

(No Model.)

J. J. UNBEHEND.
RIVET.

No. 411,174.

Patented Sept. 17, 1889.

Fig. 1.

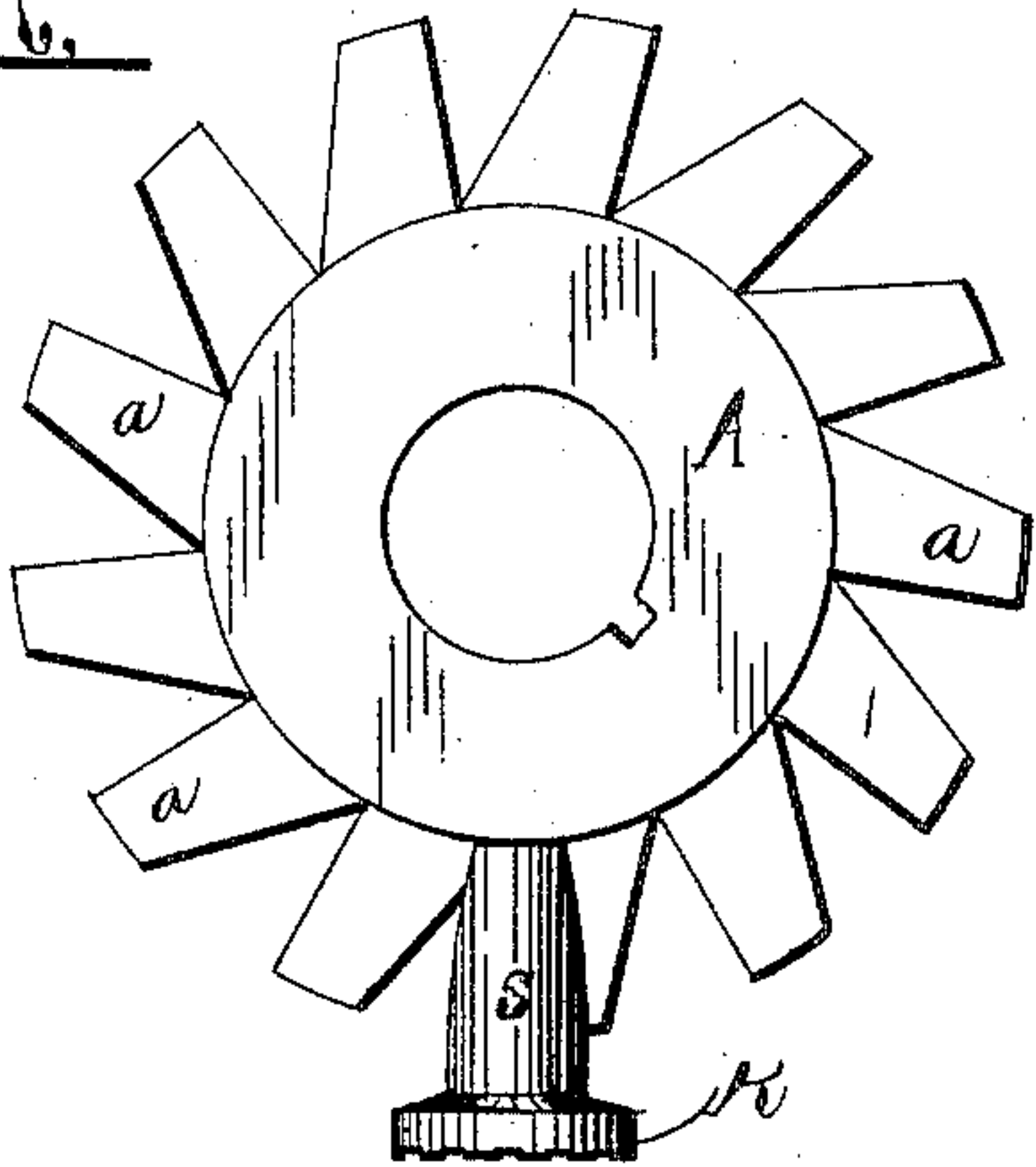


Fig. 2.

