J. E. WOOTTEN.

Rivets.

No. 133,737. Patented Dec. 10, 1872.

Fig. 1.

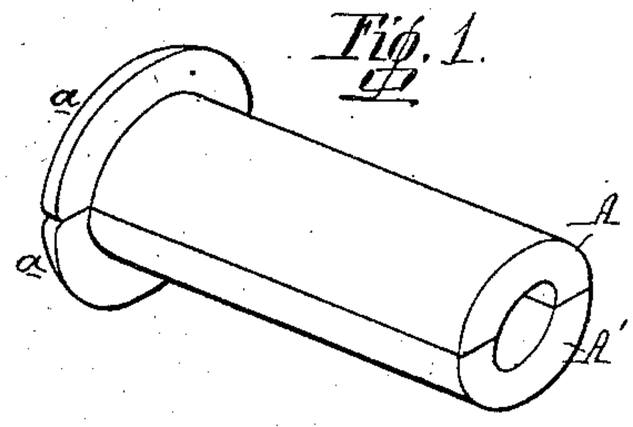


Fig. 2.

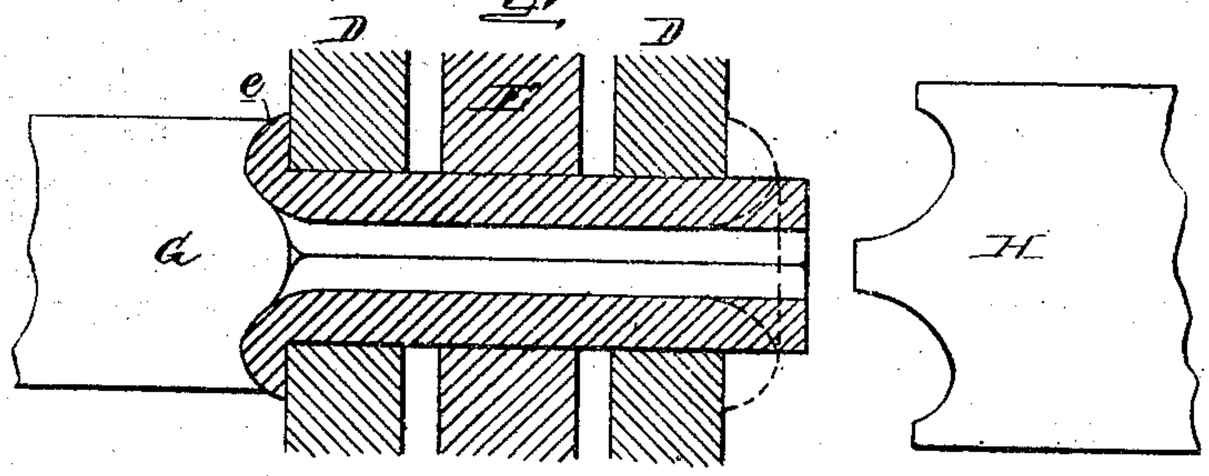
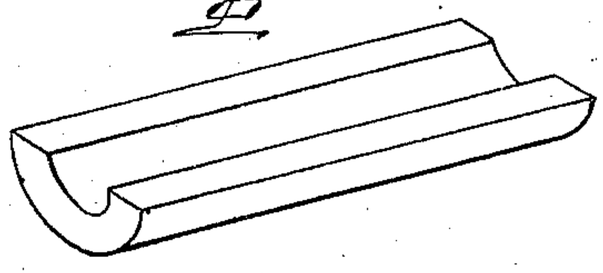


Fig. 3.



Witnesses { Thomas McIlvain
Harry W. Douty

J. E. Wootten.
by his Attys.
Howson and Son

UNITED STATES PATENT OFFICE.

JOHN E. WOOTTEN, OF READING, PENNSYLVANIA.

IMPROVEMENT IN RIVETS.

Specification forming part of Letters Patent No. **133,737**, dated December 10, 1872.

To all whom it may concern:

Be it known that I, JOHN E. WOOTTEN, of Reading, in the county of Berks and State of Pennsylvania, have invented an Improvement in Rivets, of which the following is a specification:

The object of my invention is a metallic rivet the ends of which can be readily distended while cold without danger of injuring its efficiency.

This rivet I make of two semi-tubular sections, A A′, each having one end, *a*, bent by swaging or otherwise, so that when the two sections are placed together, as shown in Figure 1, they will together form a tubular rivet of which the bent ends are the head. In applying the rivet it is passed, while cold, through holes in the object to be secured—for instance, the splicing-bars D of a rail, E; and while a suitable bar, G, is held against the head of the rivet, the tapering end of a tool, H, is applied to the opposite end, and is struck as many blows with a hammer as may be necessary to bend the end of the two sections against the splice, as indicated by dotted lines in Fig. 2. A rivet made of ordinary rolled tubing, treated with a tool, H, in the manner described, would necessarily be so distended as to be in most cases split, and this violent splitting would so disintegrate and shatter the metal that the rivet would be more or less insecure. In order to obviate this difficulty I made a rivet of a flat strip or bar of iron, by coiling the latter and welding the coil so that the grain of the iron might have a direction across the rivets, thereby permitting the distension and bending of the end with less danger of splitting the rivet than when the grain had a longitudinal direction; but this rivet, for which Letters Patent were granted to me August 6, 1867, was expensive to manufacture; hence my present rivet, which can be economically made from a rolled or otherwise formed semi-tubular bar, a portion of which is shown in Fig. 3, the bar being cut into the lengths required, and each length being bent at one end so as to form the head of the rivet; or, if desired, the head may be dispensed with and the riveting of both ends may be accomplished simultaneously. When the tool H is applied to the projecting end of the rivet the distension can have little or no tendency to split the metal, as each section is at liberty to yield to the tool without interfering with the other.

It will be evident that the rivet may be made of more than two sections, although two sections will suffice for ordinary rivets—such, for instance, as may be used in connection with rail-splices.

I claim as my invention and as a new manufacture—

A tubular rivet made in sections, as and for the purpose herein set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

J. E. WOOTTEN.

Witnesses:
JAS. M. LANDIS,
J. E. PRICE.