In a safety razor, the combination with a guard and stops at its ends to position the cutting edge of a blade, of a spring having a free portion extending transversely to the length of the guard, and a support provided at its upper end with a seat adapted to engage the rear edge of the blade and at its lower end with a socket embracing the free portion of the spring and adapted to bind thereon when the support is tilted with respect thereto.

4. In a safety razor, the combination with a guard and stops at its rear ends to position the cutting edge of blade, of a spring fixed at one end and doubled to provide a free portion extending toward the guard and thence rearward into position to be operated by the user, and a support provided at its upper end with a seat adapted to engage the rear edge of the blade and at its lower end with a socket embracing the free portion of the spring in frictional engagement therewith.

Signed at Boston, Mass., this 20th day of January, 1919.

EVERETT D. CHADWICK.