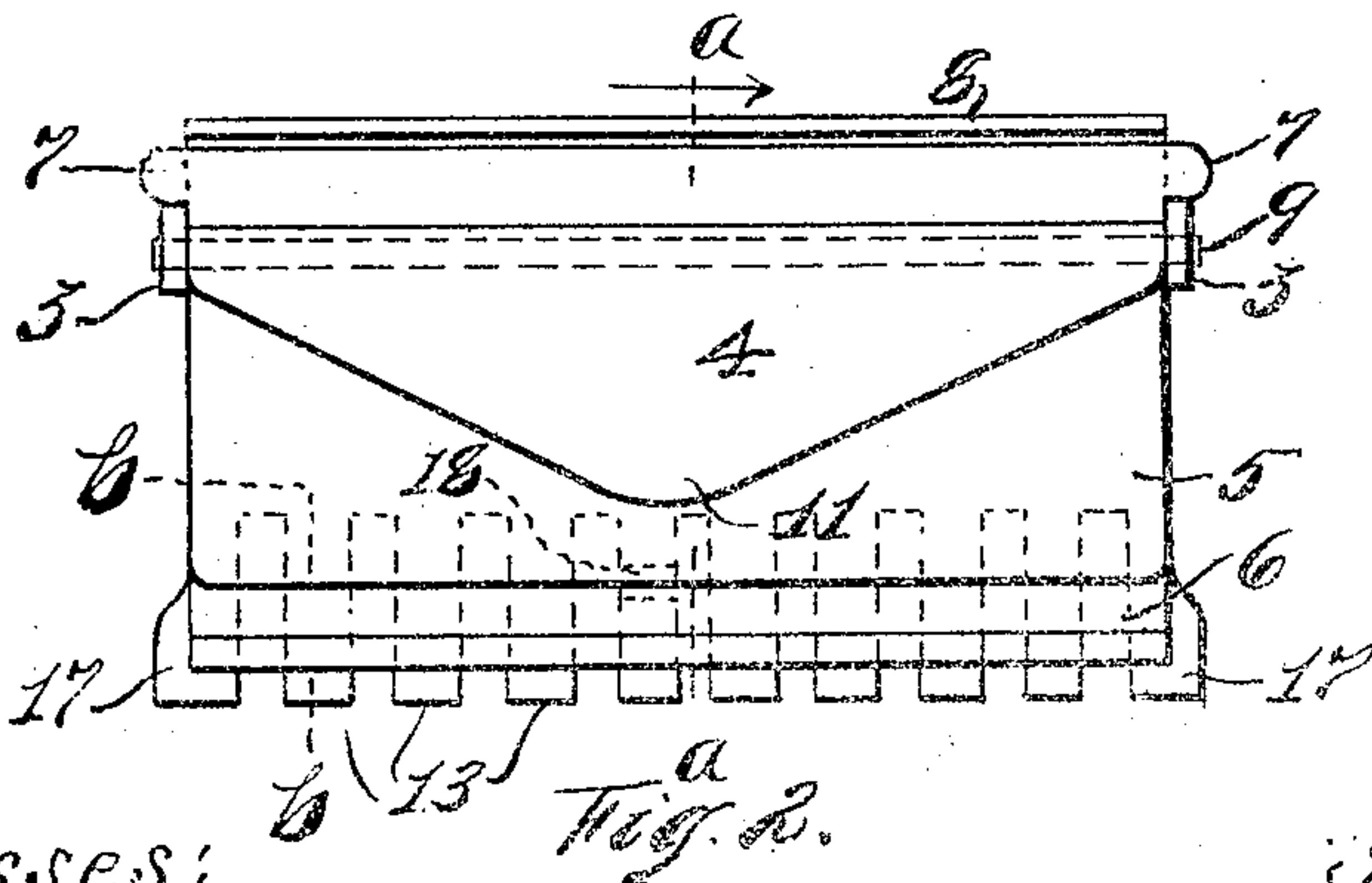
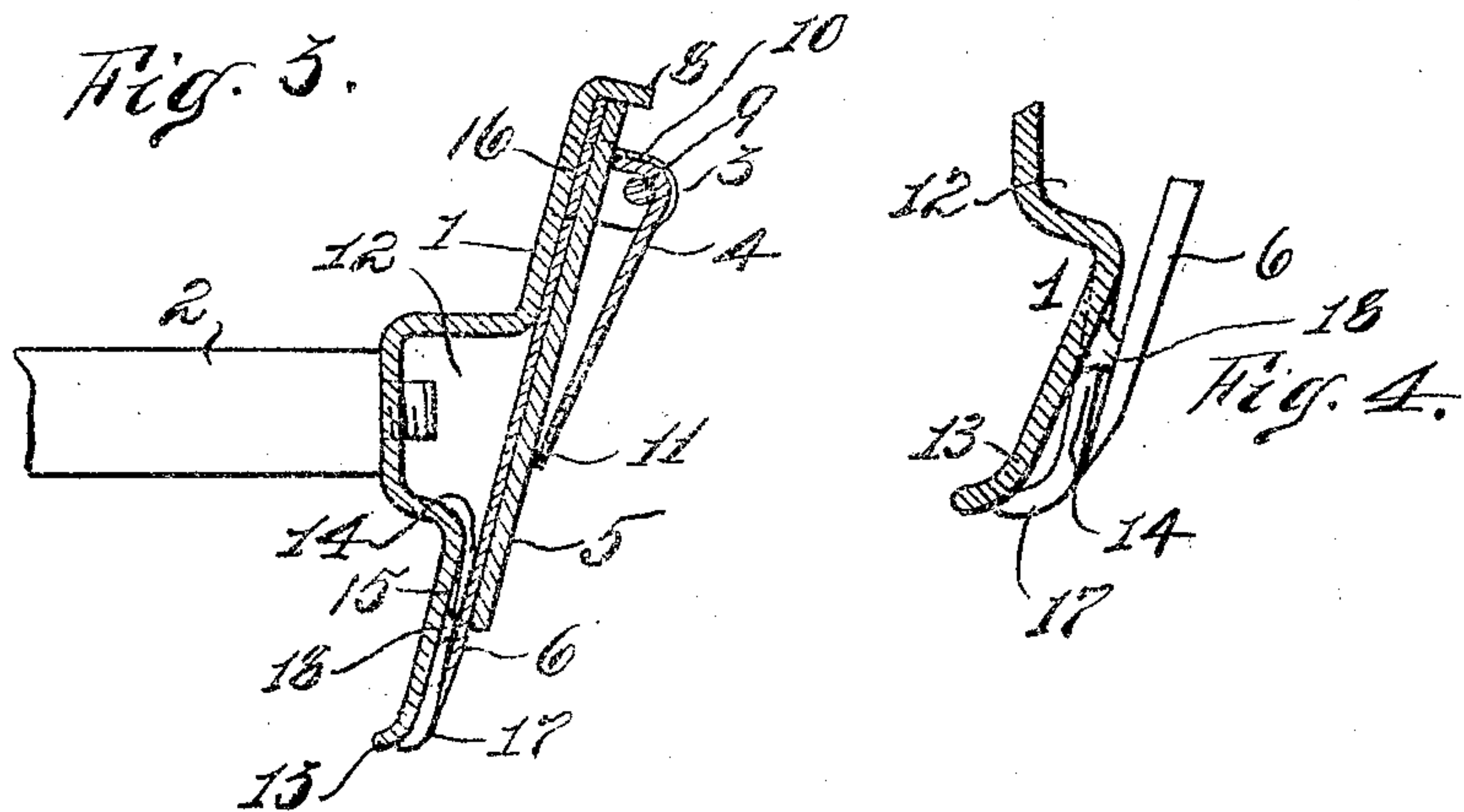
