

J. F. WEITZEL.
SHEET METAL DOOR.
APPLICATION FILED NOV. 29, 1909.

999,533.

Patented Aug. 1, 1911.

Fig. 1.

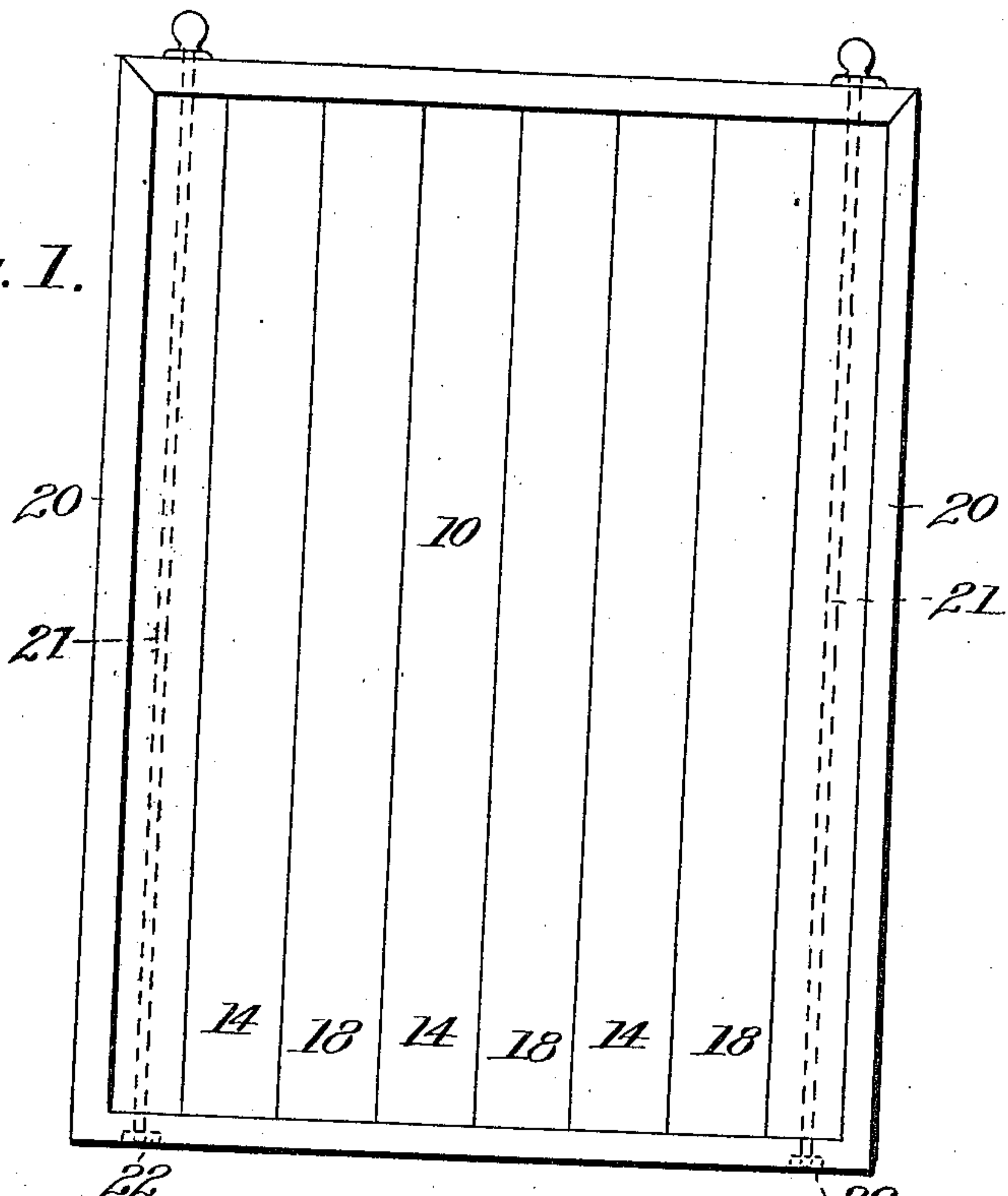


Fig. 2.

