

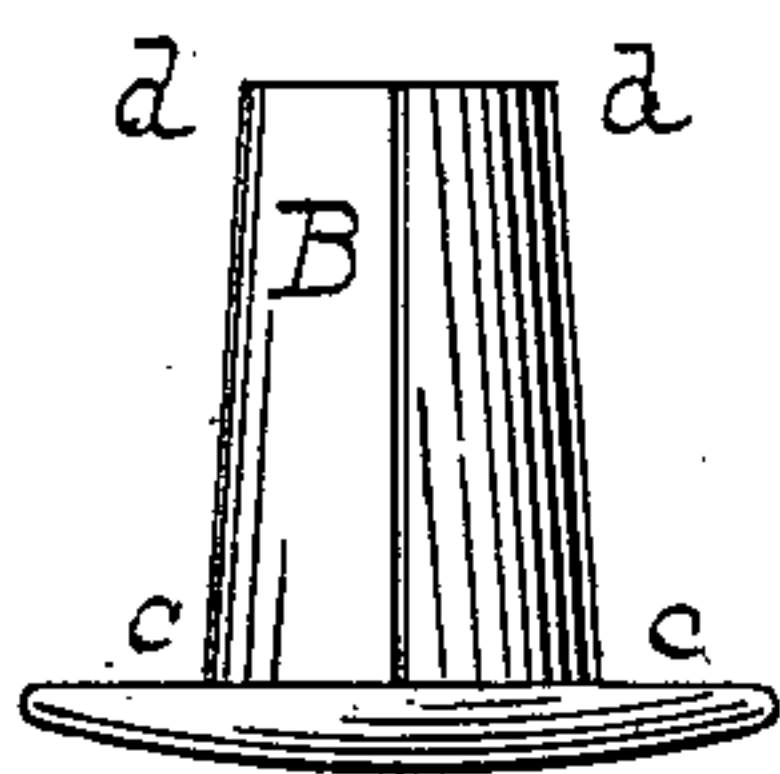
(No Model.)

B. L. D'AUBIGNÉ.  
TUBULAR RIVET.

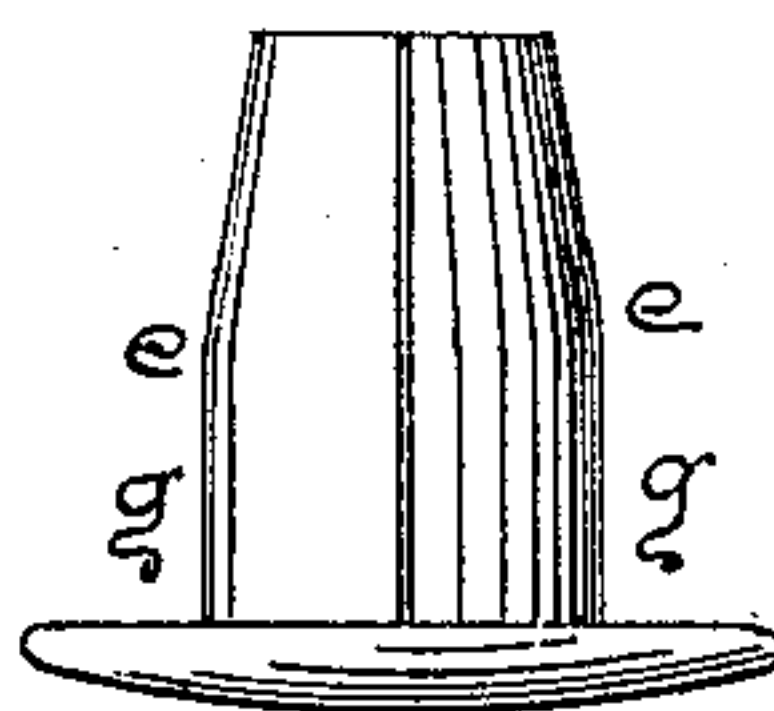
No. 275,158.

Patented Apr. 3, 1883.