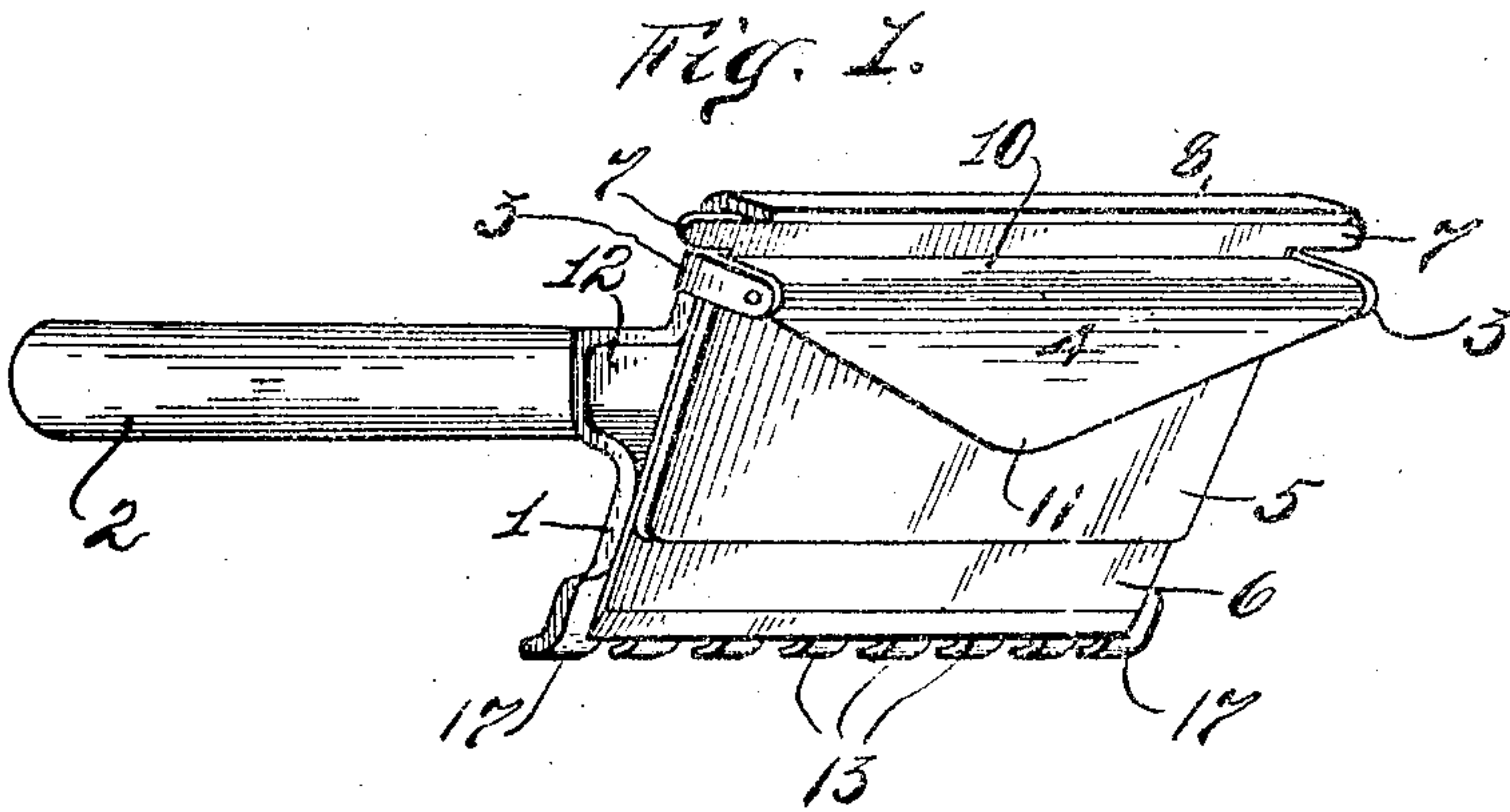


