

W. W. TROWBRIDGE & C. H. WHEELOCK.

RAZOR BLADE STROPPER.

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940,412.

Patented Nov. 16, 1909.

Fig. 1.

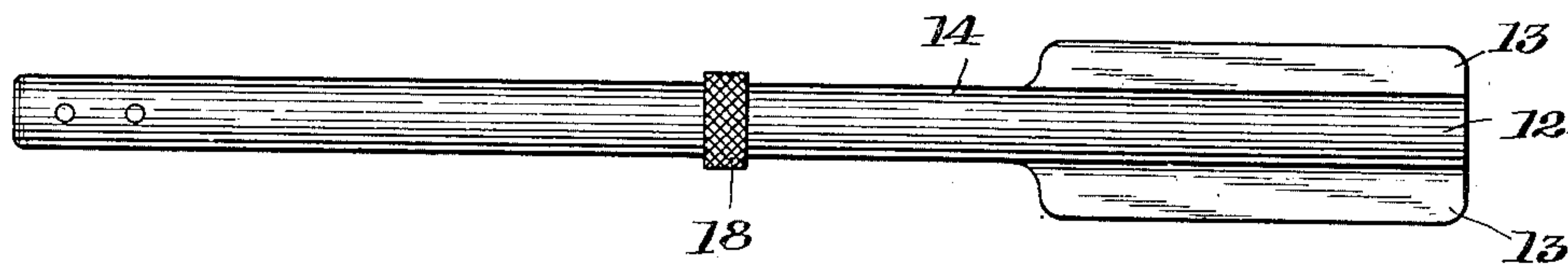


Fig. 2.

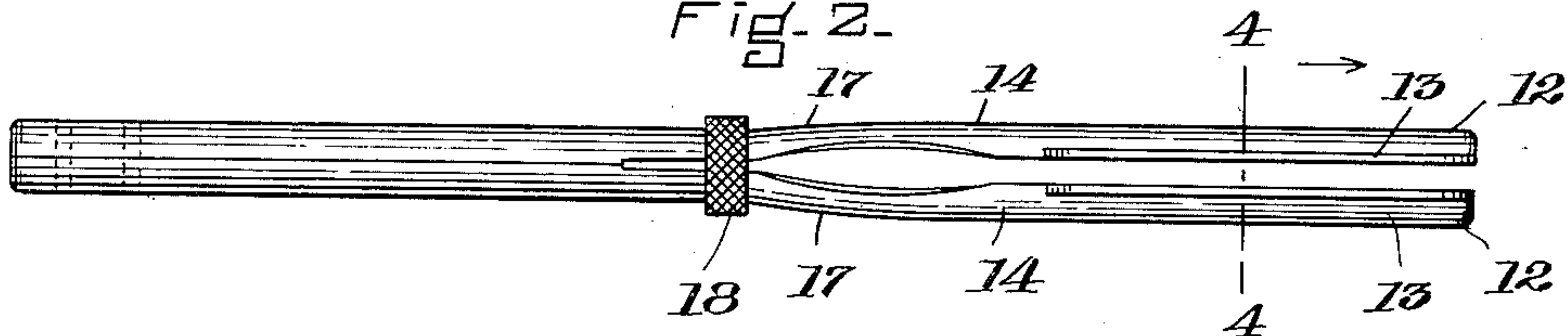


Fig. 3.

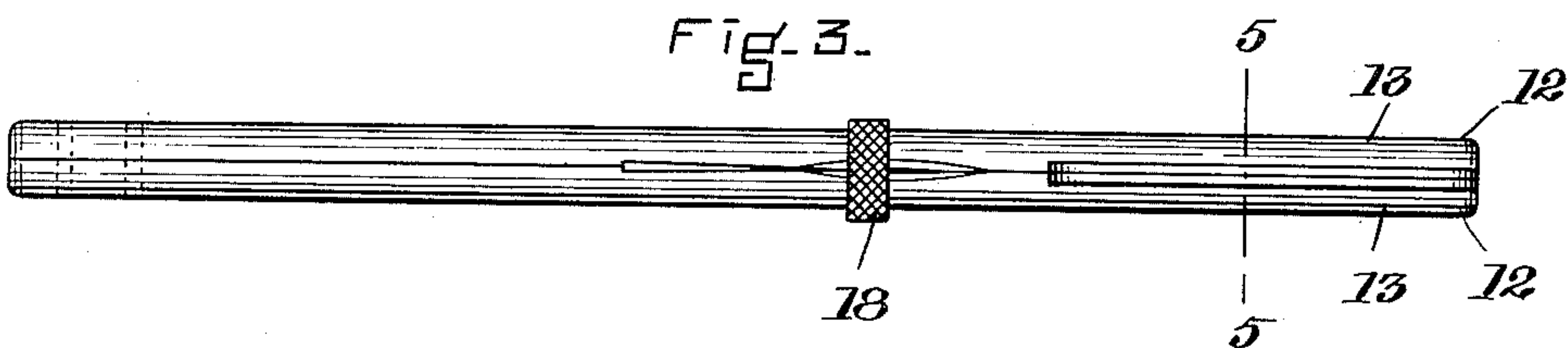


Fig. 5.