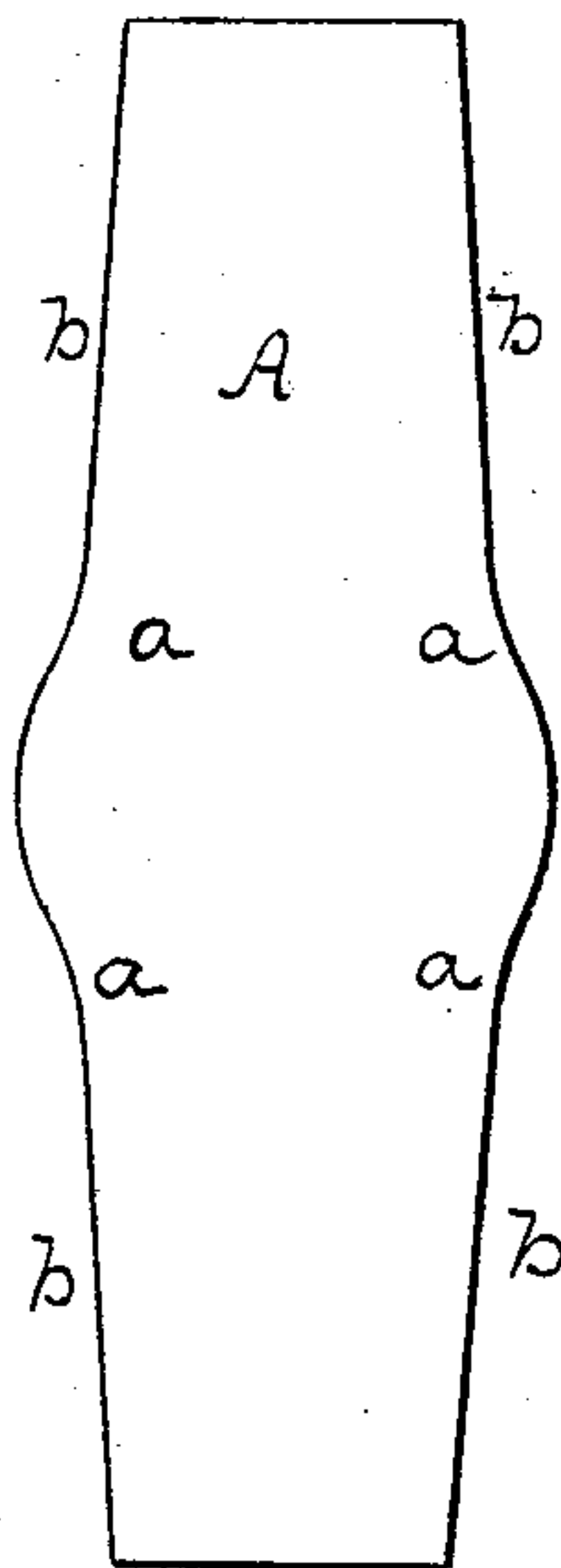
*Fig: 1.*



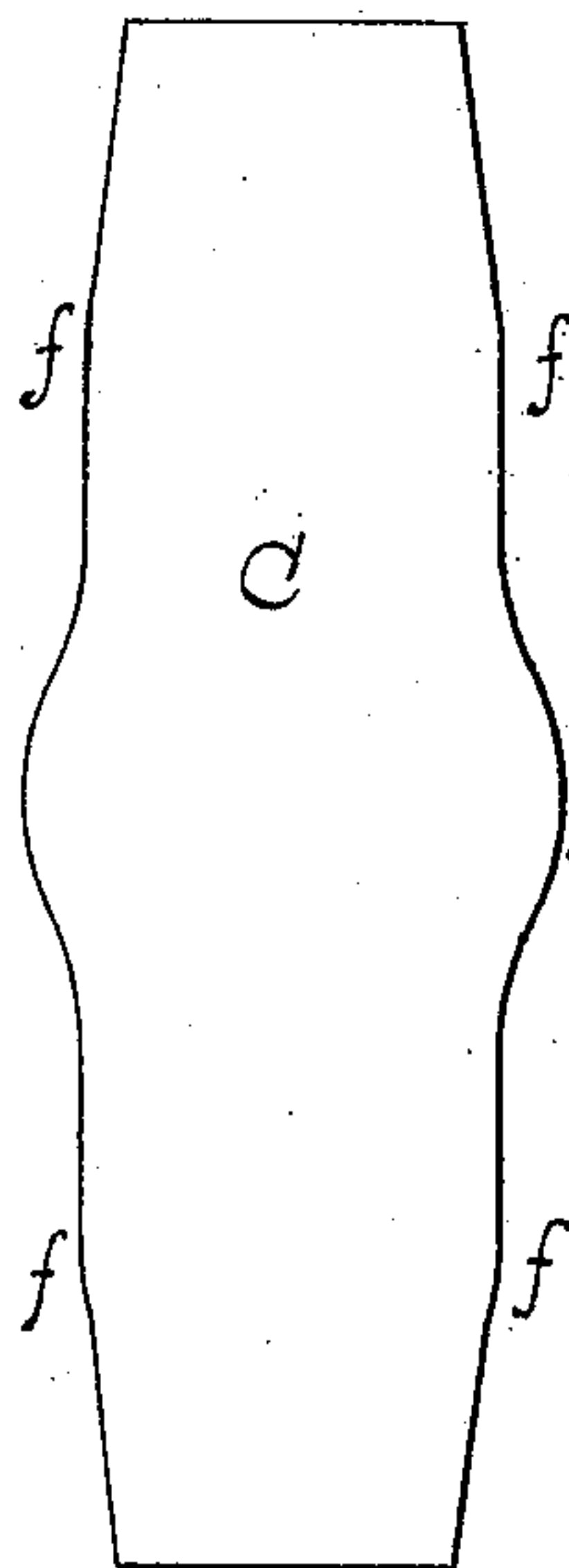
*Fig: 4.*



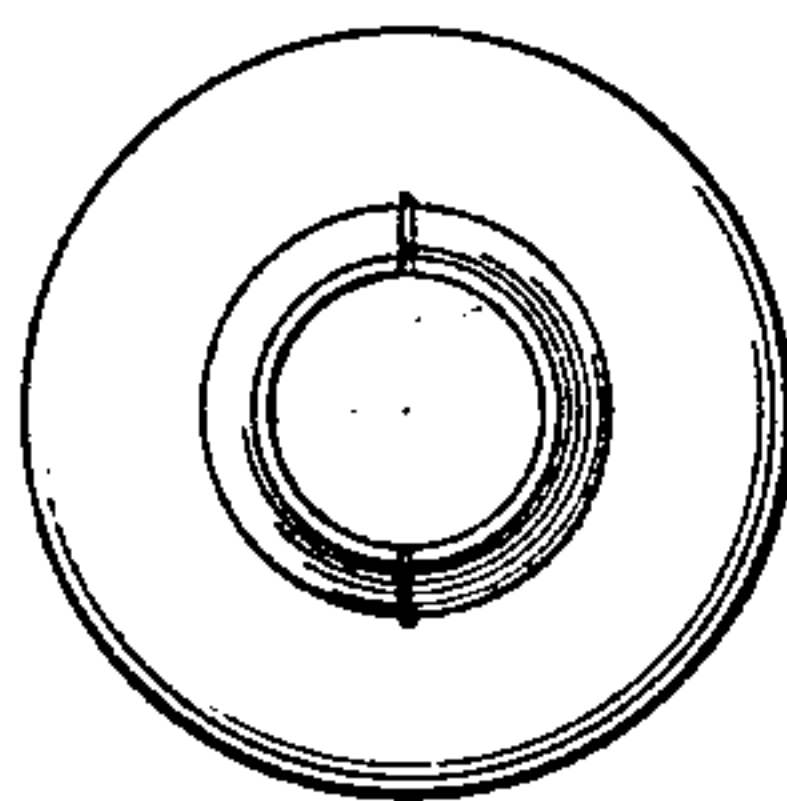
*Fig: 2.*



*Fig: 5.*



*Fig: 3.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

BARTOLO L. D'AUBIGNÉ, OF BOSTON, MASSACHUSETTS.