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SAFETY RAZOR FRAME.  
APPLICATION FILED AUG. 4, 1908.

920,482.

Patented May 4, 1909.



Witnesses:  
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Attorney



# UNITED STATES PATENT OFFICE.

ALFRED KOSCHERAK, OF NEW YORK, N. Y.

## SAFETY-RAZOR FRAME.

No. 920,482.

Specification of Letters Patent.

Patented May 4, 1909.

Application filed August 4, 1908. Serial No. 446,850.

*To all whom it may concern:*

Be it known that I, ALFRED KOSCHERAK, a citizen of the United States, residing at New York city, Manhattan borough, county and State of New York, have invented certain new and useful Improvements in Safety-Razor Frames, of which the following is a clear, full, and exact description.

This invention relates to safety-razor frames, and has for its object to provide a safety-razor frame of novel construction, whereby the blade will be rigidly held in the frame and yet can be easily removed when desired.

My invention comprises the novel features of improvement and combination and arrangement of parts which I will now proceed to describe and finally claim, reference being had to the accompanying drawing, forming part of this specification, wherein:

Figure 1 is a perspective view of a safety-razor frame and blade carried thereby embodying my invention; Fig. 2 is a face view thereof; Fig. 3 is a cross section of my improved safety-razor frame, the handle being broken away, and the section being taken on a line *a—*a** in Fig. 2; and Fig. 4 is a detail view of a portion of the razor frame, intended to show the offset teeth for a purpose to be hereinafter explained; the said view being partly in section on a line *b—*b** in Fig. 2.

