No. 894,210.

PATENTED JULY 28, 1908.

J. D. KARLE.

BLIND RIVETING.

APPLICATION FILED DEC. 17, 1906.



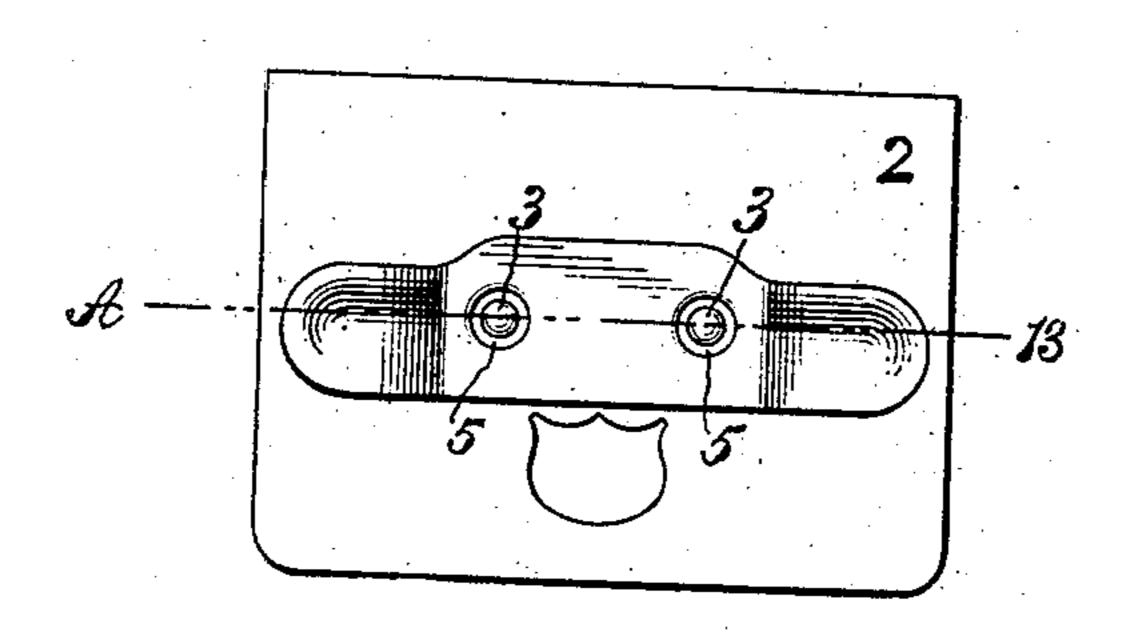
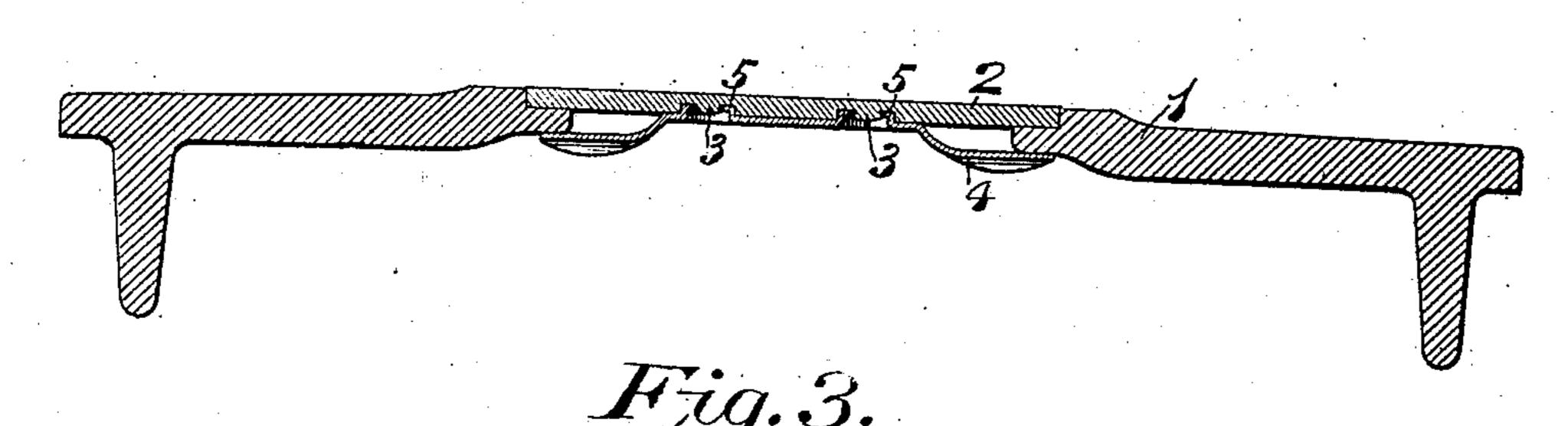
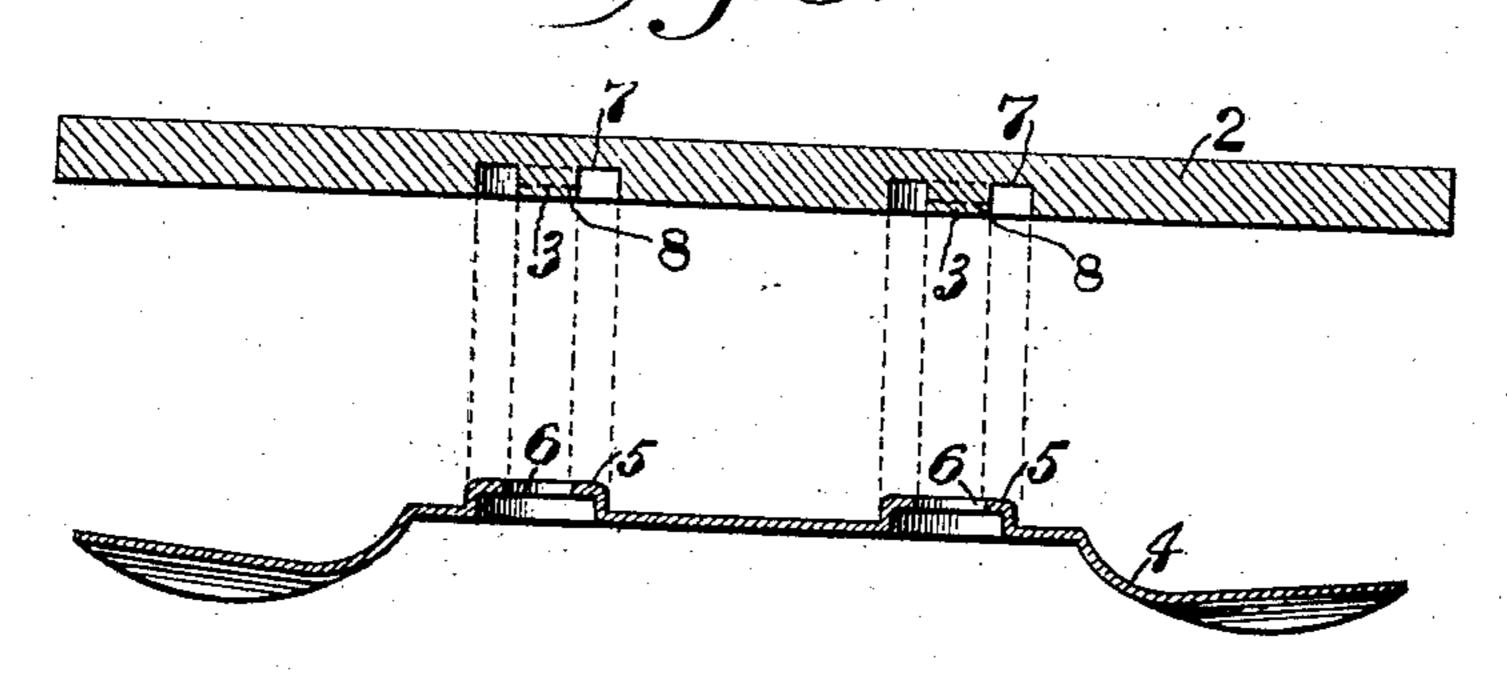


Fig. 2.





