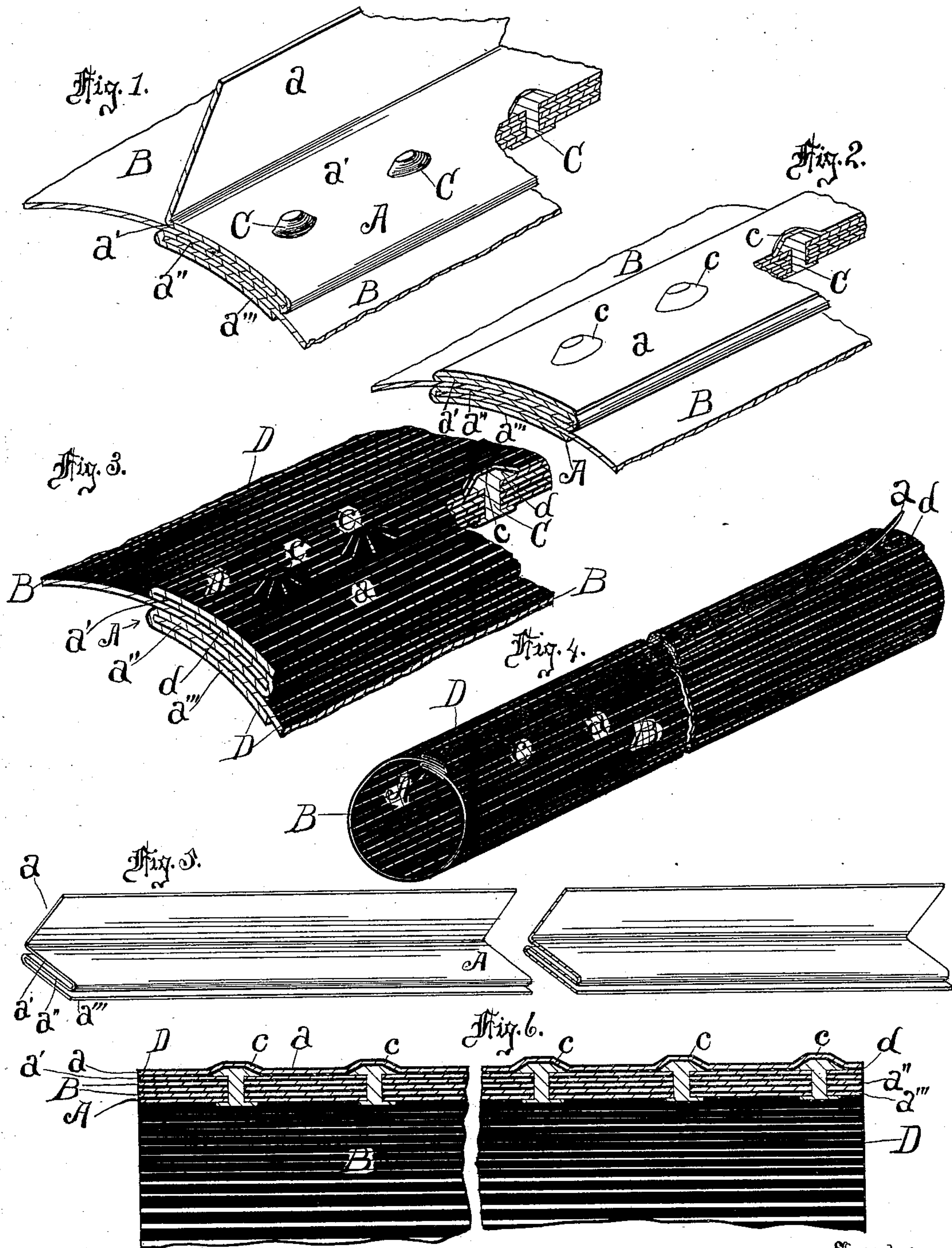


(No Model.)

C. S. HAMLIN.
DOUBLE LAP PIPE.

No. 496,118.

Patented Apr. 25, 1893.



Witnesses.

M. M. Lu.
Kellie E. Lurd.

Inventor.

Charles S. Hamlin
Hazard & Townsend
his attys.

UNITED STATES PATENT OFFICE

CHARLES S. HAMLIN, OF LOS ANGELES, ASSIGNOR OF ONE-HALF TO ARTHUR C. HARPER, OF UNIVERSITY, CALIFORNIA.

DOUBLE-LAP PIPE.

SPECIFICATION forming part of Letters Patent No. 496,118, dated April 25, 1893.

