No. 667,384. Patented Feb. 5, 1901.

# W. BRANDT.

## SHEET METAL BUILDING.

(Application filed Feb. 27, 1899.)

(No Model.) 2 Sheets—Sheet 1.

*Fig. 1.*

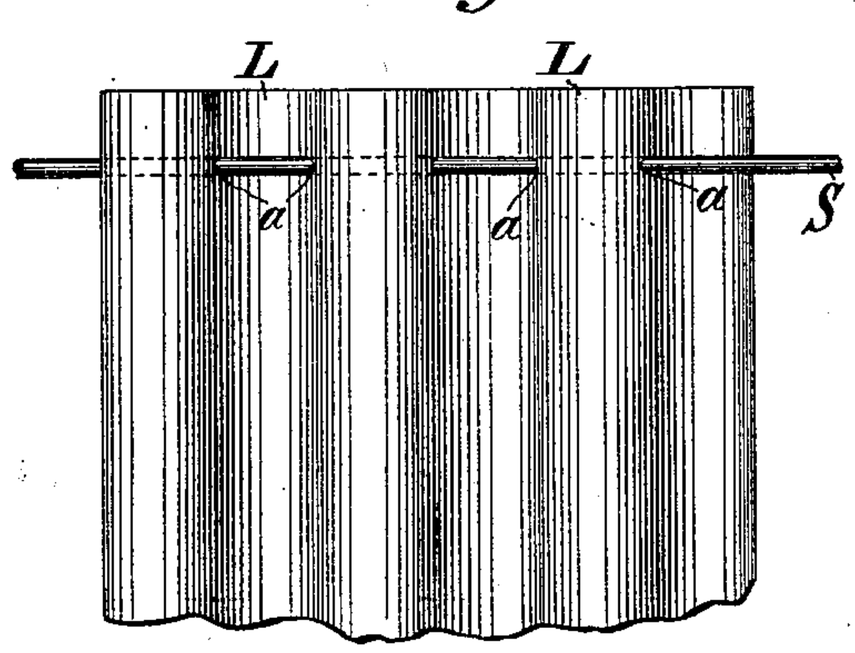



*Fig. 2.*


*Fig. 3.*

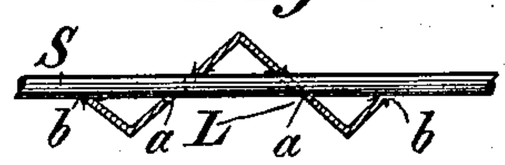



*Fig. 4.*

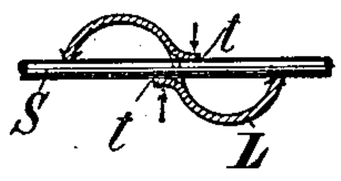



*Fig. 5.*

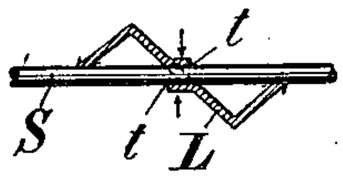



*Fig. 6.*

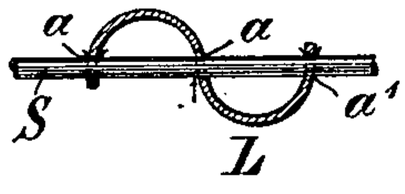
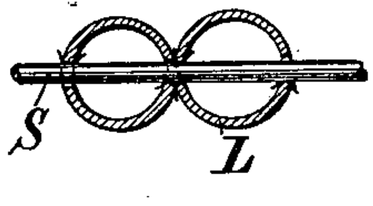



*Fig. 7.*




Witnesses:
Frank S. Ober
Jas. A. Donnelly.

Inventor
Wilhelm Brandt
by Wm. A. Rosenbaum
Atty

No. 667,384. Patented Feb. 5, 1901.

# W. BRANDT.

## SHEET METAL BUILDING.

(Application filed Feb. 27, 1899.)

(No Model.) 2 Sheets—Sheet 2.

Fig. 8.

