

(No Model.)

A. J. & C. LINDEMANN

SHEET METAL PIPE.

No. 378,694.

Patented Feb. 28, 1888.

FIG. 1.

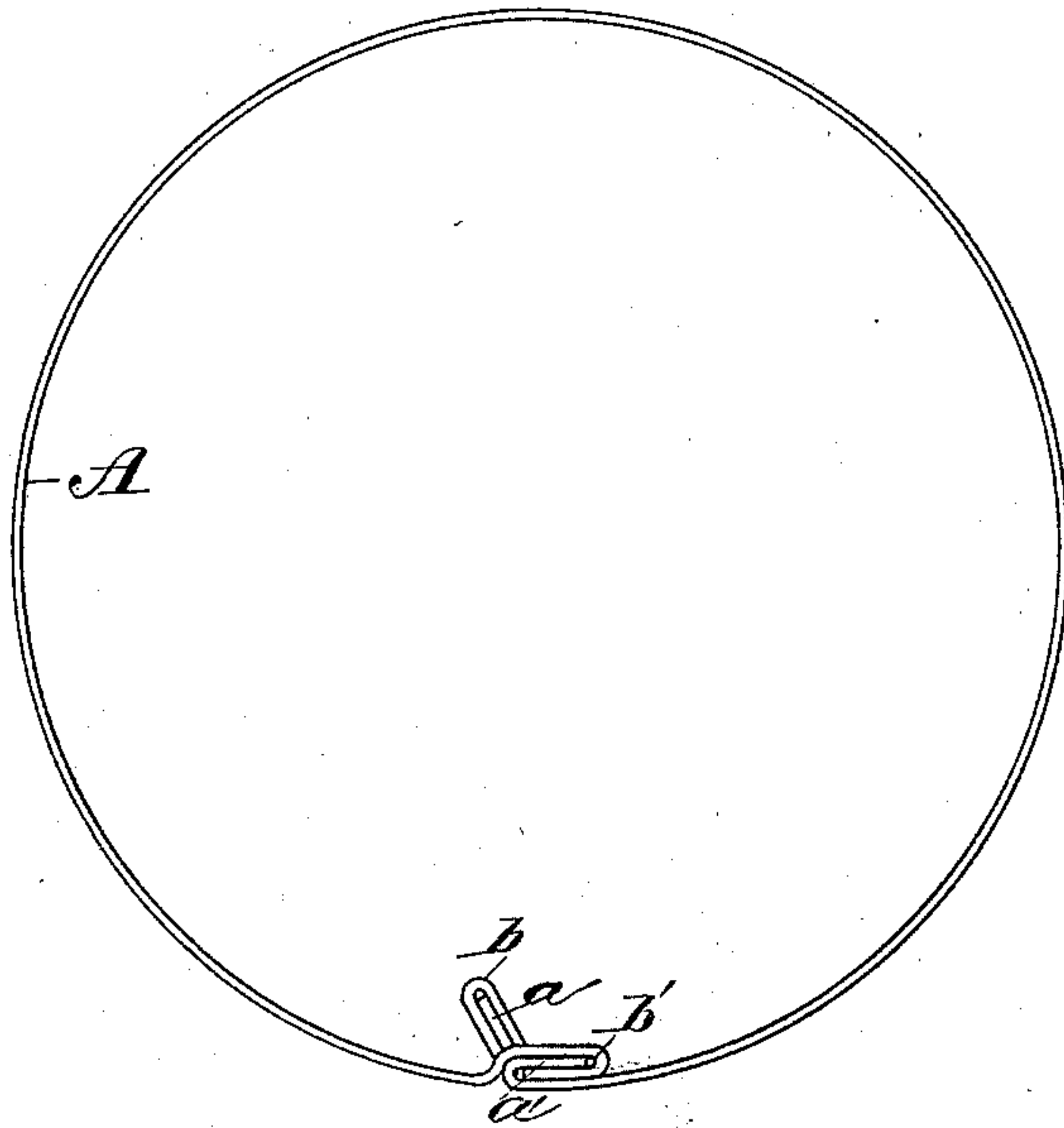
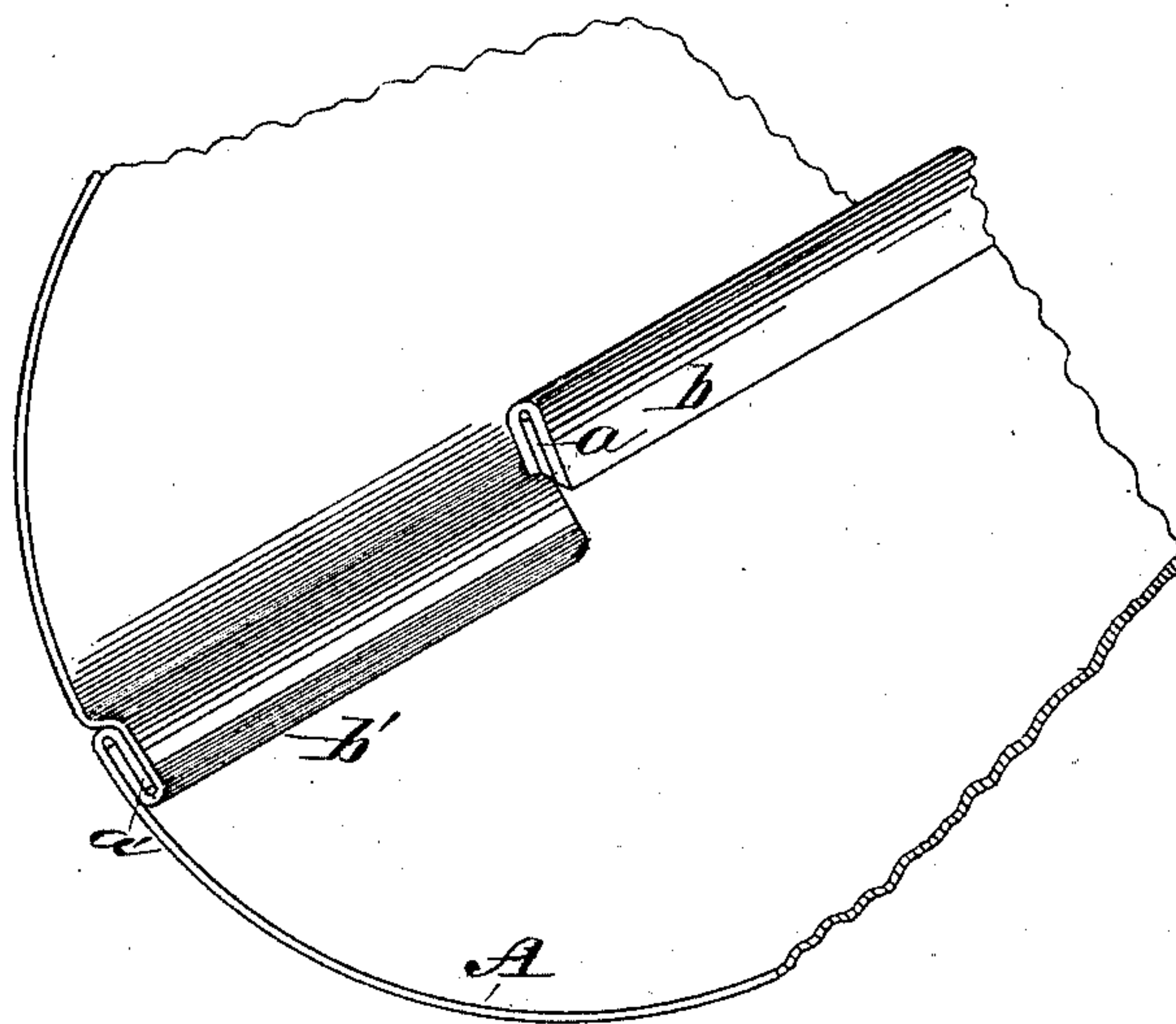


