

(No Model.)

W. C. BRAY.  
RIVET.

No. 326,100.

Patented Sept. 15, 1885.

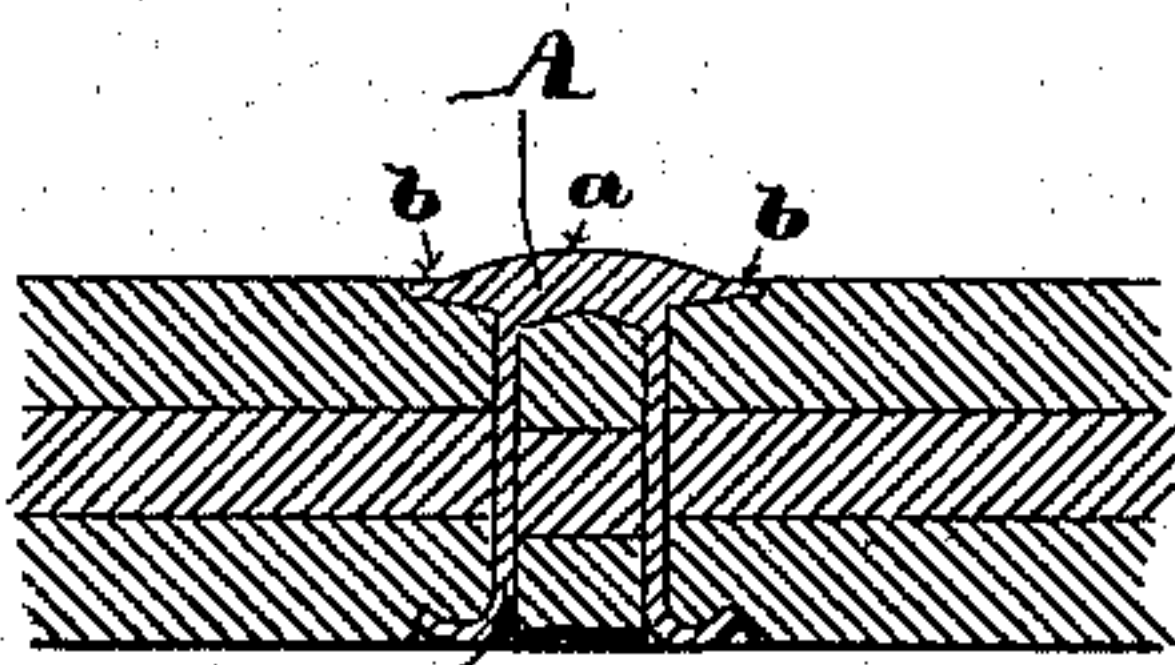


Fig. 4.

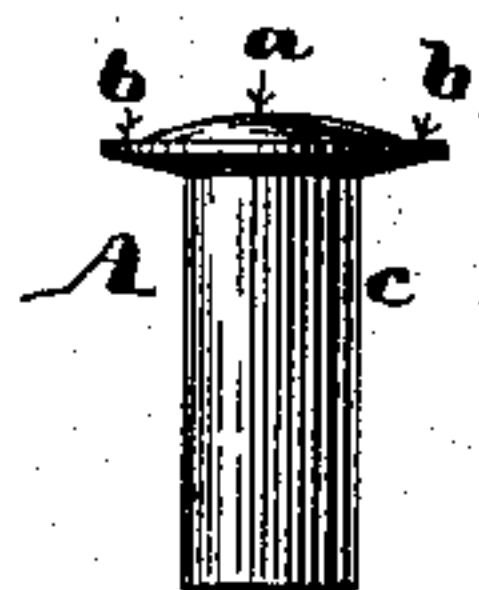


Fig. 2.

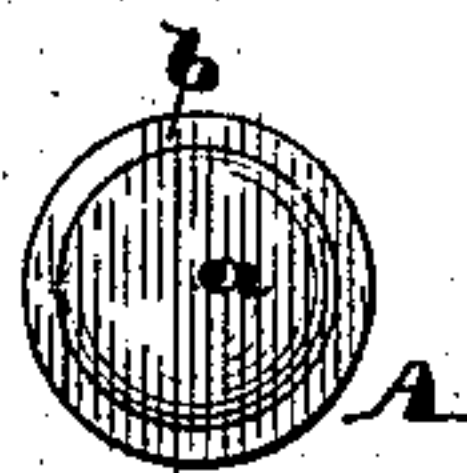


Fig. 1.