Application filed September 16, 1892. Serial No. 446,046. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. HAMLIN, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Improvement in Double-Lap Pipes, of which the following is a specification.

Dipped sheet metal pipe is liable to destruction from rusting of rivets from which the asphaltum or other protecting coating has been abraded by handling in transportation or otherwise, for the reason that the rivet heads project beyond the periphery of the pipe and are thus subject to be struck and abraded. When in the ground the abraded surface from which the preservative coating has thus been removed becomes subject to the attack of destructive agents and sooner or later rusts out, thus in time destroying the pipe.

The object of my invention is to increase the efficiency and durability of riveted pipe by strengthening the seam and providing against the removal from the rivet heads of the protecting and preservative coating of asphaltum, &c.

My invention is an improvement upon double lap pipe heretofore invented by me and set forth in my application for Letters Patent, Serial No. 412,642, filed in the United States Patent Office November 21, 1891, and in which I have shown the edges of the metal sheet which forms the tube of the pipe clasped by a doubly reversely bent lap strip, the whole being riveted together in the ordinary method of straight seaming.

My present improvement consists in providing the doubly reversely bent lap strip with an auxiliary flap adapted to be bent over upon the heads of the rivets of the seam of the joint, when the pipe is completed, to cover such rivets and to receive between it and the rivet head and pipe proper a coating of asphaltum or similar pipe-coating material when the pipe is dipped in the ordinary manner.

The accompanying drawings illustrate my invention.

Figure 1 is a fragment of pipe showing my improved double lap seam and the auxiliary flap as it appears after the seam has been riveted and before the lap strip has been

hammered down into place. Fig. 2 shows the same after the lap strip has been hammered into place and before it has been dipped. Fig. 3 shows the same after the pipe has been dipped. Fig. 4 is a fragmentary view of the completed pipe, a portion of the lap strip being raised to show the coating of asphaltum which forms between the lap strip and over the heads of the rivets when the pipe is dipped. Fig. 5 is a fragmentary view of the lap strip ready for application to form the joint. Fig. 6 is a fragmentary longitudinal section mid-way of the seam of the completed pipe.

A indicates the lap strip, B the metal sheet which forms the tube of the pipe, C the rivets and D the asphaltum coating formed by dipping in the ordinary manner.

a indicates the flap of the lap strip.

a', *a''* and *a'''* indicate the several members of the lap strip which receive the edges of the sheet which forms the tube of the pipe.

d indicates the coating of asphaltum formed over the heads of the rivets, between the flap *a* and the riveted heads and the outer member *a'* of the lap strip.

In manufacturing my improved pipe the edges of the sheet to form the tube are inserted between the members of the lap strip and the holes are punched for rivets, the rivets are then inserted and riveted in place, thus forming the strong and permanent seam described in my above mentioned application. The flap is then hammered down into place and by means of a rivet-heading tool is swaged to form the cup *c* to fit over the heads of the rivets C. When the seam is completed throughout, the pipe is dipped in melted asphaltum in the ordinary manner and the asphaltum permeates the interstices between the several members, and coats the heads of the rivets and cements the flap to the outer member of the lap strip. By this means all danger of accidental removal of the coating of asphaltum from the rivet heads is entirely obviated and all danger from rusting away at the seam is prevented for the reason that a complete coating of asphaltum is interposed between the rivet heads and the outer flap, and if the asphaltum should be removed from the cupped portion *c* which receives the rivet

heads and the flap should, in consequence, rust at that point, the rust would not affect the rivet head as that is covered by a coating of asphaltum which was wholly protected by the flap while the pipe was subject to handling and so remained intact until the pipe was laid, after which there would be no liability of removal of the coating even though the flap were to wholly rust away.

Now, having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A riveted sheet metal pipe provided with a flap arranged to cover the rivets of the seam and provided with a preservative coating interposed between the flap and the rivet heads.

2. The pipe comprising the combination of the double lap strip provided with the flap

arranged to protect the rivet heads of the seam; the metal sheet of which the tube is formed having its edges inserted between the members of the lap strip; a series of rivets inserted through the members of the lap strip and the edges of the sheet, and riveted to secure the seam, and a preservative coating interposed between the rivet heads and the flap.

3. A pipe having its seam secured by a double lap strip and rivets and having a rivet protecting flap swaged upon the rivet heads and the whole coated with a preservative material as set forth.

CHARLES S. HAMLIN.

Witnesses:

JAMES R. TOWNSEND,
F. M. TOWNSEND.