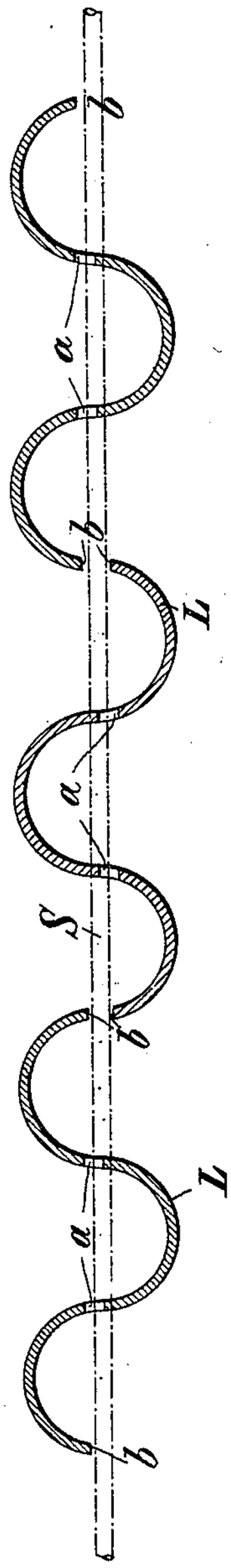
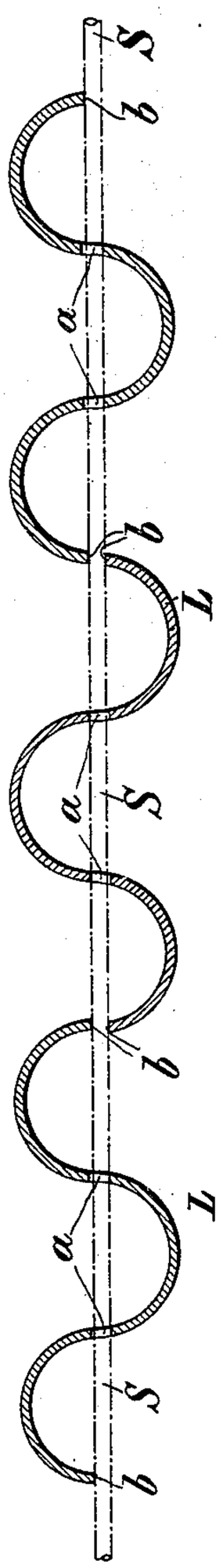



Fig. 9.




Witnesses
Frank S. Ober
James A. Connelly.

Inventor
Wilhelm Brandt
by Wm. A. Rossbaum
Atty.

# UNITED STATES PATENT OFFICE.

WILHELM BRANDT, OF OSTERODE, GERMANY.

## SHEET-METAL BUILDING.

SPECIFICATION forming part of Letters Patent No. 667,384, dated February 5, 1901.

Application filed February 27, 1899. Serial No. 706,974. (No model.)

*To all whom it may concern:*

Be it known that I, WILHELM BRANDT, a subject of the King of Prussia, German Emperor, residing at Osterode, in the Kingdom of Prussia, German Empire, have invented certain new and useful Improvements in Methods of Constructing Parts of Buildings of Sheet Metal of Any Desired Cross-Section, of which the following is a specification.

This invention consists of improvements in the construction of parts of buildings—such as railings, walls, roofs, and the like—in which sheets of considerable length, even to one hundred meters, and of any desired cross-section can be used, which sheets can be fastened together by means of their own elasticity.

The accompanying drawings show several forms of this invention, in which the manner of securing the separate sheets together is clearly illustrated.

Figure 1 represents the general arrangement according to one form of the invention in plan, and Fig. 2 the same form in cross-section. Figs. 3 to 7 represent the means of fastening for sheets of various cross-sections. Fig. 8 is a sectional view through the plates, showing their relative position and the location of the holes for the supporting-rod before said rod is inserted. Fig. 9 is a similar view after the rod is inserted.

In Figs. 1 to 7, S is a support upon which two sheets L of various cross-sections are arranged, which sheets are elastic and provided with holes *a*, through which the supports S pass. The holes *a* are so arranged that the edges of same do not lie in the same straight line, so that upon placing the support into position it is necessary to slightly bend the sheets. By reason of this relative arrangement of the holes the edges of the sheets, which are hollowed out to about half the cross-section of the support, and the edges of the holes *a* are pressed upon the rail, so that the sheets are held in position solely by their own elasticity.

Any desired section of sheet may be used, the essential point being that a certain degree of elasticity exist. Fig. 3, for example, shows a sheet of angular cross-section which is held in exactly the same manner as in Figs. 1 and 2.

In order to obtain as much elasticity as possible, the sheets should be narrow, and in some cases a single complete S-curve or zigzag may be used. The first form is shown in Fig. 4 and the latter in Fig. 5. These forms, however, require the arrangement of special pieces or stops, which offer a resistance to the elasticity of the strip, in order to assure a good pressure of the edges upon the rail. For this purpose the material stamped out for the formation of the holes *a* can be bent back, as shown at *t*, Figs. 4 and 5, or the free edges of the sheet can also be provided with holes through which the support S passes, as shown in Fig. 6.

Another form is shown in Fig. 7, the arrangement of which will be clear from the above.

What I claim, and desire to secure by Letters Patent of the United States, is—

A wall, roof or like structure constructed of corrugated metal plates of any desired cross-section, said plates being provided with perforations so located that when the plates are arranged edge to edge the perforations are out of alinement with each other, in combination with a supporting-rod passing successively through said perforations, and thereby putting the plates under tension and holding them in position.

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

WILHELM BRANDT.

Witnesses:

HENRY HASPER,

WILHELM HABERMANN.