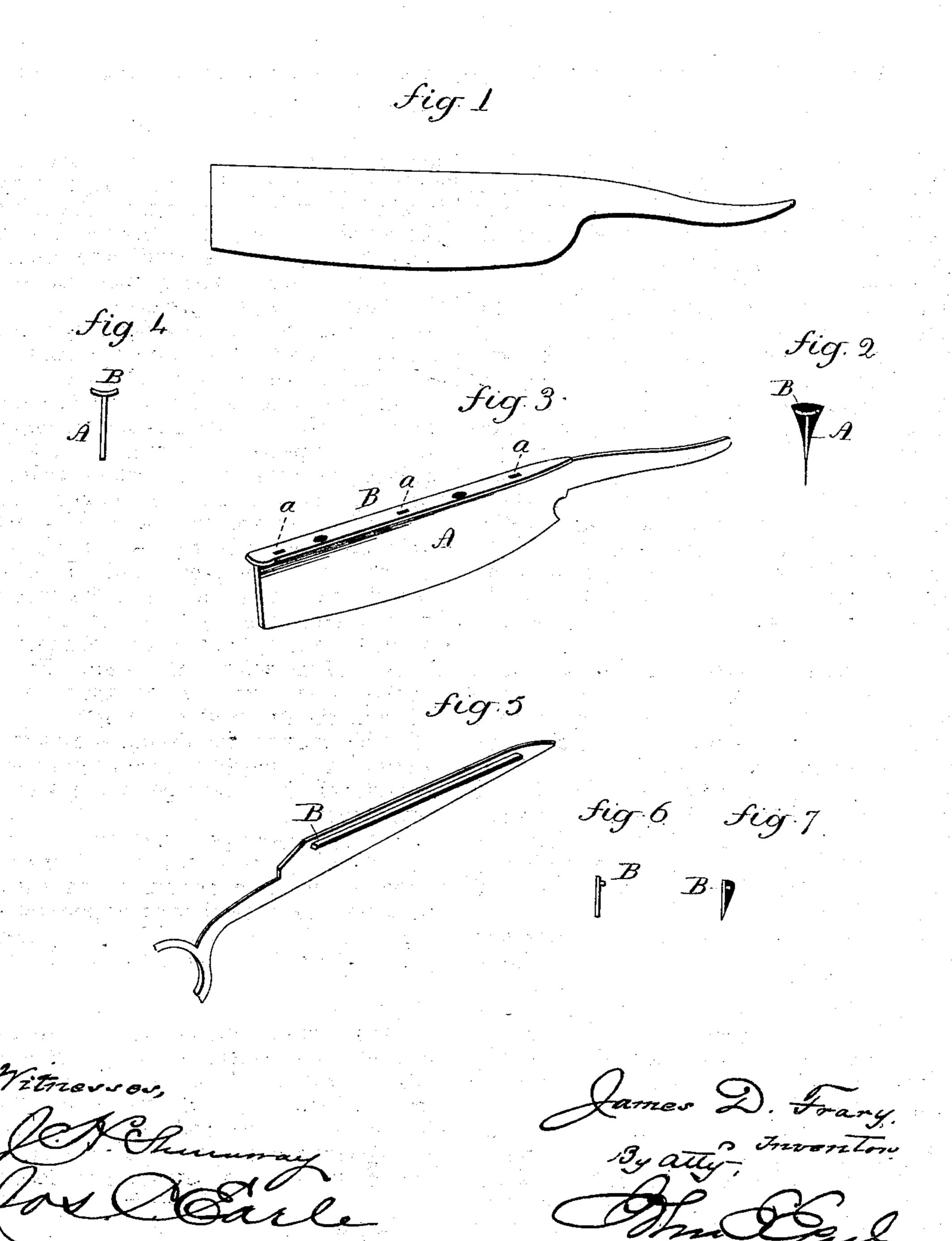
(No Model.)

J. D. FRARY.

CUTLERY BLADE.

No. 275,630.

Patented Apr. 10, 1883.



## United States Patent Office.

JAMES D. FRARY, OF BRIDGEPORT, CONNECTICUT.

## CUTLERY-BLADE.

SPECIFICATION forming part of Letters Patent No. 275,630, dated April 10, 1883.

Application filed January 11, 1883. (No model.)

To all whom it may concern:

Be it known that I, JAMES D. FRARY, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented a new Improvement in Cutlery-Blades; and I do here by declare the following, when taken in connection with 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 side view of a finished razor-blade; Fig. 2, a transverse vertical section of the finished blade; Fig. 3, a perspective view of the sheet-metal blank with the strengthening-rib; Fig. 4, a vertical transverse section of the same; Fig. 5, a perspective view of a scissors-blank with the strengthening-rib attached; Fig. 6, a transverse section of the same; Fig. 7, a transverse section of the blade complete.

complete.

This invention relates to an improvement in that class of cutlery in which the blade is made of thin sheet-steel, and backed by a 25 casting of white or similar soft metal—such, for illustration, as scissors and razors. (Seen respectively in Letters Patent of the United States Nos. 227,514 and 264,742.) In this construction of cutlery the blades are liable to 30 spring more or less in use, and such springing tends to separate, break, or crack the softmetal backing.

The object of the invention is to overcome this difficulty and strengthen the blade indesting pendent of its backing; and it consists in a hard-metal rib attached to the blade and projecting laterally therefrom, so as to form a support for the blade and resist the tendency to spring or bend, and as more fully hereinafter described.

The razor-blade consists of a sheet-metal body with the backing cast thereon to inclose the back edge and extend down onto the blade, so that the sides of the blade are ground to 45 give the same appearance as if the blade were entirely of steel, as seen in Figs. 1 and 2.

The blank A for the blade is cut the shape

required, with one or more projecting studs, a, on its back edge. B is the strengthening-rib, in width a little narrower than the thickness of the finished blade at the back, and is pierced in a central line, corresponding to the studs a on the blade, then placed upon the back of the blade. The studs projecting through the holes in the rib are riveted down upon the rib, as seen in Fig. 3. Thus prepared, the white or soft metal is cast upon the blade in the usual manner, the white metal inclosing the strengthening-rib. This rib, having considerable width laterally, supports the back of the blade 60 against any spring or bend which under ordinary circumstances may be brought upon it.

In the case of scissors the metal is cast entirely upon one side, as seen in Fig. 7. In this case the strengthening-rib B is placed 65 upon the side of the blade, near its back edge, and secured in the same manner as to the razor-blade, except that the stude are formed on the rib and the holes in the blade. Then the backing of soft metal is cast upon the blade 70 to inclose the rib, as seen in Fig. 7.

By this construction the blade is made quite as strong as if forged complete from steel, yet possesses all the advantages of the cheap softmetal backing.

Another advantage of this rib, particularly in regard to razors, is that the rib may come to the extreme outer surface of the cast metal and form a hard-metal surface upon which the razor will bear in strapping, and thereby 80 avoid the rapid wearing away of the white-metal.

I claim—

In that class of cutlery in which the blades are made from sheet-steel with a backing of 85 white or soft metal cast thereon, the sheet-metal blades having a laterally-projecting longitudinal rib, B, attached thereto, substantially as specified, and so as to be inclosed by the white or soft metal, substantially as described. 90 JAMES D. FRARY.

Witnesses:

Jos. C. Earle, J. H. Shumway.