Referring to the accompanying drawing, 1 indicates the guard of my improved device, while 2 indicates a handle therefor. Projecting from the guard 1 are ears or lugs 3, in which is pivotally hung a clamp 4. To aid the clamp 4 to hold a razor blade in position on the guard 1, I utilize a shoe, or shield plate, 5, the said shield plate being wide enough to extend throughout the greater part of the width of the razor blade, the razor blade being indicated by 6. The shield plate 5 is provided with outwardly projecting members 7, which are adapted to lie between the ears 3 and the projection 8 of the guard 1. The clamp 4 is in this instance mounted upon a spindle 9, the said spindle being carried by the ears 3, as shown. The upper end of the clamp 4 is provided with an extension 10, which is adapted, when the blade 6 is in position to firmly hold the shoe 5 against the said blade 6; the lower end 11 of the said clamp 4 will, when the razor blade is in position, contact the said shoe 5, and prevent the blade from chattering.

Referring more particularly to the upper

end 10, of the clamp 4, I wish to state that the action of the projection 10 is in the nature of a cam or wedge, that is to say the projection 10 will be long enough to require a little pressure to be applied to the lower end 11, for instance, of the clamp 4, in order to force the shoe 5 inwardly against the razor blade 6. When the projection 10 has been forced to occupy a position substantially at a right angle to the face of the shoe 5, the blade 6 cannot be removed, which is quite obvious.

The object of the shoe 5 is to equalize the pressure on the surface of the razor blade, whereby the said blade is firmly pressed against the guard 1, thereby avoiding vibration. It will be seen by referring to Fig. 2 that the blade 6 and shoe 5 are substantially equal in width to the distance between the inner surfaces of the ears 3, therefore the said blade 6 and shoe 5 are prevented from side-lashing, and the only action on the part of the said clamp 4 and shoe 5 is to hold the razor blade against forward movement. The projection 8 on the guard 1 takes the thrust.

Another feature of my improved device is the provision of a channel 12 in the guard 1, which is adapted to collect the lather and hair. To facilitate the passage of the lather from the face to the channel 12, I offset the intermediate comb-teeth 13 which provides a passage 14 between the said comb-teeth and the back of the blade 6. The purpose of the passage 14 is to permit the lather to pass from the face up into the channel 12 without clogging that portion of the razor adjacent the cutting edge. It will be seen by Fig. 3 that the surface 15 of the lower end of the guard is out of alinement with the surface 16 of the upper end of the guard, and that the blade 6 does not contact the lower end of the guard 1 excepting at the ends thereof, the said ends being provided with rests 17, which are adapted to contact the lower remote ends of the blade, as seen in Fig. 2. To prevent the blade from springing, I provide a projection 18, said projection being placed about midway of the length of the blade.

As will be seen in Fig. 3, the end 11 of the clamp 4 rests against the shoe 5 and thus still further aids to hold the blade 6 firmly in position. It may here be stated that the shoe 5 is loosely mounted on the guard 1, and is held in position by the clamp 4.

A valuable feature of my invention is the manner of backing up the razor-blade when



said blade is locked in position. It is obvious that the blade 6 is, at the lower or cutting end, supported only at the remote ends or corners and intermediate the said ends, this feature being shown in Figs. 2 and 3. In other words, the guard 1, at the lower end, does not contact the razor-blade, throughout its entire length, but only at the points mentioned, and where the guard and blade do not contact there is a passage which has been hereinbefore mentioned and which is fully illustrated in Figs. 3 and 4.

It will be seen that by my improved form of clamp I have provided a most simple method of holding a blade in operative position and yet permitting of a quick release with little manipulation. It will also be noted that my improved device is composed of comparatively few parts, requiring but little machine work for their formation and assemblage, thus rendering the device inexpensive to manufacture.

Having now described my invention, what I claim and desire to secure by Letters Patent is:

A safety razor comprising a guard, ears carried by said guard, a cutting blade, a shield-plate loosely supported by said ears and adapted to contact throughout its entire inner surface said cutting blade, said guard being provided with a projection adapted to overlap the top of said shield-plate, whereby said shield-plate is held in position, a clamp pivotally mounted in said ears and adapted to press said shield-plate firmly against said cutting blade, and teeth carried by the lower end of said guard, the teeth on the ends of said guard being adapted to support said cutting blade, the teeth intermediate of said end teeth being offset and out of alinement with said end teeth, one of said offset teeth being provided with a projection adapted to contact said cutting blade adjacent to the cutting edge thereof.

Signed at New York city, N. Y., this 1st day of August, 1908.

ALFRED KOSCHERAK.

Witnesses:

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