(No Model.)

## S. SLOCOMBE. SHEET METAL ROOFING.

No. 409,510. Patented Aug. 20, 1889. Fig. 1

WITNESSES:

C. Bendison.

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## United States Patent Office.

SIDNEY SLOCOMBE, OF MARCELLUS, NEW YORK.

## SHEET-METAL ROOFING.

SPECIFICATION forming part of Letters Patent No. 409,510, dated August 20, 1889.

Application filed April 13, 1889. Serial No. 307,162. (No model.)

To all whom it may concern:

Be it known that I, SIDNEY SLOCOMBE, of Marcellus, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Sheet-Metal Roofing, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to roofing composed

10 of tin or other sheet metal.

The object of the invention is to render said roofing expansible and contractible when subjected to changes of temperature without unduly straining the metal, and also without interfering with the flow of water from the roof and in the gutter; and to that end my invention consists in forming the metal sheet with two folds in opposite directions and on lines parallel and in proximity to each other and lying in planes approximately parallel with that of the sheet, as hereinafter more fully described, and specifically set forth in the claim.

In the annexed drawings, Figure 1 is a plan view of a section of a roof and gutter embodying my improvements. Fig. 2 is a transverse section on line x x, Fig. 1; and Fig. 3 is a lon-

gitudinal section on line y y.

A A represent sheets of tin or other metal of which the roofing is formed. Said sheets 30 being joined to each other in any suitable and well-known manner, the form of the seams is immaterial and does not pertain to my invention. Inasmuch as the seams have to be made water-tight, they have been soldered or other-35 wise rigidly united, and in some cases made to stand erect from the roof, and termed "standing" seam. Said rigid ties of the sheets prevent the said sheets from contracting when subjected to cold weather, and fre-40 quently the seams are torn by the tensile strain they are subjected to, and thus the roof is caused to leak. The aforesaid standing seam permits to some extent the shrinking of the sheets; but such seams can only be 45 disposed in the direction of the inclination |

of the roof; otherwise they would form dams across the roof.

To overcome the aforesaid defect, various constructions of the metal sheets have been resorted to, generally consisting of corruga- 50 tions of the sheets; but such corrugations can be made only in the same direction on the roof as the standing seam in order to allow the water to freely run from the roof. All of these defects are overcome by my present inven- 55 tion, which consists in forming each sheet A with a double fold a, preferably across the center of the sheet and remote from the seam by which the sheets are joined. The two folds are made in opposite directions and on 60 lines parallel and in proximity to each other, and lying in planes approximately parallel with that of the sheet, as shown in Figs. 2 and 3 of the drawings. The described fold may be disposed in any direction on the roof, 65 and does in no case present a barrier to the flow of the water from the roof, and in cold weather the said fold yields and allows the sheet to shrink without subjecting it to undue tensile strain. The said fold can be made 70 crosswise of the gutter, (represented at C in Figs. 1 and 2 of the drawings,) and therefore obviates leakage in that part of the roof which has been most difficult to maintain intact and water-tight.

Having described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

In a sheet-metal roofing, the sheets formed with the double fold a across their central 80 portions and remote from the seams joining said sheets, substantially as described and shown.

In testimony whereof I have hereunto signed my name this 11th day of April, 1889. 85

SIDNEY SLOCOMBE. [L. s.]

Witnesses:

J. M. SEYMOUR, Wm. Griffin.