No. 716,585.

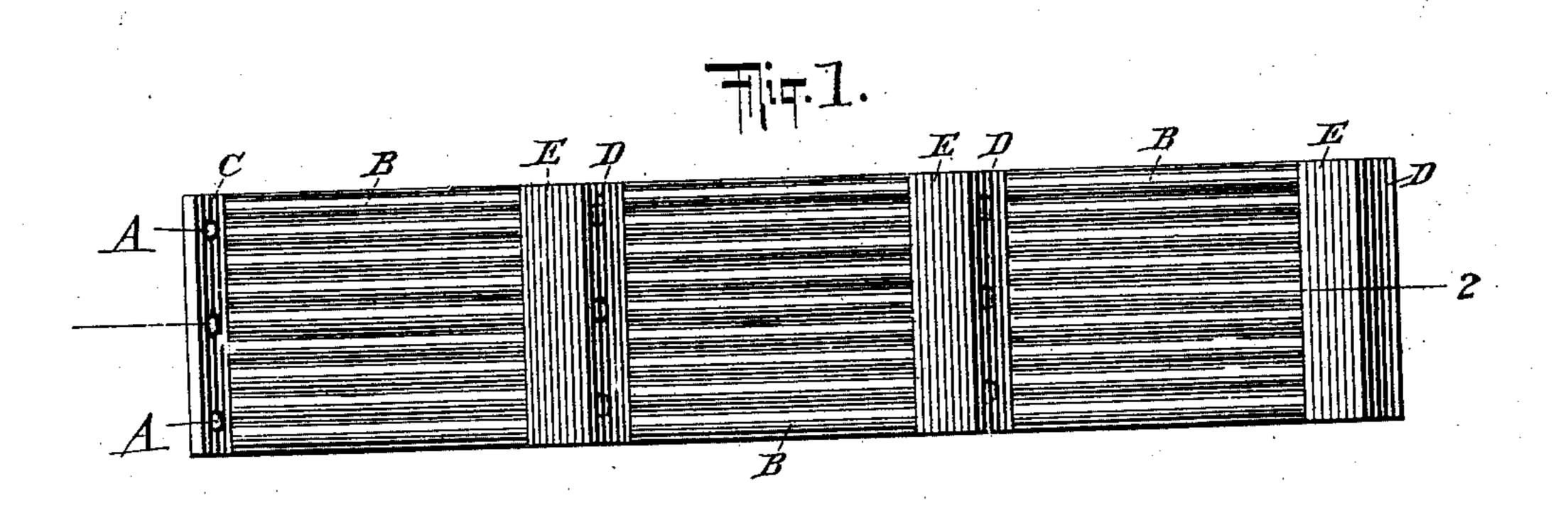
Patented Dec. 23, 1902.

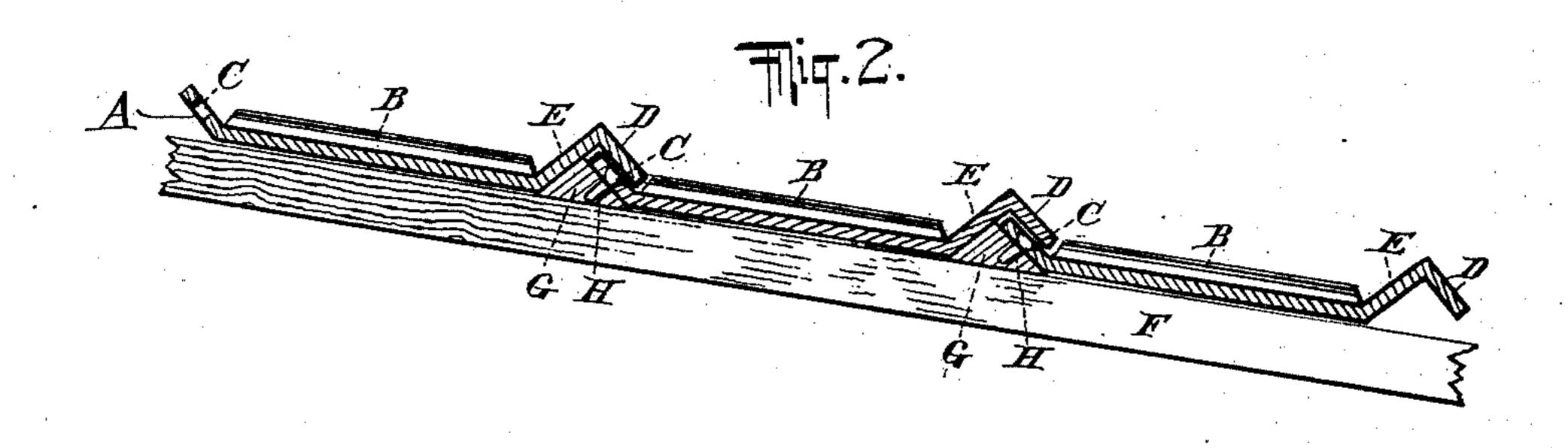
E. SCHNEIDER.

