

(No Model.)

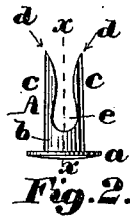
M. BRAY.  
RIVET.

No. 421,659.

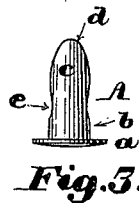
Patented Feb. 18, 1890.



*Fig. 1.*



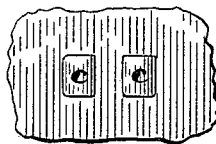
*Fig. 2.*



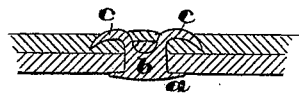
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



*Fig. 6.*

*Witnesses:*  
*G. A. McClure,*  
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*by N. C. Lombard*  
*Attorney.*

# UNITED STATES PATENT OFFICE.

MELLEN BRAY, OF NEWTON, MASSACHUSETTS.

## RIVET.

SPECIFICATION forming part of Letters Patent No. 421,659, dated February 18, 1890.

Application filed December 20, 1889. Serial No. 334,436. (No model.)

*To all whom it may concern:*

Be it known that I, MELLEN BRAY, of Newton, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Rivets, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to rivets, and to that particular class of rivets which are made from solid wire; and it consists in certain novel features of construction, arrangement, and combination of parts, which will be readily understood by reference to the description of the drawings, and to the claims hereinafter given and in which my invention is clearly pointed out.

Figure 1 of the drawings is a plan of a rivet embodying my invention. Fig. 2 is an elevation of the same. Fig. 3 is an elevation viewed at right angles to Fig. 2. Fig. 4 is a sectional elevation, the cutting plane being on line *x x* on Fig. 2; and Figs. 5 and 6 are respectively a plan and a central section of my improved rivet set in and securing together two pieces of leather or other material.

In the drawings, A represents my improved rivet provided with the head *a*, a short solid cylindrical section of a shank *b*, and two clinching-prongs *c c*, forming prolongations of segments of said cylindrical shank, with their outer surfaces parallel to the axis of said cylindrical shank and their inner surfaces parallel to each other in a transverse direction, but curved in a longitudinal direction, so as to form rounded cutting-edges at their ends, as at *d d*, and a slot or space between them of greater width at or near their junction with said short cylindrical shank *b*, as at *e*, than at or near the middle of their lengths, as shown in Fig. 2. The slot between the prongs *c c* is widened at its outer end to the full diameter of the wire from which the solid section of the shank and said prongs are formed, thus forming cutting-edges on the ends of said prongs, presenting an elliptical outline, as shown in Figs. 3 and 4.

The enlargement of the inner end of the slot between said prongs, as shown at *e*, weakens said prongs at the point where it is desired they should bend easily when the same is being clinched.

The oval or rounded cutting-edges of the prongs *c c* render them peculiarly adapted to pierce the material in which they are to be set with the minimum of power applied thereto, and at the same time said cutting ends are easily turned backward into the material, as shown in Figs. 5 and 6.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A rivet made from solid wire having a short section of a cylindrical shank, a solid head formed on one end thereof, and two piercing-prongs forming prolongations of segments of said cylindrical shank, with their outer surfaces parallel to the axis of said shank and their inner surfaces parallel to each other transversely or in the direction of their width, and curved in the direction of their length and having a greater distance between them at or near their junction with said cylindrical shank than at or near the middle of their lengths.

2. A rivet made from solid wire having a short section of a solid cylindrical shank, a solid head formed on one end thereof and on the other end two piercing-prongs, forming prolongations of segments of said cylindrical shank, with their outer surfaces parallel to the axis of said shank and their inner surfaces parallel to each other transversely and curved in the direction of their length, said prongs having rounded cutting or piercing ends and a greater distance between them at or near their junction with said shank than at or near the middle of their lengths.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 16th day of December, A. D. 1889.

MELLEN BRAY.

Witnesses:

WALTER E. LOMBARD,  
C. A. MCCLURE.