## TUBULAR RIVET.

SPECIFICATION forming part of Letters Patent No. 275,158, dated April 3, 1883.

Application filed June 22, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, BARTOLO L. D'AUBIGNÉ, of the city of Boston, county of Suffolk, State of Massachusetts, have invented a new and useful Improvement in Tubular Rivets; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying sheet of drawings, making part of this specification.

This invention is in the nature of an improvement in tubular rivets; and the invention consists in a tubular rivet "struck up" from a suitable metallic blank and constructed with a solid flanged head and a tubular shank divided into vertical sections, which shank is tapered more or less toward its point, as is more particularly described hereinafter.

In the accompanying sheet of drawings, Figure 1 is a side elevation of rivet with shank tapering from butt to point. Fig. 2 is a blank for same; Fig. 3, a plan or top view of rivet; Fig. 4, side elevation of rivet with shank tapering midway of its length; Fig. 5, a blank for same.

Similar letters of reference indicate like parts in the several figures.

This invention is in the nature of an improvement in the tubular rivets which were patented to me by Letters Patent of the United States bearing date the 27th day of May, 1875, No. 215,889, in which patent is described a rivet struck up from blanks of different shapes so that the rivet will have substantially a solid head, and also have its shank divided into two or more vertical sections. In this rivet so patented to me the shank is of uniform diameter from point to butt. Now, as an improvement upon this rivet, I first take a blank, A, which may be of the shape shown in Fig. 2, or of any other desired shape, and from the central portion, *a*, of the blank cause its four edges, *b*, to taper somewhat toward each end of the blank, so that when this blank is by suitable mechanism struck up in dies and the head properly swaged thereon the drawing together of the four edges *b* of the blank in close contact forms a tubular shank, B, which tapers gradually from the inner surface of the head *c* to the point *d* of the shank. (See Fig. 1.) If desired, however, the shank B of the rivet may commence to taper, not from the inner surface of the head *c*, as above described, but from some place intermediate

between the head and the point of the shank, as at *e*, Fig. 4. The last-named form of tapered shank is made from a blank, C, Fig. 5, where the tapering edges of the blank commence at a point, *f*, on either side of the central part of the blank, thereby forming a shank when the blank is struck up that will be of uniform diameter to a certain extent, as at *g*, and then taper from that point to the end of the shank, as shown in Fig. 4.

Rivets with heads that are substantially solid, and having sectional shanks, when made in the manner hereinbefore described, possess the advantage of not only being more readily "upset" by the upsetting-tool than are rivets with shanks of uniform diameter throughout, but they also possess the advantage of causing the upset sections to coil over, thereby strengthening, in the nature of a re-enforce, these turned-over sections, giving them a strength which will cause them to better resist the strain to which they are subjected when in use. An additional advantage arising from this taper form of shank in rivets of this kind is that when applied by hand into perforations made in the material that is to receive them they will more easily enter such perforations, and the perforation corresponding only with the diameter of the tapered or smaller end of the shank of the rivet, it is clear that when the untapered portion of the shank is forced through this hole it will necessarily crowd tightly into it, so that if the substance through which the rivet is passed is leather or other thick material this substance will materially assist in strengthening the shank of the rivet, particularly when the shank is made of thin metal.

It is to be understood that the rivets above described are to be constructed precisely the same as are the rivets described in my aforesaid Letters Patent, with the exception that the shanks are tapered, as recited herein.

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

A rivet with a solid flanged head and with a tapering sectional tubular shank, substantially as is shown and described.

BARTOLO L. D'AUBIGNÉ.

Witnesses:

G. M. PLYMPTON,  
C. E. SIMMS, Jr.