

No. 804,174.

PATENTED NOV. 7, 1905.

K. SCHMELZER.
CONNECTION FOR SUPERIMPOSED BOILERS.
APPLICATION FILED AUG. 10, 1905.

Fig.1.

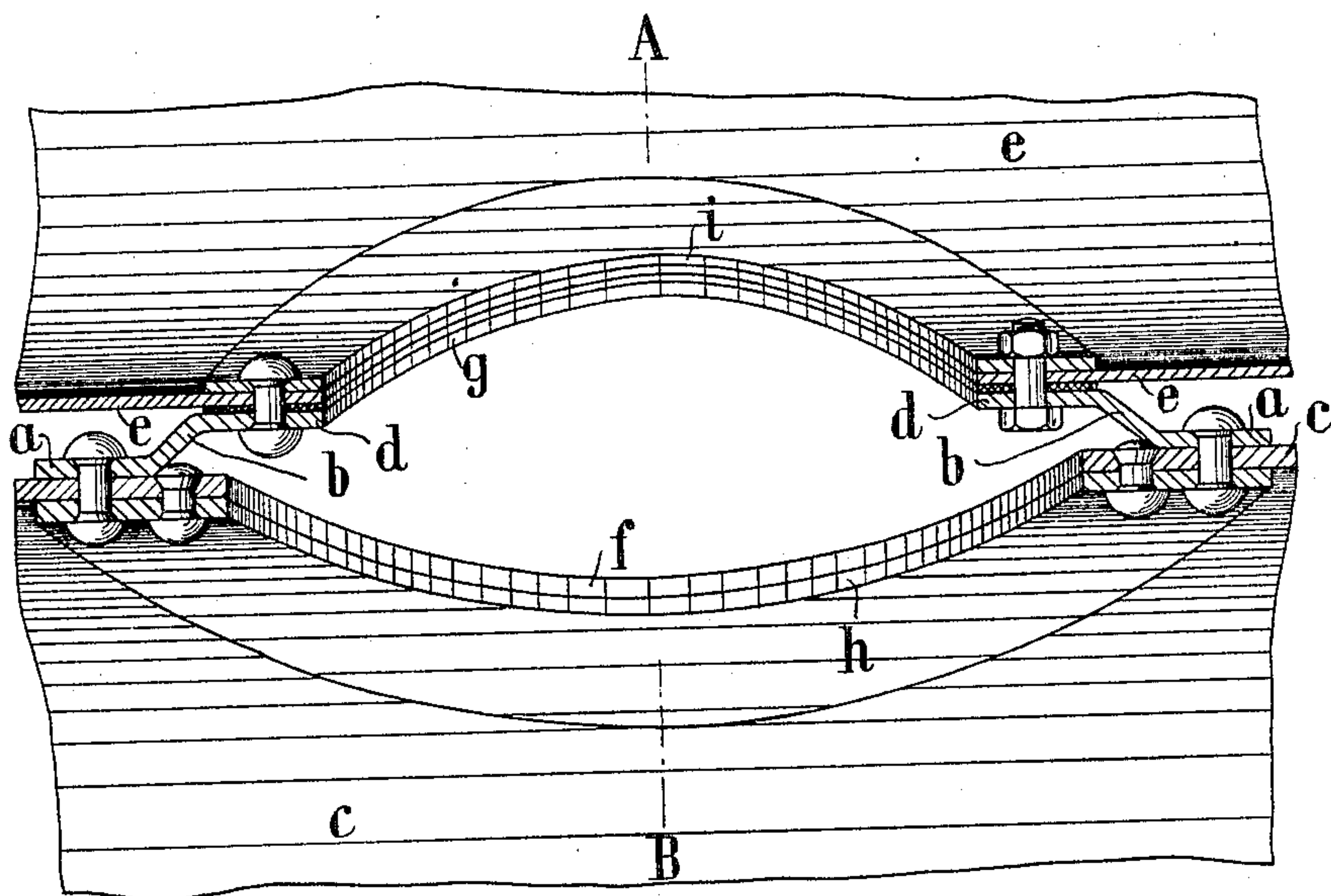
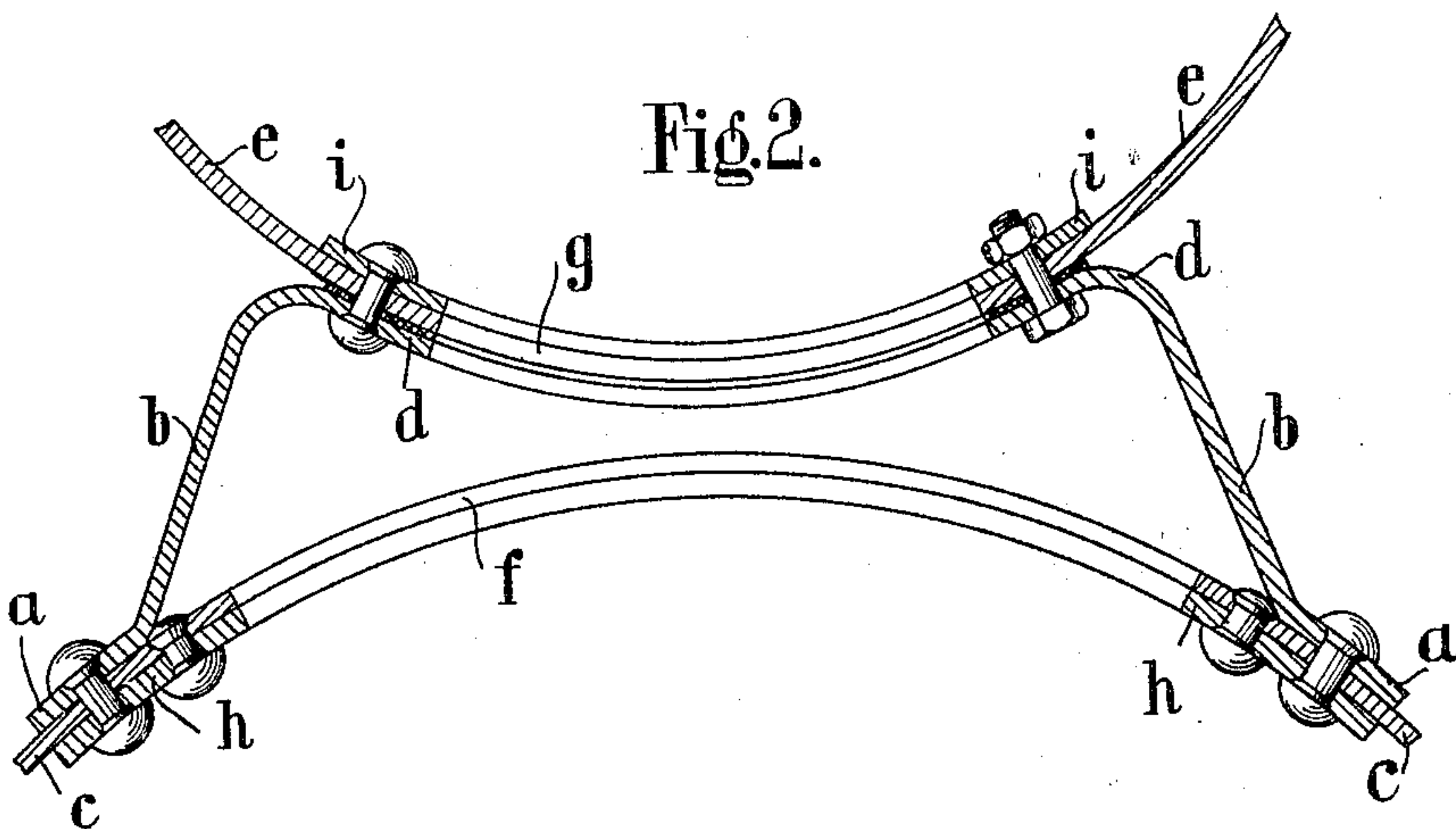