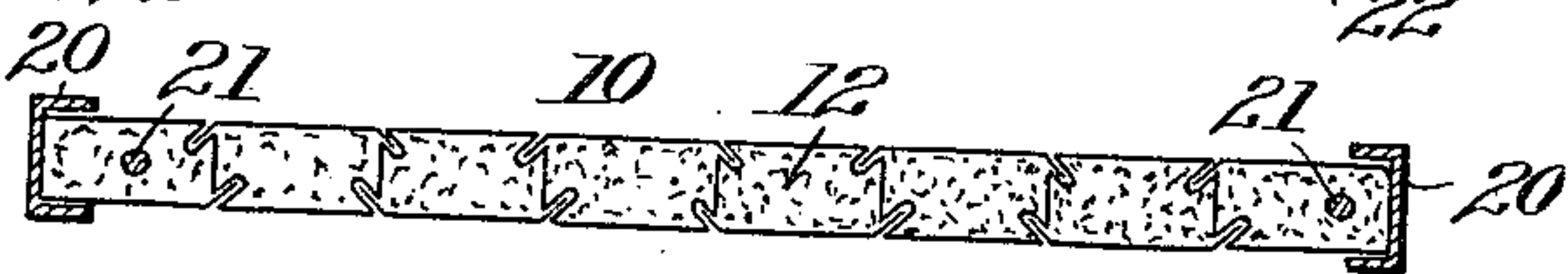


Fig. 3.

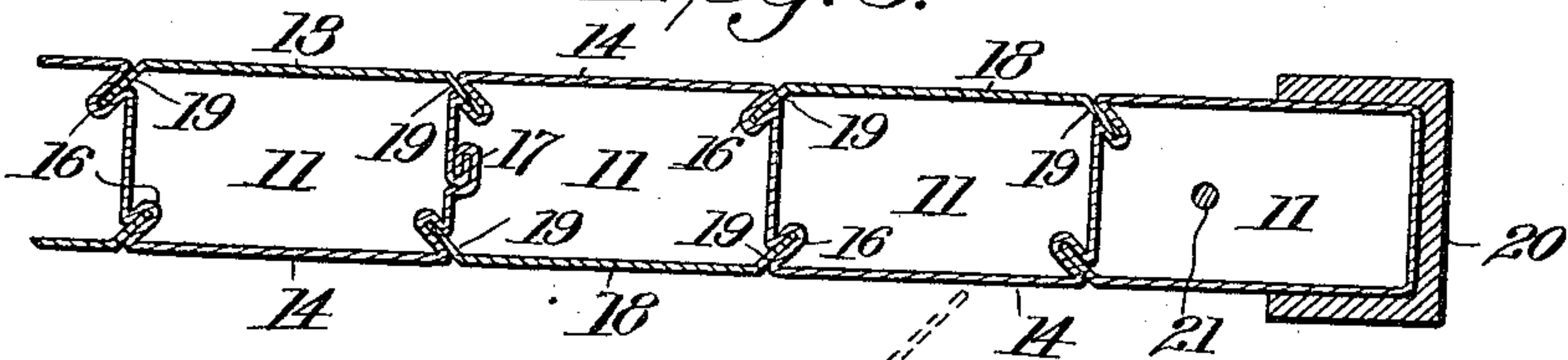
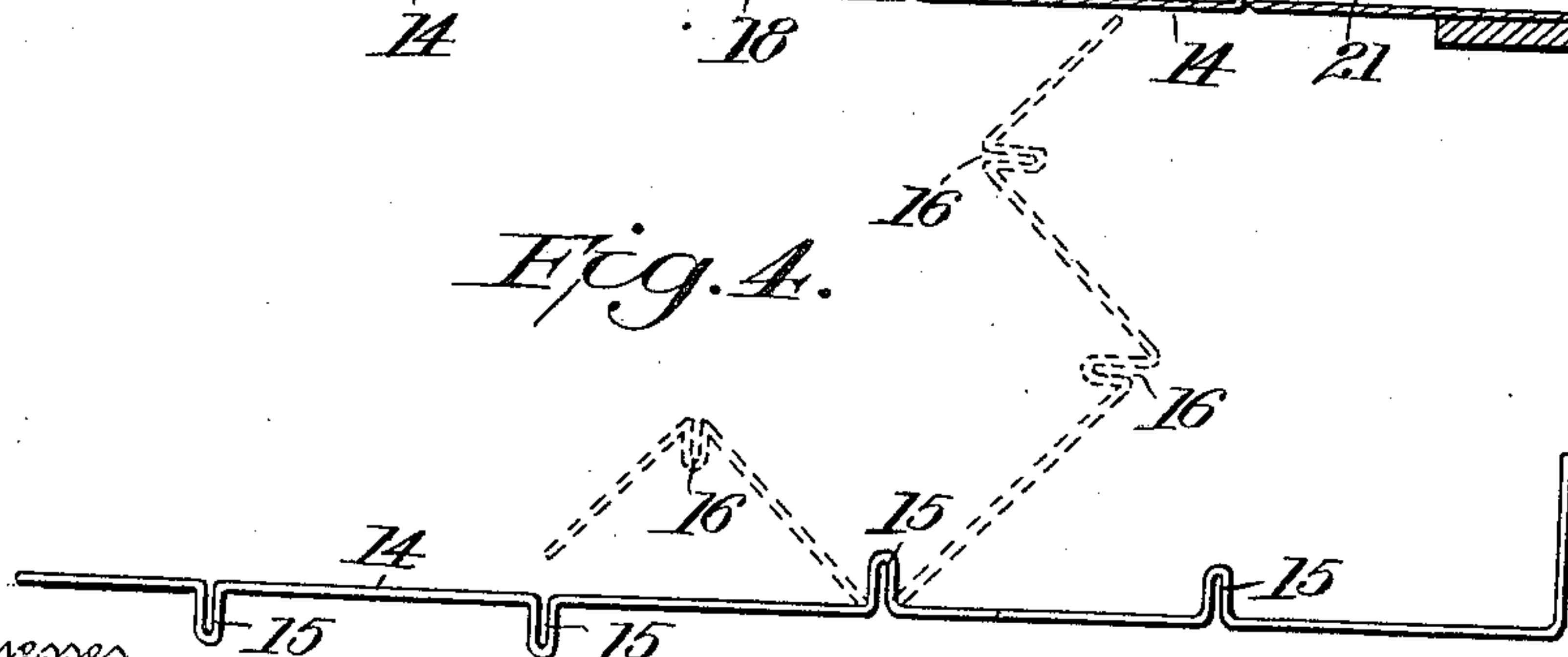