WITNESSES: A. Frinch

INVENTOR. JOHN D. KARLE

BY

HIS ATTORNEY.

UNITED STATES PATENT OFFICE.

JOHN D. KARLE, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE SINGER MANUFACTURING COMPANY, A CORPORATION OF NEWSJERSEY.

BLIND RIVETING.

No. 894,210.

Specification of Letters Patent.

Patented July 28, 1908.

Application filed December 17, 1906. Serial No. 348,332.

To all whom it may concern:

Be it known that I, John D. Karle, a citizen of the United States, and a resident of Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Blind Riveting, of which the following is a specification.

This invention relates to improvements in blind riveting and has for its object to provide a main portion or body of metal with a rivet formed integral with and extending from within the said body of metal toward one side thereof, said rivet being 15 formed within and of less length than the

thickness of said metal.

Referring to the several figures in which like parts are similarly designated, Figure 1 is an underside view of the front slideplate of a sewing machine provided with a spring for holding said plate against accidental movement, said spring being secured by the employment of my blind rivet. Fig. 2 is a view of the front end portion of the 25 cloth-plate of a sewing machine, together with the slide-plate which is shown in section on the line A—B, Fig. 1. Fig. 3 is an

enlarged sectional view of the slide-plate and slide-plate spring, the said parts being vertically arranged and slightly separated to better illustrate the manner of securing said spring to said slide-plate.

1 is the cloth-plate of a sewing machine,
2 is the slide-plate, and 3, 3 are rivets the
35 free ends of which lie in the same plane as the
plane of the metal and may be formed by
cutting away the metal, as in the present
instance, or by cutting casting or forging
such rivets with their free ends lying inside
40 the plane of the metal as indicated by 8—8,
Fig. 3. 4 is a slide-plate spring of usual
construction, except that it is provided with
circularly-formed offset portions 5, 5 which
are provided with holes 6, 6 into which the
45 rivets 3, 3 enter, the offset portions 5, 5 fitting into circular portions 7, 7 formed in the
plate 2. After the parts 2 and 4 have been

thus positioned, they are secured by riveting the free ends of the rivets over and upon that portion of the spring immediately sur- 50

rounding the rivets.

The advantage derived from my present invention consists in forming the rivet integral with the main portion or body of the metal so that its free end lies in the same 55 plane or within the plane of the rivet side of the metal, and in such manner that the surface of the metal opposite the rivet side is left undisturbed, thus presenting an unbroken surface capable of being smoothly 60 polished or plated, as in the construction of the sewing machine slide-plate herein illustrated and described.

What I claim is:—

1. A main portion or body of metal having 65 formed integral with it a rivet, the portion comprising said rivet being surrounded by a circular groove, thus forming a seat and attaching means within the thickness of said metal, in combination with a second part or 70 piece having an offset portion adapted to enter said groove, the bottom wall of said groove acting as a seat for said offset portion, which latter is provided with an opening through which the rivet extends for heading 75 over and upon the metal immediately surrounding said rivet.

2. A body of metal provided with a depression, an integral projection rising from the bottom of said depression not higher 80 than the surface thereof, in combination with a second body of metal having a projection seated in the depression, and a perforation through said projection through which the integral projection extends, said 85 second body of metal being held by the upset end of the integral projection.

Signed at Bridgeport, in the county of Fairfield, and State of Connecticut, this 13th day of December, A. D. 1906.

JOHN D. KARLE.

Witnesses:

A. K. WILLIAMS, Jr., A. DONIHEE.