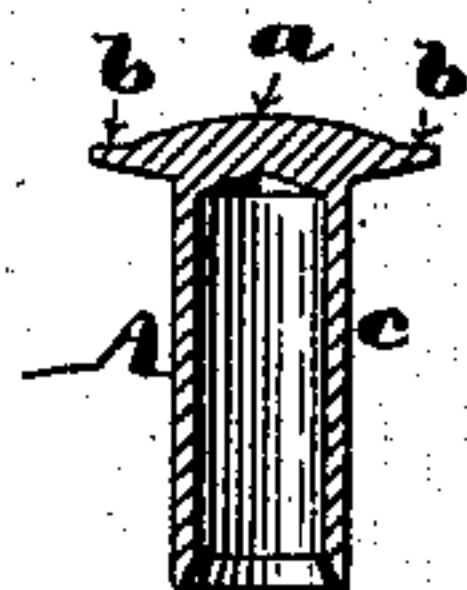


Fig. 3.

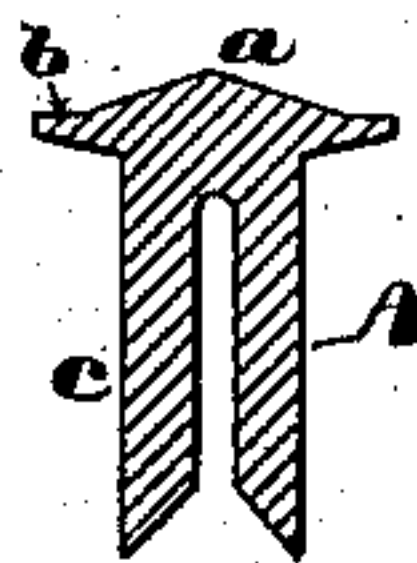


Fig. 5.

Witnesses:

Walter E. Lombard.  
William H. Parry.

Inventor:

William C. Bray,  
by N. C. Lombard  
Attorney.



# UNITED STATES PATENT OFFICE.

WILLIAM C. BRAY, OF NEWTON, MASSACHUSETTS.

## RIVET.

SPECIFICATION forming part of Letters Patent No. 326,100, dated September 15, 1885.

Application filed June 29, 1883. (No model.)

*To all whom it may concern:*

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

My invention relates to that class of rivets which have tubular or split shanks, and are  
10 adapted to cut their way through the material in which they are to be set, and has for its object the remedying of one objection to rivets of considerable length of this class, viz:

It has been found in practice that rivets  
15 one-half or five-eighths of an inch in length and about five thirty-seconds of an inch in diameter, and having heads the outer surfaces of which are convex or raised in the center and gradually sloping to their periph-  
20 eries, can seldom be driven straight through two thicknesses of solid sole or belt leather, but will be deflected to one side, the head rolling or moving in the concaved end of the setting-plunger to permit such deflection.  
25 Heretofore in order to obviate this difficulty such extra long rivets have been made with heads having their outer surfaces flat planes at right angles to the axes of the rivets; but such heads are not as desirable as those heads  
30 having raised centers, for the reason that they are not as strong and do not look as well, and hence the desirability of obviating the difficulty without making a flat head.

To this end my invention consists in a rivet  
35 having a head the central portion of the outer surface of which is raised in the center higher than at its periphery and having at its outer edge an annular flat surface at right angles to the axis of the rivet, as will be more  
40 fully described.

Of the drawings, Figure 1 represents a plan of one form of my improved rivet. Fig. 2 represents a side elevation of the same. Fig.

3 represents a central longitudinal sectional elevation of the same. Fig. 4 represents the same rivet set; and Fig. 5 represents a modified form of my improved rivet.

In the drawings, A is the rivet, the central portion, *a*, of the outer surface of the head of which is made convex or higher at the center  
50 than at the periphery, said convex or raised surface being surrounded by an annular flat surface, *b*, in a plane at right angles to the axis of the rivet-shank *c*, as shown.

With a rivet formed as shown, and the end  
55 of the setting-plunger being provided with a sunken recess to readily receive the convex or raised portion *a*, and an annular flat surface about said recess, which flat surface shall correspond with the flat annular surface *b* of  
60 the rivet, the rivet will be forced straight through the material without deflecting to one side or the other just as certainly as if the whole outer surface of the head were flat, and the head will resist a greater strain because of  
65 its greater thickness at its junction with the shank than the flat head, and at the same time it presents a much neater appearance when set than the flat-headed rivet, and therefore is more desirable.

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

A rivet having a head provided with an annular flat surface at its outer edge at right angles to the axis of its shank, and an elevated  
75 central portion of greater thickness than said flat surface, substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 27th day of June, 80  
A. D. 1885.

WILLIAM C. BRAY.

Witnesses:

WALTER E. LOMBARD,  
WILLIAM H. PARRY.