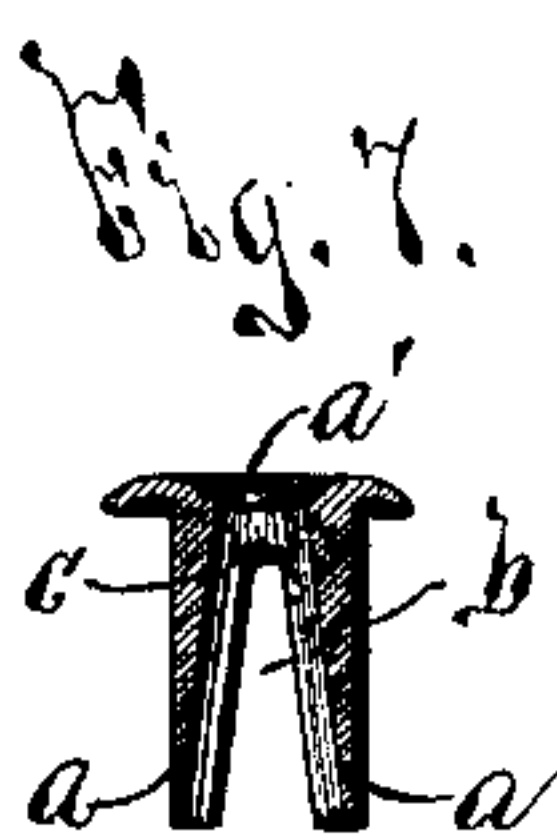
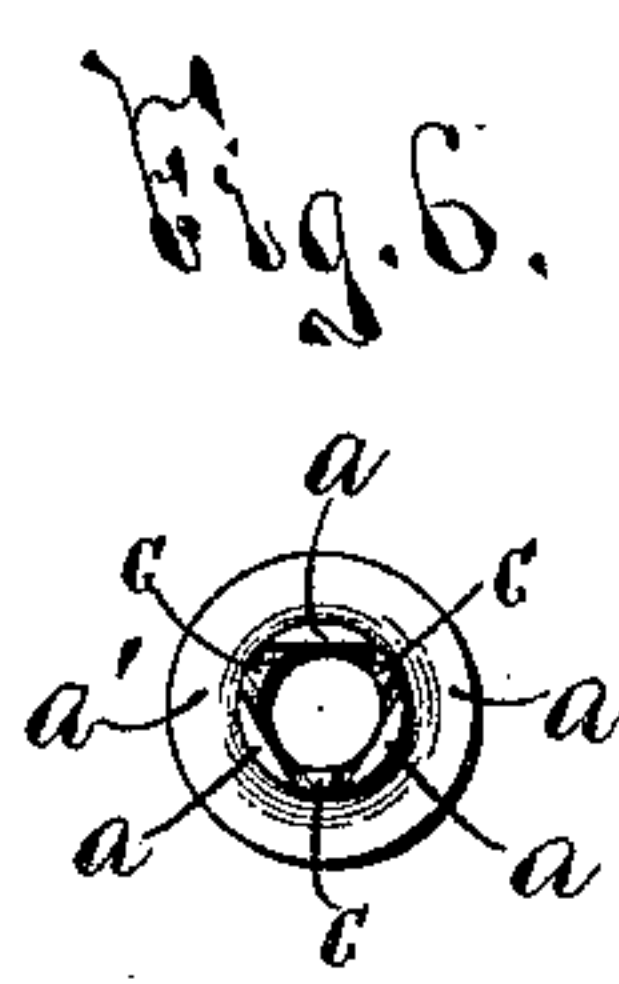
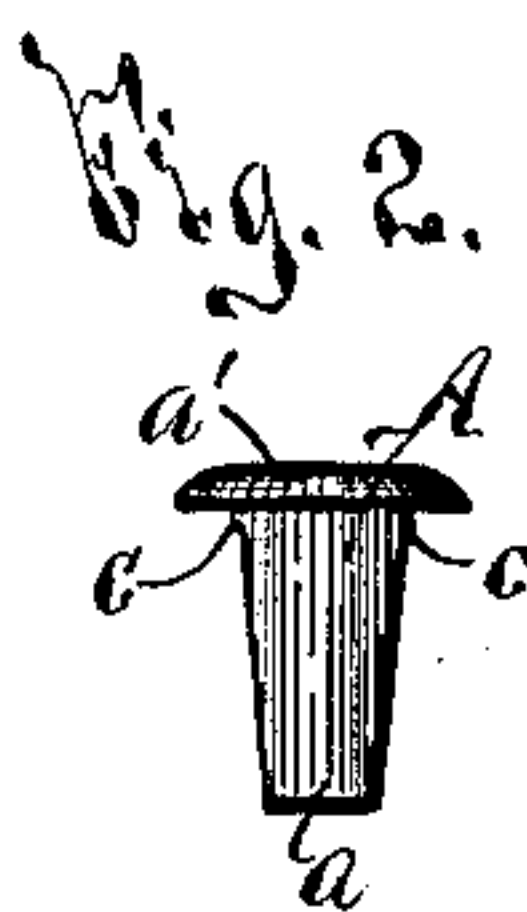


(No Model.)

J. L. THOMSON.  
RIVET.

No. 432,498.

Patented July 15, 1890.



WITNESSES

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# UNITED STATES PATENT OFFICE.

