

C. F. PLUEMACHER.  
Manufacture of Razors.

No. 221,352.

Patented Nov. 4, 1879.

Fig. 1.

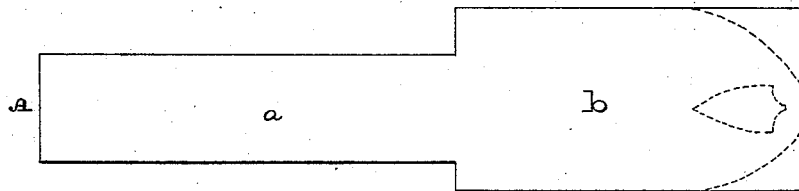


Fig. 2.

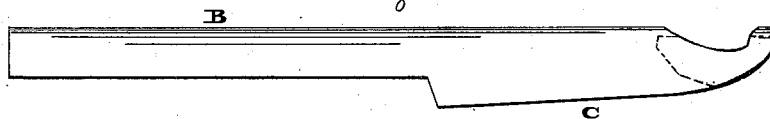


Fig. 3.

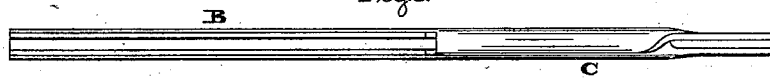


Fig. 4.



Fig. 5.



Fig. 6.



Fig. 7.

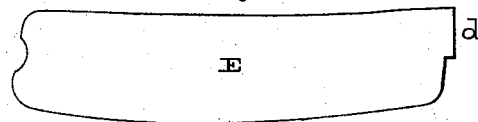


Fig. 8.

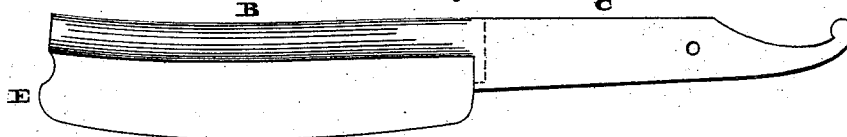


Fig. 9.



Witnesses:

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# UNITED STATES PATENT OFFICE.

CHARLES F. PLUEMACHER, OF NORRISTOWN, PENNSYLVANIA.

## IMPROVEMENT IN THE MANUFACTURE OF RAZORS.

Specification forming part of Letters Patent No. **221,352**, dated November 4, 1879; application filed March 17, 1879.

*To all whom it may concern:*

Be it known that I, CHARLES F. PLUEMACHER, of Norristown, in the county of Montgomery and State of Pennsylvania, have invented a new and useful Improvement in the Manufacture of Razors, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a front view of the blank from which the razor back and tang are made. Fig. 2 is a side view of the shaped back and tang. Fig. 3 is a bottom-edge view thereof. Fig. 4 is a front-end view thereof. Fig. 5 is a side view of a filling-piece. Fig. 6 is a front-end view of a finished back and tang. Fig. 7 is a side elevation of a detached blade. Fig. 8 is a side elevation of the blade back and tang. Fig. 9 is a front-end view thereof.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a razor-back formed tubular, with spring clamping-jaws, whereby the blade is securely held by said jaws, and its application to and removal from the back is accomplished by sliding motions, said blade having a projection, which engages with the tang for laterally bracing the connection of the blade.

Referring to the drawings, A represents a piece of steel, which constitutes the blank for the back and tang of a razor-blade, said piece consisting of the narrow and wide parts *a b*.

The blank is placed on a mandrel and drawn thereover by hammering or otherwise, so as to bend the blank and form a tubular shape, (shown in Figs. 2 and 3,) certain portions at the inner or pivot end being removed, as shown by the dotted lines, Figs. 1 and 2, the shape produced being that of the back B and tang C, the front end whereof is illustrated in Fig. 4.

Referring to Fig. 6, the shape is still further drawn or hammered in order to bring the disconnected sides closer together and in opposition, thus producing spring-jaws *c c*. The ends of the tang are now drawn one over the other, and thus lap-seamed, and then brazed, the result whereof is shown at *c'*.

The piece D, Fig. 5, is inserted and secured in the space at the inner or pivot end, so as to fill said space, and the whole is then ground and finished.

E represents the blade, which is separate from the back and tang, and formed tapering, and having a projection, *d*, at its inner or heel end.

The back of the blade is introduced between the jaws *c c* at the front of the same, and forced inward to full extent, whereby the projection *d* enters the space of the tang, and the jaws *c c* clamp the entire length of the back of the blade, so as to firmly hold the same.

It will be seen that the back and tang are cheaply constructed, as they may be made at one operation and of one piece, and are strong and serviceable, there being no joint between them.

The back of the blade rests against the inner face or crown of the back B, and the jaws *c c* of the latter firmly embrace and clamp the sides of the blade, whereby the blade is securely held in position, the security being increased by the engagement of the projection *d* of the blade and tang C.

Should the blade break, and thereby or for other causes require removal, it is only necessary to draw or drive the blade from the back B, this being permitted owing to the sliding joint of the blade and back.

By this construction, also, I am enabled to construct the blade of the finest stock, and make the razor lighter and cheaper than those formed of one solid piece of steel.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The spring clamping-back B and tang C, jointly with the detachable blade formed with the projection *d* at its heel, substantially as and for the purpose set forth.

C. F. PLUEMACHER.

Witnesses:

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