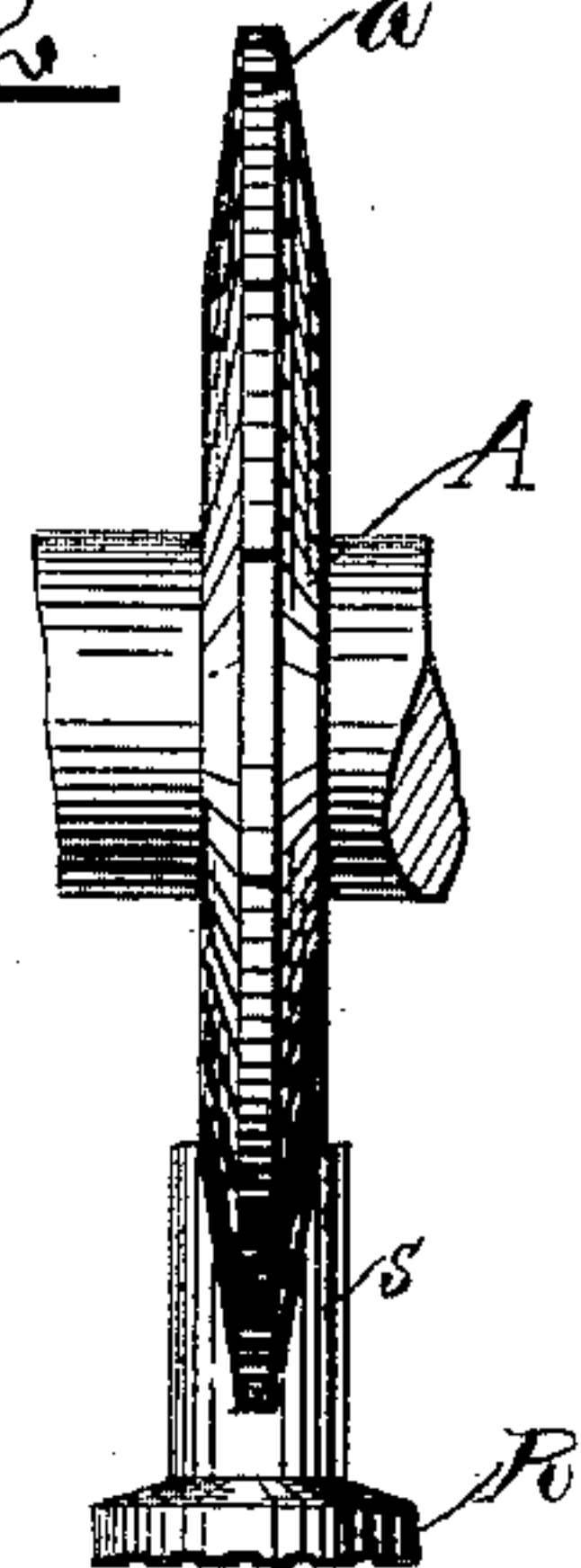


Fig. 3.