Fig.2.



WITNESSES

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CONNECTION FOR SUPERIMPOSED BOILERS.

No. 804,174.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, KARL SCHMELZER, a subject of the King of Prussia, German Emperor, and a resident of Saarbrücken, Germany, have invented certain new and useful Improvements in Connections for Superimposed Boilers, of which the following is a specification.

In connecting boilers or parts of boilers together, especially superimposed longitudinal boilers, a serious disadvantage in the waste of material and space has always presented itself. The connection was usually effected by cutting a circular opening in the adjacent parts of the boiler and inserting a cylindrical connecting-joint having outwardly-turned edges. These edges were riveted or otherwise secured around the edges of the openings, and it was therefore necessary to have a connecting-joint of considerable length in order to properly secure the rivets. By the present invention this disadvantage is avoided by using connecting-joints the edges of which are turned over in opposite directions. Accordingly the adjacent circular openings of the two parts of the boiler are of different diameter and the line of rivets with which the joint is fastened to the edge of the opening of smaller diameter can be approached through the larger opening, so that the length of the joint and the space between the boiler can be essentially decreased.

In the accompanying drawings, Figure 1 is a section through the connection in the longitudinal direction of the boiler, and Fig. 2 is a section along the line A B of Fig. 1.

In the form of construction represented the lower edge *a* of the joint *b* is curved outwardly and riveted or bolted to the lower boiler *c*, while the upper edge *d* of the joint *b* is curved inwardly and riveted or bolted to the upper boiler *e*. The places in the boiler which have been weakened by the openings *f* or *g* may be stiffened by means of rings *h* and *i*.

The connection is effected as follows: Joint *b* is first riveted or otherwise secured to the longitudinal boiler *c*, the edge of which is turned outwardly, whereupon the upper longitudinal boiler part is secured to the edge *d*

of the joint which is turned inwardly. As the rivets of the edge which is turned inwardly are conveniently approachable through the larger opening of the lower boiler, the connecting-joint *b* needs to have only a very slight height, so that an exceedingly small space between the boilers or boiler parts results, which is of importance, especially for locomotive-boilers.

I claim as my invention—

1. A boiler connection for superimposed boiler parts, comprising adjacent openings in the adjacent parts, and a connecting-joint having its edges turned over in opposite directions and adapted to be secured about the edges of said openings.

2. A boiler connection for superimposed boiler parts, comprising adjacent openings in the adjacent parts, and a connecting-joint having its edges turned over in opposite directions and adapted to be secured about the edges of said openings, said openings being of different diameters.

3. A boiler connection for superimposed boiler parts, comprising an opening in each boiler part and a connecting-joint having its edges turned over in opposite directions and adapted to be secured about the edges of said openings, in combination with stiffening-rings about said openings.

4. A boiler connection for superimposed boiler parts, comprising openings in the adjacent parts and a connecting-joint between said openings having its edges turned over in opposite directions and adapted to be secured to the edges of said openings, in combination with stiffening-rings secured with said connecting-joint about the openings, said openings being of different diameters.

5. A connecting-joint for superimposed boilers, having one edge turned outward and the other edge turned inward, for the purpose described.

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

KARL SCHMELZER.

Witnesses:

EMIL C. DANNENBERG,
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