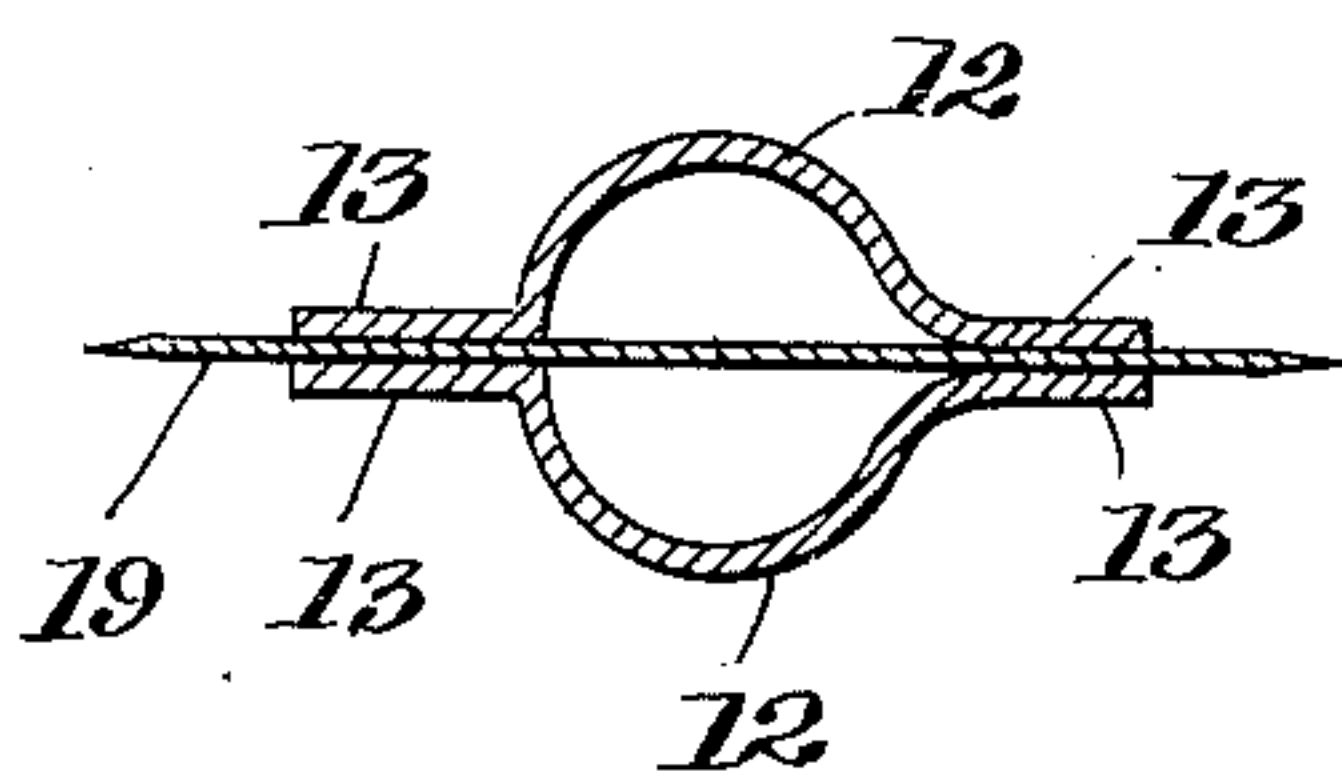


Fig. 4.