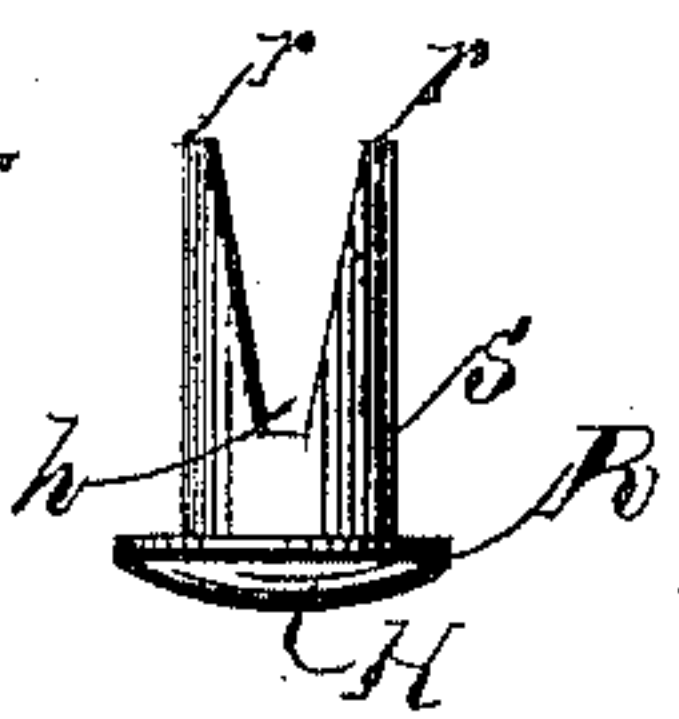


Fig. 4.

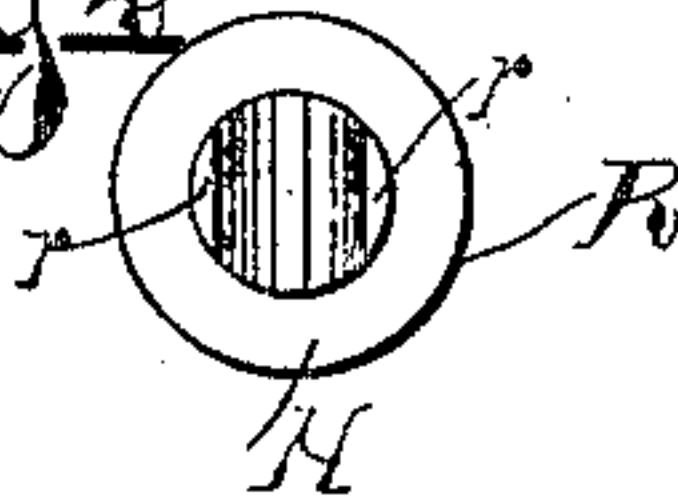
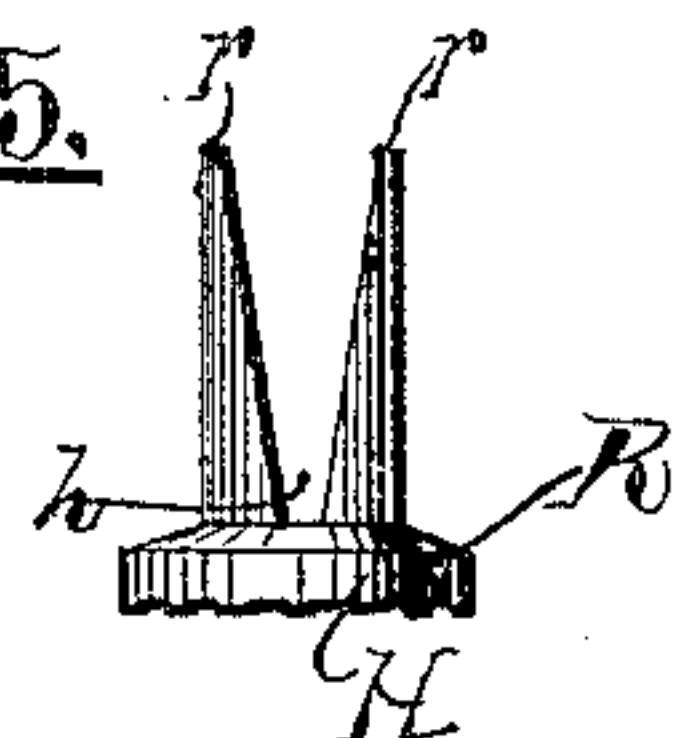


Fig. 5.



WITNESSES:

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JACOB J. UNBEHEND, OF SYRACUSE, NEW YORK, ASSIGNOR TO JUDSON L. THOMSON & CO., OF SAME PLACE.

RIVET.

SPECIFICATION forming part of Letters Patent No. 411,174, dated September 17, 1889.

Application filed May 10, 1887. Serial No. 237,719. (No model.)

