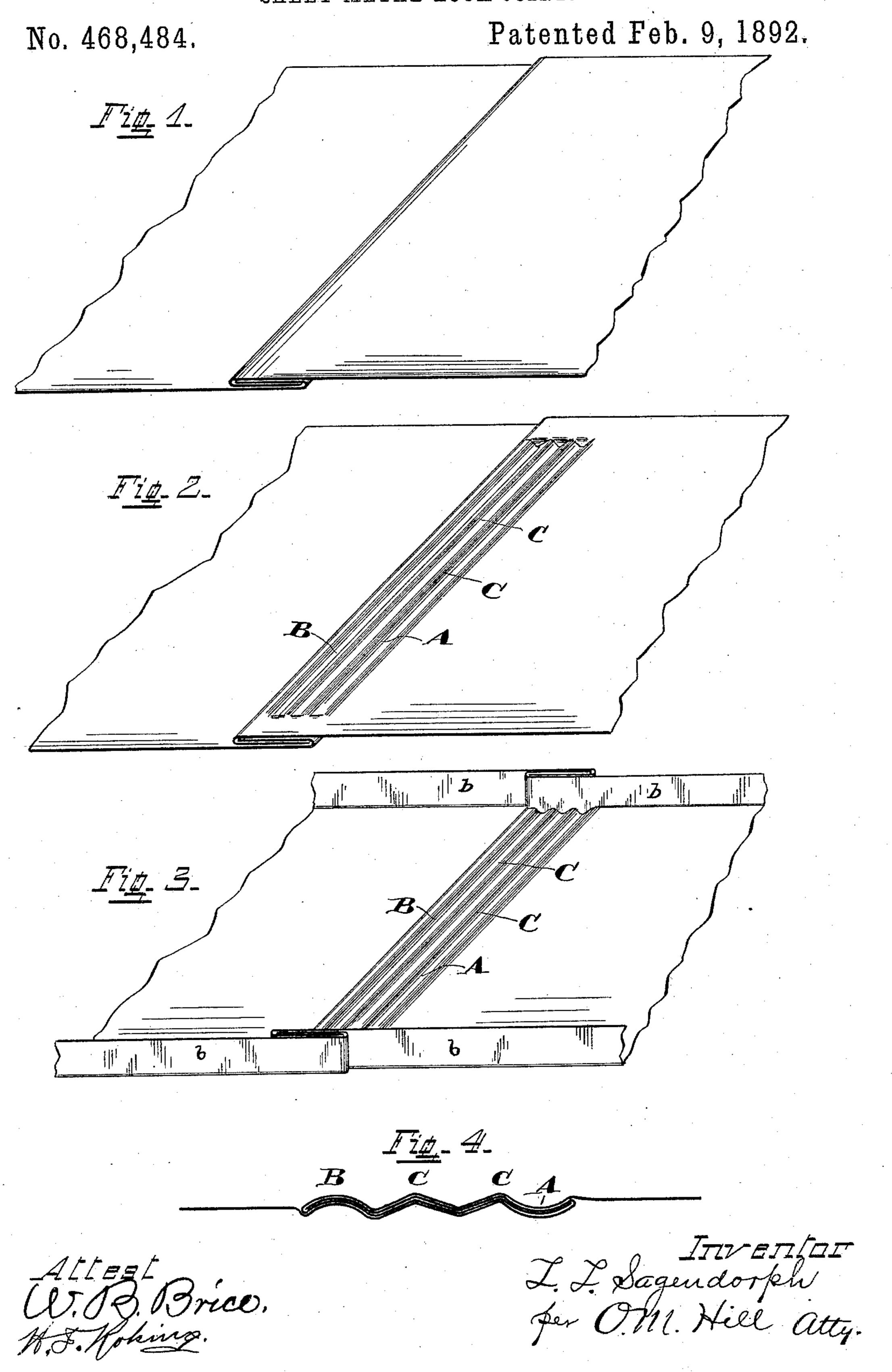
(No Model.)

L. L. SAGENDORPH. SHEET METAL LOCK JOINT.



HE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

United States Patent Office.

LONGLEY LEWIS SAGENDORPH, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO CHARLES N. HARDER, OF PHILMONT, NEW YORK.

SHEET-METAL LOCK-JOINT.

SPECIFICATION forming part of Letters Patent No. 468,484, dated February 9, 1892.

Application filed July 25, 1891. Serial No. 400,736. (No model.)

To all whom it may concern:

Be it known that I, Longley Lewis Sagen-DORPH, a citizen of the United States, residing at Philadelphia, in the county of Phila-5 delphia, State of Pennsylvania, have invented certain new and useful Improvements in Sheet-Metal Lock-Joints, of which the following is a specification, reference being had to the accompanying drawings.

My improved lock-joint for metal sheets is designed more especially for use in connection with roofing-sheets, and is an improvement over the joint patented to me on April 8,

1890, Patent No. 425,002.

In the accompanying drawings, Figure 1 is a perspective view of two sheets of metal united by means of the ordinary hooked flanges, which is the first step toward forming my improved lock-joint. Fig. 2 is a view similar to Fig. 1 with the addition of my invention. Fig. 3 is a perspective view of two roofing-sheets united by means of my improved lock-joint with the side flanges bent to position. Fig. 4 is a transverse section taken through the lock-joint shown in Figs. 2 and 3, said section being on an enlarged scale.

My invention consists in forming in the seam of two sheets (said seam being formed by the interlocking flanges, as shown in Fig. 30 1) two longitudinal corrugations A B, preferably circular in cross-section, said corrugations extending along the outer edges of said seam, one of said corrugations being concave and the other convex on the same plane. Be-35 tween the outer circular corrugations A B is formed one or more V-shaped corrugations C, extending parallel with the outer corrugations. The body of each sheet is gradually rounded upward and downward, respectively, 40 at each side the seam, and when the sheets are joined by my improved lock-joint or seam said sheets at each side the seam will be on the same plane.

When my improved lock-joint is used in

connection with roofing-sheets, as shown, the 45 corrugations preferably do not extend the full length of the seam, but terminate a short distance from the outer edges in order to permit of the side flanges b being readily bent to position when placed on the roof.

The advantages arising from the use of my improved lock-joint herein shown and set forth are first, the joint thus formed is watertight, the V-shaped corrugations C in connection with the outer corrugations tending to ef- 55 fectually check any capillary attraction; second, the joint thus formed will permit of airspaces beneath the seam, thus tending to prolong the life of the latter and also prevent decay of the sheeting at that point; third, saving 6c of solder; fourth, by reason of the outer corrugations A B being rounded in opposite directions in cross-section either side of the sheets may be laid outward, and, fifth, any desired number of sheets may be joined by 65 means of my improved lock-joint and then rolled in a compact form for shipment with-

What I claim as new, and desire to secure 70

out danger of any of said sheets becoming

by Letters Patent, is—

disengaged.

1. A sheet-metal lock-joint consisting of longitudinal corrugations formed in the outer edges of the interlocking flanges of said sheets with a central V-shaped corrugation 75 between and parallel with said outer corrugations, for the purposes specified.

2. In a sheet-metal lock-joint formed by the ordinary interlocking flanges, the outer corrugations A B, formed in said interlocked 80 seam, with the central V-shaped corrugations C, the corrugations A B being formed in opposite directions to one face, substantially as

LONGLEY LEWIS SAGENDORPH.

Witnesses:

set forth.

A. L. FOULDS, WM. AUBREY.