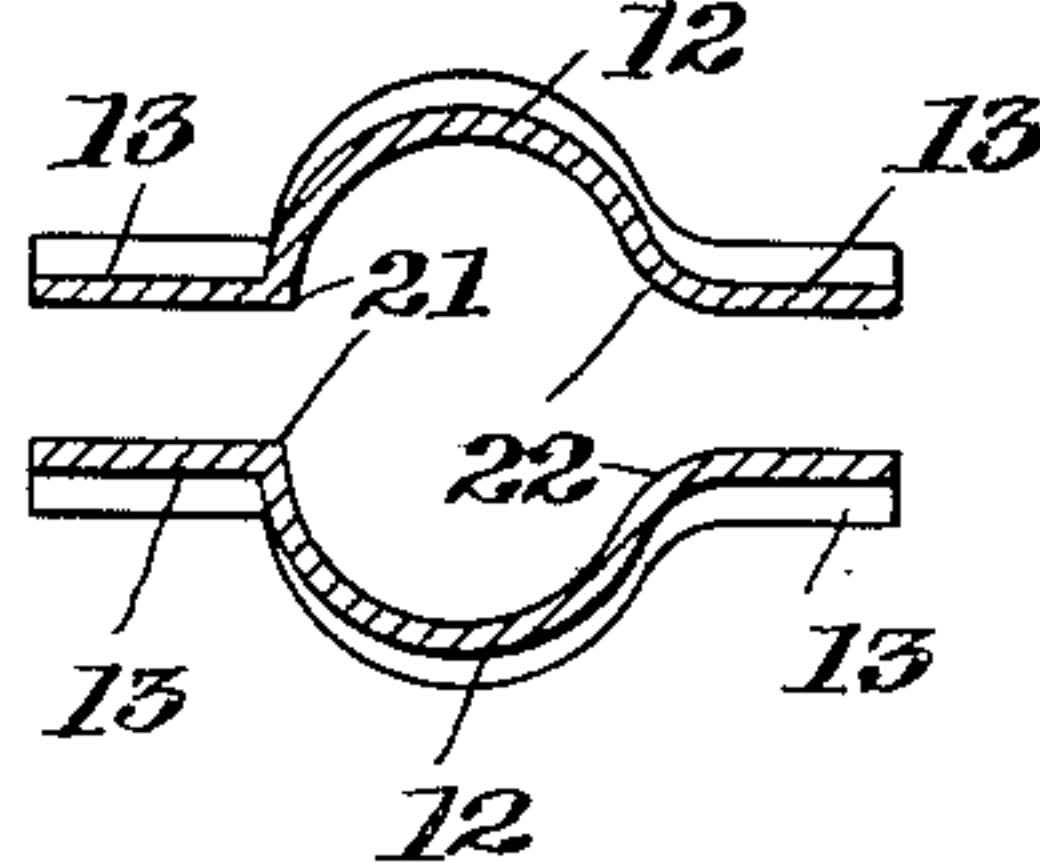
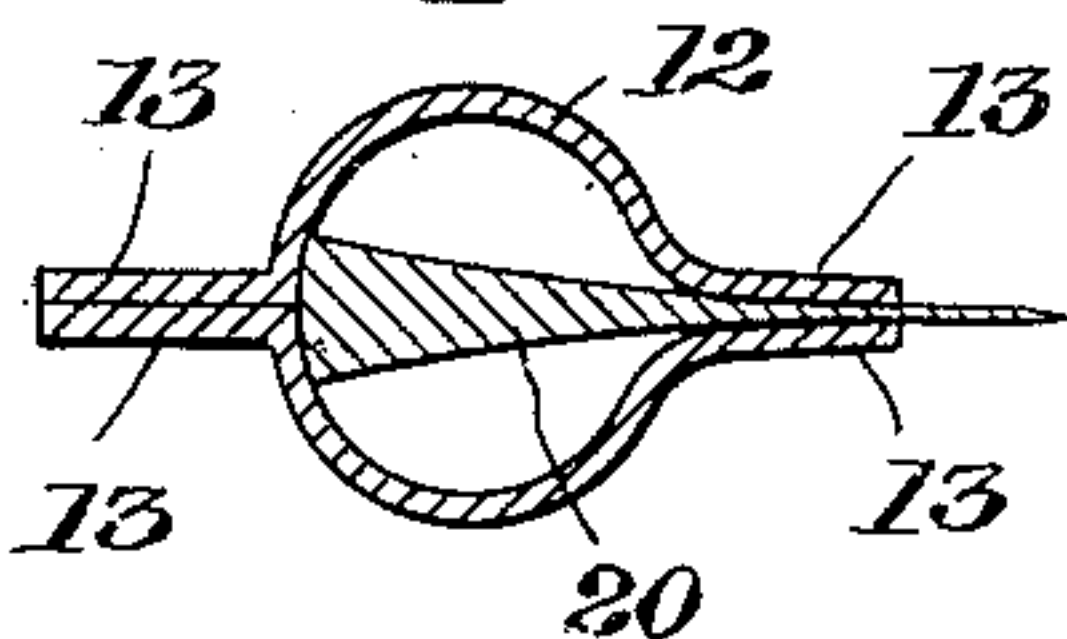


Fig. 6.



WITNESSES.

P. N. Pezzetti
H. R. Roulstone

INVENTORS.

W. W. Trowbridge
C. H. Wheelock

by Hugh Brown Quincy May
attys.

UNITED STATES PATENT OFFICE.

WILLIAM WALDO TROWBRIDGE AND CHARLES HAROLD WHEELOCK, OF NEWTON,
MASSACHUSETTS.

RAZOR-BLADE STROPPER.

940,412.

Specification of Letters Patent.

Patented Nov. 16, 1909.