FIG. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ALBERT J. LINDEMANN AND CHARLES LINDEMANN, OF MILWAUKEE,
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SHEET-METAL PIPE.

SPECIFICATION forming part of Letters Patent No. 378,694, dated February 28, 1888.

Application filed September 3, 1883. Serial No. 105,403. (No model.)

To all whom it may concern:

Be it known that we, ALBERT J. LINDEMANN and CHARLES LINDEMANN, both of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Sheet-Metal Pipes; and we do hereby declare that the following is a full, clear, and exact description thereof.

Our invention relates to the construction of sheet-metal tubing or pipes, and is designed as an improvement upon that for which Letters Patent No. 261,004 were granted to us on the 11th day of July, 1882.

In the drawings, Figure 1 is an end view of a section of tubing embodying our invention, and Fig. 2 is a perspective view of the same with the greater portion of the pipe broken away.

A is the body of the tubing, one edge of which is provided with a flange, *a*, and the other with a flange, *b*. The flange *a* is of a single thickness; but the flange *b* is recurved to form a hook, and both are slit transversely, leaving short independent flanges *a'* *b'*, which, together with the flanges *a* *b*, are bent out of a radial—that is, they point to one side of the center of the pipe; and herein lies our present invention, for as the flange *a* is thrust into the hook formed by flange *b* it is locked by wedging into place, and after the flanges *a'* *b'* have been turned down cannot spring apart in the center, as it would be liable to if the flanges were radial.

In other respects our device is identical with that in our former patent. After the

flange *a* has been caught in the hooked flange *b*, then the flanges *a'* *b'* are bent down upon the body of the pipe-section at an obtuse angle to the flanges *a* *b*, which securely locks both edges together.

In our former patent we found the device was liable to bulge in the center, this bulging being caused by the inherent elasticity of the metal composing the device and the radial position of the flanges. By having the flanges *a* *b* bent out of a radial and at an obtuse angle to the flanges *a'* *b'*, that are bent down upon the pipe-section, the inherent elasticity of the metal composing the device will only serve to draw and wedge the former flanges more tightly together, thereby preventing any springing or bulging.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

A sheet-metal pipe-section having interlocked flanges *a* *b* and *a'* *b'*, separated by a transverse cut, the flanges *a* *b* bent out of a radial, and the flanges *a'* *b'* bent down upon the body of the pipe-section at an obtuse angle to said flanges *a* *b*, as set forth.

In testimony that we claim the foregoing we have hereunto set our hands, on this 27th day of August, 1883, in the presence of two witnesses.

ALBERT J. LINDEMANN.
CHARLES LINDEMANN.

Witnesses:

STANLEY S. STOUT,
M. KAUMHEIMER.