

No. 663,385.

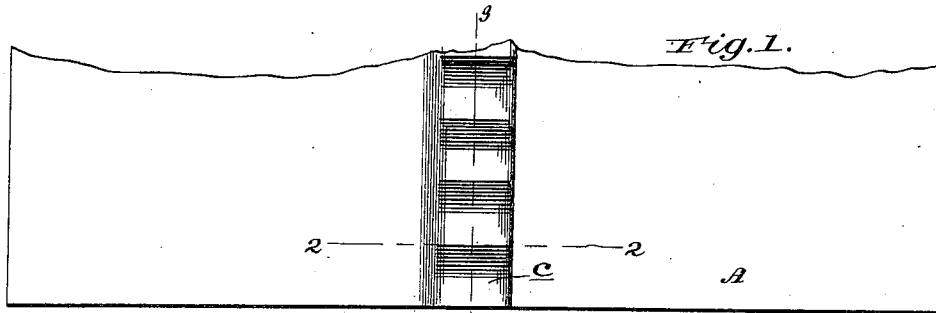
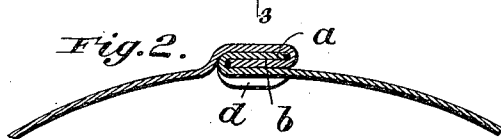
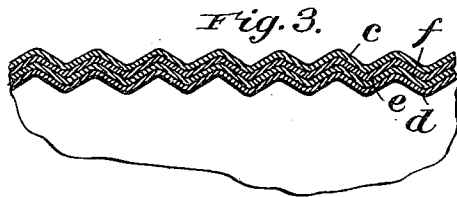
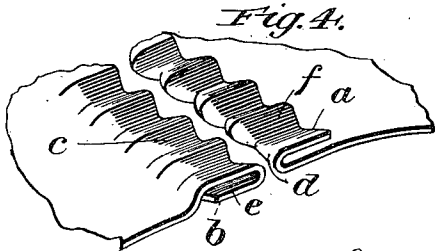
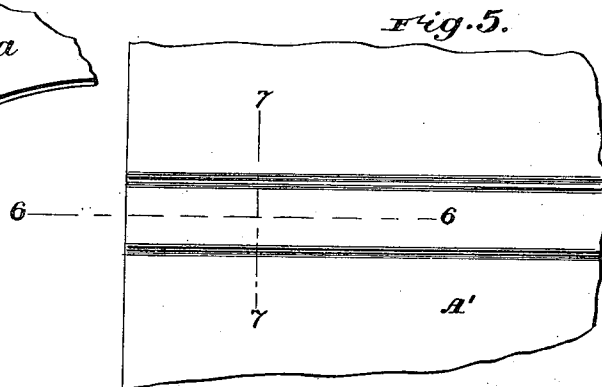
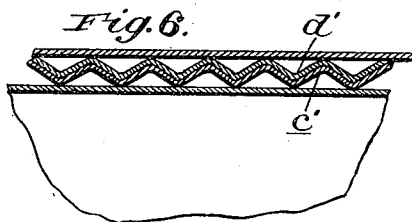
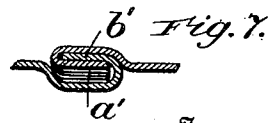
Patented Dec. 4, 1900.

G. P. HOBBS.

LOCK SEAM FOR METAL ARTICLES.

(Application filed Mar. 8, 1900.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE P. HOBBS, OF NEW ORLEANS, LOUISIANA, ASSIGNOR OF ONE-HALF
TO THE H. HALLER MANUFACTURING COMPANY, LIMITED, OF SAME
PLACE.

LOCK-SEAM FOR METAL ARTICLES.

SPECIFICATION forming part of Letters Patent No. 663,385, dated December 4, 1900.

Application filed March 8, 1900. Serial No. 7,888. (No model.)

To all whom it may concern:

Be it known that I, GEORGE P. HOBBS, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented new and useful Improvements in Lock-Seams for Metal Articles, of which the following is a specification.

My invention relates to improvements in lock-seams for sheet-metal pipes, cans, and plates and other flat work; and it consists in the peculiar and advantageous lock-seam hereinafter described, and particularly pointed out in the claims appended.