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To all whom it may concern:

Be it known that we, WILLIAM WALDO TROWBRIDGE and CHARLES HAROLD WHEELOCK, of Newton, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Razor-Blade Stoppers, of which the following is a specification.

This invention relates to devices for holding and manipulating detachable blades of so-called "safety" razors while the same are being stropped.

The invention has for its object to provide a blade stopper adapted to hold various forms of safety razor blades, including a blade with a thickened back, such as is used in the "Star" safety razor, or a blade with flat parallel sides, such as that used in the Gillette and other well-known safety razors, provision being made for exposing both edges of a double-edged blade so that both edges may be stropped at one operation.

The invention consists in the improvements which we will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification,—Figure 1 represents a side elevation of a blade stopper embodying our invention. Fig. 2 represents an edge view of the same, showing the jaws separated. Fig. 3 represents a view similar to Fig. 2, showing the jaws closed. Fig. 4 represents a section on line 4—4 of Fig. 2. Fig. 5 represents a section on line 5—5 of Fig. 3, showing a double-edged flat sided blade held by the device. Fig. 6 represents a view similar to Fig. 5, showing a blade of the "Star" razor type.

The same reference characters indicate the same parts in all the figures.

Our improved blade stopper comprises two resilient sheet metal plates *a, a*, each of which has a longitudinal central boss 12, and two blade-clamping jaws 13 projecting in opposite directions from the boss 12. Each plate is provided with a shank 14, which shanks are extended from the jaws sufficiently to form a handle, the outer end portions of the shanks being rigidly connected, while their portions which are adjacent to the jaws are separated by a slot 16 which permits the said shank portions and the jaws to be separated, as indicated in Figs. 2 and 4, the separation being preferably caused by the resilience of the shanks.

Means are provided for forcing the plates toward each other to cause the jaws to cooperate in grasping a razor blade interposed between them. As here shown, the resilient portions of the shanks are provided with inclines 17 which cooperate with a ring or band 18, which is adapted to slide from the position shown in Figs. 1 and 2 to that shown in Fig. 3, and thus force the plates toward each other, the band having a sufficient frictional hold upon the shanks to hold the jaws in the adjustment shown in Fig. 3.

The above described construction provides two pairs of blade-clamping jaws projecting in opposite directions from the bosses 12, so that the device is adapted to grasp a flat double-edged razor blade 19 of the Gillette type, as shown in Fig. 5, the width of the plates *a* being less than the width of the blade so that both edges of the blade are exposed sufficiently to enable them to be stropped.

The bosses stiffen the plates sufficiently to enable the jaws to bear firmly throughout their entire length on the interposed blade. Said bosses also form a chamber between the two pairs of blades adapted to receive the thickened back of a razor blade 20 of the "Star" razor type, said blade having a single cutting edge which projects from one pair of the jaws, as shown in Fig. 6, the jaws of the other pair being enabled by a torsional movement of the plates *a* to meet so that the inner surfaces of the bosses at their junction with the meeting jaws, form an abutment for the back of the blade 20. The support thus provided for the back of the blade enables a single pair of jaws to hold the blade with sufficient firmness to prevent its accidental displacement during the stropping operation.

We prefer to form the plates in cross section as shown in Fig. 4, the junction between the bosses and plates of one pair forming angles 21 which meet to form the support or abutment for the back of the blade 20. The formation of the plates at the junction of the bosses with the opposite pair of jaws is preferably such that curved surfaces 22 are provided, these conforming approximately to the concave sides of the blade 20.

When a double-edged blade 19 is held by the device, the frictional engagement between the pairs of jaws and blade is suffi-

cient to prevent accidental displacement of the blade during the stropping operation.

The construction is preferably such that when there is no blade between the jaws, a movement of the ring 18 from the position shown in Fig. 2, to that shown in Fig. 3, will press the jaws of each pair into yielding contact with each other, the jaws being therefore adapted to occupy different planes and angles so that the jaws of one pair may conform to the inclined sides of a "Star" razor blade, while the jaws of the other pair are in contact with each other as shown in Fig. 6.

We claim:

15 A razor blade stropper comprising a pair of resilient plates, each having a central hollow boss and two blade-clamping jaws at opposite sides of the boss, the resilience of the plates permitting one pair of jaws to meet,

while the jaws of the other pair are separated by an interposed blade, the back of which is supported by the interior of the boss adjacent to the meeting jaws, the plates being entirely separable from each other whereby a two-edged razor blade may be held by the frictional and clamping engagement of the two pairs of jaws on its sides, the plates being provided with connected shanks which are provided with means for pressing the plates and jaws toward each other.

In testimony whereof we have affixed our signatures in presence of two witnesses.

WILLIAM WALDO TROWBRIDGE.
CHARLES HAROLD WHEELOCK.

Witnesses:

C. F. BROWN,
JAS. H. CHURCHILL.