To all whom it may concern:

Be it known that I, JACOB J. UNBEHEND, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in the Art of Manufacturing 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 readily-constructed rivet which may be easily and quickly inserted into the desired articles without any chance of the prongs of the rivet being bent or turned by the material through which they are passed; and to this end it consists, essentially, in a blank provided with a head formed integral therewith, prongs provided upon the rivet, and formed by cutting away the central portion of the shank thereof, said prongs having their outer edges rounding and their adjacent inner edges flat, with a greater distance between the extremities of said prongs than between their points of junction.

In describing my 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.

Figure 1 is a side elevation of a cutter and a rivet for carrying out my invention. Fig. 2 shows an edge view of the parts as illustrated in Fig. 1. Fig. 3 is an elevation of the rivet bifurcated according to my invention. Fig. 4 shows a top plan view illustrating particularly the contour of the clinching-prongs, and Fig. 5 shows a rivet having its clinching-prongs extending to the head thereof.

A represents a suitable cutter for removing or cutting away the central portion of the rivet-blank. This cutter A, which may be of any desirable form or construction, is here illustrated as a circular cutter provided with beveled cutting-teeth *a*, of a shape conforming to the desired cut-out in the rivet-blank.

The rivet R, formed of material sufficiently

malleable, consists of a head H, which may be of desired form and construction, and a blank *s*, formed integral with the head H. The blank or shank *s* may be either oval or round in cross-section, and extends from the head a sufficient distance to form clinching-prongs of the desired size. The rivet is held by suitable mechanism, (not illustrated,) and the cutter A is then actuated to remove the central portion of said rivet, and thus form the clinching-prongs *r r*, having cutting extremities. The outer surface of said clinching-prongs is rounding, and their inner adjacent surfaces are flat, and while substantially parallel at their upper ends or cutting extremities there is a greater distance between said upper ends than their points of junction. It will also be seen, especially in Figs. 1 and 2, that the prong of the rivet, when viewed from the outside, tapers from the base thereof to the extremity; or, in other words, is of greater width at its base than at its extremity. This peculiar taper of the rivet-prongs is occasioned by cutting out a greater amount at the extremity of the blank *s* than at the point of junction of the prongs.

By reference to the drawings and the foregoing description it will be seen that the rivet-prongs have cutting extremities, rounding outer surfaces, and flat inner surfaces, and that they are made tapering widthwise from their junction to their cutting ends, and have a greater distance between their extremities than between their points of junction. This peculiar construction of clinching-prongs causes the rivet to be readily forced through any desired article without any liability of the prongs being bent while passing therethrough. The rounding outer surface greatly aids in insuring easy entrance of the rivet-prongs, and the peculiar form of the rivet-prong causes the same to be stronger at its point of junction than at the extremities thereof. Moreover, this peculiar form of rivet-prongs allows the same to be readily clinched or bent over after the rivet has been inserted into the desired article, since, as described, the extremities are lighter than the points of junction of said prongs.

While a circular cutter has been shown, it

will be understood that a broach or punch, or even suitable male and female dies, could be used to remove or cut away the central portion of the rivet-shank.

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

1. A rivet made from solid wire, provided with a head and two prongs, each having a
10 rounded outer surface and a flat inner surface, said prongs being provided with cutting ends and made tapering widthwise from their junction to their cutting ends, and having a greater distance between the cutting ends of
15 said prongs than their points of junction, substantially as and for the purpose set forth.

2. A rivet made from solid wire, provided with a head and two prongs, each having a rounded outer surface and a flat inner sur-

face, said flat surfaces of said prongs being 20 substantially parallel longitudinally to each other and to the rounded outer surface of said prongs, said prongs being provided with cutting ends and made tapering widthwise from their junction to their cutting ends, and 25 having a greater distance between their extremities than their points of junction, substantially as and for the purpose specified.

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 6th day of May, 1887.

JACOB J. UNBEHEND.

Witnesses:

FREDERICK H. GIBBS,
E. C. CANNON.