In the accompanying drawings, Figure 1 is an elevation of a portion of a sheet-metal stovepipe provided with my improved seam. Fig. 2 is a transverse section taken in the plane indicated by the broken line 2 2 of Fig. 1. Fig. 3 is a longitudinal section taken in the plane indicated by the broken line 3 3 of Fig. 1. Fig. 4 comprises disconnected perspective views of the edges of the members comprised in my improved seam. Fig. 5 is a detail elevation of a modification in which the fluted or corrugated edges are covered and hidden from view. Figs. 6 and 7 are detail sections taken in the planes indicated by the broken lines 6 6 and 7 7, respectively, of Fig. 5.

Referring by letter to the said drawings, and more particularly to Figs. 1 to 4 thereof, A is a sheet-metal stovepipe which is provided with a longitudinal outturned edge *a* and a longitudinal inturned edge *b*. These edges *a b* are of the proportional width illustrated and provided, preferably throughout the length of the pipe, with transversely-disposed or crosswise corrugations *c d*, respectively. The main portion of the stovepipe opposite the outturned edge *a* is also provided with transversely-disposed corrugations *e*, corresponding in length to the corrugations *c d*, while the main portion of the pipe opposite the inturned edge *b* is provided with corrugations *f*, also corresponding in length to the corrugations *c d*. By virtue of this construction it will be readily observed that when the edges *b a* are interlocked—that is, edge *b* is interposed between edge *a* and the opposite main portion of the pipe

and said edge *a* is interposed between the edge *b* and the opposite main portion of the pipe—the corrugations of the edges *a b* and the corrugations of the main portion of the pipe will conform and the projections of the contiguous corrugated layers of metal will be nested in the depressions of each other, with the result that such contiguous layers, including the outturned edge *a* and the inturned edge *b*, will be securely held against longitudinal or endwise movement with respect to each other. It will also be observed that when the interlocked corrugated portions of the pipe are pressed together or the joint is closed, as shown in Figs. 2 and 3, they will be held against lateral as well as longitudinal movement or shifting with reference to each other and will form a perfectly tight lock-seam.

While designed more particularly for use in a stovepipe, my improved lock-seam may obviously be used to advantage in cans, either of circular or angular form in cross-section, and in connecting the sheet-metal sections of flat work, as well as in other connections, which it is unnecessary to specify. The said seam is very cheap and easy to make, and while it requires no more metal than an ordinary seam and does not entail the employment of rivets or the like it is calculated to materially stiffen that portion of the pipe or other article adjacent to it. It is also advantageous, because it locks the edges of the sheet forming a pipe or other article throughout the length thereof, and hence permits of the pipe or other article being cut into a plurality of sections without impairing the efficiency of the seam of any section.

In Figs. 5, 6, and 7 of the drawings I have illustrated a modification in which only the outturned edge *b'* and inturned edge *a'* of a pipe A' are provided with transverse corrugations *d' c'*. By virtue of this construction when the outturned and inturned edges are interlocked and are pressed together the projections of the one will enter the depressions of the other, with the result that they will be securely held against both longitudinal and lateral movement with respect to each other and form a lock-seam almost if not

quite as strong as that disclosed in Figs. 1 to 4 and before described. At the same time it will be observed that the portions of the sheet of metal opposite the corrugated or fluted edges *a' b'* will cover and hide the same from view and will present a smooth surface both at the inside and outside of the pipe or other article.

The modification shown in Figs. 5 to 7 is susceptible of being used in as many connections as the construction shown in Figs. 1 to 4 and possesses all of the advantages of the latter.

I have entered into a specific description of the construction and relative arrangement of the parts embraced in the present embodiment of my invention in order to impart a full, clear, and exact understanding of the same. I do not desire, however, to be understood as confining myself to such specific construction and arrangement of parts, as such changes or modifications may be made in practice as fairly fall within the scope of my invention.

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

1. In a lock-seam, the combination of a member having an outturned edge provided with corrugations extending in the direction

of and throughout its width, and a member having an inturned edge also provided with corrugations extending in the direction of and throughout its width; the said edges of the members being interlocked and pressed against each other whereby the projections of the one are secured in the depressions of the other, substantially as and for the purpose specified.

2. In a lock-seam, the combination of a member having an outturned edge provided with crosswise corrugations extending throughout the width thereof and also having a smooth main portion opposite said edge, and a member having an inturned edge provided with crosswise corrugations, extending throughout the width thereof and also having a smooth main portion opposite said inturned edge; the said edges of the members being interlocked and pressed against each other between the smooth main portions of the members, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GEORGE P. HOBBS.

Witnesses:

JOHN A. HELUF,
FRANK ZENGEL.