JUDSON L. THOMSON, OF SYRACUSE, NEW YORK, ASSIGNOR TO THE JUDSON L. THOMSON MANUFACTURING COMPANY, OF PORTLAND, MAINE.

## RIVET.

SPECIFICATION forming part of Letters Patent No. 432,498, dated July 15, 1890.

Application filed April 18, 1890. Serial No. 348,458. (No model.)

*To all whom it may concern:*

Be it known that I, JUDSON L. THOMSON, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Rivets, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to an improved rivet for holding the seams and other portions without seams of leather, fabrics, and other articles, and has for its object the production of a simple and effective construction adapted to be inserted into the said articles without liability of cutting out a portion thereof and thus forming a hole, and which is provided with an open head, whereby a portion of said article is, upon the insertion of the rivet, forced through its head, and thereby prevents rubbing or abrasion of the rivet-head and also greatly adds to its appearance and prevents undue prominence being given thereto, as is the case with a full-headed rivet.

The invention also consists in the detail construction and arrangement of the parts of my invention, all as hereinafter more particularly described, and pointed out in the claims.

In describing this invention reference is had to the accompanying drawings, forming a part of this specification, in which like letters indicate corresponding parts in all the views.

Figures 1 and 2 represent elevations of my improved rivet, taken in planes at right angles with each other. Figs. 3 and 4 are respectively top and bottom plan views of my improved rivet as shown in Figs. 1 and 2. Fig. 5 is an elevation of a rivet formed with a three-pronged shank. Fig. 6 is a bottom plan view of the form of rivet shown in Fig. 5, and Fig. 7 is a modified form of a rivet having prongs tapering from the inside outwardly.

It is well known that rivets are now generally and ordinarily used for securing together seams and other portions of leather, fabrics, and other articles where a strong, easily-applied, and effective securing means is required. It will be readily understood that when used for this purpose the head of the

rivet lies on or substantially on the outside of the article to which it is secured and becomes worn or rubbed by the abrasion of articles with which it may be contacted, and thus deteriorates the appearance of the article to which it is secured. For the purpose of obviating these disadvantages I have constructed my improved rivet, which is provided with an open head, whereby, owing to the less amount of material or surface of the head on the outside of the article to which the rivet is secured, the rivet-head is impressed to a greater extent within said article, and the insertion of the rivet causes a portion of the article to which it is secured to enter the opening in its head and to be forced slightly beyond the outside face thereof.

It will be readily understood that accordingly as the amount of the head of the rivet is decreased the deterioration of the appearance of said article is correspondingly decreased, and that the portion of the material filling the opening in the rivet-head causes the prominence of the same to be reduced to a minimum, and thereby renders the rivet-head comparatively imperceptible and also prevents the abrasion of the rivet. This obviation of the abrasion of the rivet-head is a feature of great advantage, since in order to add to the appearance of the rivets they are generally plated with nickel or other material, which soon becomes worn by contact. However, with my improved rivet a direct abrasion and consequent wearing of said plating of the rivet-head is absolutely prevented and the field of use for the rivet is thus greatly increased.

A represents the rivet, which may be formed from a solid section of wire by suitably-constructed dies, or may be drawn from a metal, or formed by lapping a piece of sheet metal upon itself, as in my previous patent, No. 423,884, dated March 18, 1890. The prongs *a*, for securing the rivet to the desired article, may be of any desired form or construction, and may be formed by cutting out a portion of the blank from which the rivet is formed, either before or after said blank is formed into a rivet. As preferably constructed, however, the opening *b*, interposed between the adjacent edges of the rivet-prongs, is of greater width at



the bottom than the top, in order that the strength of the rivet-prongs may gradually decrease toward their extremities for the purpose of facilitating their easy entrance and easy bending when inserted into operative position. It will also be understood that I prefer to use a tie *c* at the upper part of the rivet-prongs for preventing the undue separation of their base, which tie may be formed by making the opening *b* of less length than the rivet-prongs; but it will be understood that when the purpose is to secure together articles of extreme thinness this tie may be dispensed with, and the space *b* between the adjacent edges of the rivet-prongs may extend to the head *a'*.

It will be understood that I do not limit my invention to a rivet having any particular number of prongs, since, as shown in Figs. 5 and 6, three may be used, and experience has demonstrated that three are frequently of greater utility than two, and in some cases it is desirable to use a greater number of prongs.

At Fig. 7 I have shown the rivet-prongs as tapering from the interior outward for the purpose of further facilitating the ready clinching of said prongs, which tapering portion is especially applicable for heavy work.

It will be understood that my invention is not limited to any particular construction either of rivet or rivet-prongs, nor to the precise number of the rivet-prongs.

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

1. As an improved article of manufacture, a rivet having prongs for attaching the same, and an opening in its head for receiving a portion of the material to which the rivet is secured, substantially as and for the purpose set forth.

2. As an improved article of manufacture, a rivet consisting of an open head, a tubular shank having two or more cut-outs for enabling the same to be readily clinched without cutting out the material to which the rivet is secured, substantially as and for the purpose specified.

3. As an improved article of manufacture, a rivet consisting of an open head, a tubular shank having two or more securing-prongs, and a tie at the upper part of said shank for preventing undue separation of the base of said prongs, substantially as and for the purpose set forth.

In testimony whereof I have hereunto signed my name, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 13th day of March, 1890.

JUDSON L. THOMSON.

Witnesses:

CLARK H. NORTON,  
M. BAXTER.