SHINGLE.

(Application filed May 7, 1902.)

(No Model.)





WITNESSES:

INVENTOR Emil Schneider BYB.

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

United States Patent Office.

EMIL SCHNEIDER, OF NUTLEY, NEW JERSEY.

SHINGLE.

SPECIFICATION forming part of Letters Patent No. 716,585, dated December 23, 1902.

Application filed May 7, 1902. Serial No. 106, 258. (No model.)

To all whom it may concern:

Be it known that I, EMIL SCHNEIDER, a citizen of the United States, residing in Nutley, Essex county, State of New Jersey, have invented certain new and useful Improvements in Shingles, of which the following is a specification.

My invention relates to metallic shingles, and has for its object to provide a shingle so which will offer a high degree of resistance both to atmospheric influences and to the action of hurtful agents, such as fumes arising within the building.

A further object of my invention is to so 15 construct the shingle that it will be strong, so as to be capable of carrying considerable weight and so that it will also be capable of expanding and contracting without deforming the roof.

The invention will be fully described hereinafter and the features of novelty pointed out in the appended claim.

Reference is to be had to the accompany-

ing drawings, in which—

Figure 1 is a plan showing several shingles constructed according to my invention and fitted together; and Fig. 2 is a longitudinal section on line 2 2 of Fig. 1, showing the shingles on a roof.

In carrying out my invention I provide the shingle upon every one of its surfaces with a coating of enamel, the shingle itself being made of any suitable metal. Not only the upper and lower surfaces of the shingle are 35 thus enameled, but even the edges and also the sides of the nail-holes A, as is particularly indicated in Fig. 2. A shingle thus made will therefore be proof against the attack of noxious influences both from the outside and 40 from the inside. This is particularly of value in factories where fumes from various operations rise to the roof and are liable to corrode or otherwise injure any unprotected metallic articles.

The shingle shown in the drawings is fur-45 ther distinguished by its peculiar formation. This shingle comprises a body B, which is corrugated lengthwise, so that when the

shingles are laid upon the roof the corrugations will extend from top to bottom and 50 form gutters for the ready draining of rain and other matter. At the upper end of each shingle is provided a plane flange C, extending obliquely in an upward direction and adapted to engage a lip D, located at the 55 lower end of the adjacent shingle, this lip extending downward from an oblique flange E. The lip D is preferably arranged at a right angle to the flange E and is plane, so that it may snugly fit the flange C. Shingles 60 of this construction are arranged in the overlapping fashion illustrated by Fig. 4, in which F indicates one of the rafters, and G the triangular laths, to which the lip D and flange C are secured by means of nails Hor equiva- 65 lent fastening devices. By this construction I secure the advantage of great strength which is due to the use of a corrugated body, while those parts of adjacent shingles which are in contact with each other are smooth, so 70 that they may be readily adjusted and so as not to interfere with the expansion and contraction of the individual shingles. A buckling of the shingles, such as is often observed in structures employing corrugated 75 sheet metal, is thus effectively avoided.

,我没有大工,在这个意思,还是一直不是相信,这是一个人,一个人,也不是一个自己的人,一个人,这一个意思,有多些有最后,一家要有的家庭是一个人,也可以是有一个人, 一点也一定自然的,因此是否不同自己要想不是不同的,一个人是是多个的方面,不是一个是一个人,也是不是自己的人,是是不是不是不是不是不是不是一个人,

What I claim as new, and desire to secure

by Letters Patent, is—

A shingle comprising a longitudinally-corrugated body, a transverse flange extending 80 obliquely upward at one end of said body beyond the level of the corrugations, another transverse flange extending obliquely upward at the other end of the body beyond the level of the corrugations, and a lip extending ob- 85 liquely downward from the upper end of the second-named flange, and arranged for engagement with a flange on an adjacent shingle.

In testimony whereof I have signed my name to this specification in the presence of go

two subscribing witnesses.

EMIL SCHNEIDER.

Witnesses: JOHN LOTKA, EUGENE EBLE.