Fig. 4.



Witnesses

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SHEET-METAL DOOR.

999,533.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JACOB F. WEITZEL, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented new and useful Improvements in Sheet-Metal Doors, of which the following is a specification.

This invention relates to certain new and useful improvements in sheet metal doors.

10 The object of the invention is to obtain a door of the character mentioned which will be simple in construction, strong and durable.

15 A further object is to form a door of interlocking members which may be united without the use of solder or the like.

20 A further object is to provide a sectional sheet metal door with the elements so united that they will present a maximum rigidity and not be readily separated.

The invention will be hereinafter fully set forth and particularly pointed out in the claims.

25 In the accompanying drawings:—Figure 1 is a front elevation of a sheet metal door constructed in accordance with my invention. Fig. 2 is a transverse sectional view thereof. Fig. 3 is an enlarged section of a portion of the door. Fig. 4 is a detailed 30 view illustrating the method of forming the sheet metal body.

Referring to the drawings 10 designates a door the body of which is formed of a plurality of rectangular compartments 11, 35 which may or may not be filled with mineral wool or asbestos 12, as shown in Fig. 2: Said compartments are formed by bending a strip 14 of sheet metal of any suitable width, to form approximately rectangular 40 corrugations, suitable dies being employed to first form a series of pockets or indentations 15 in the strip. The pockets are so spaced that when the sheet is bent to form the corrugations the pockets are formed in 45 the corners of the corrugations as indicated at 16 in Figs. 2 and 3. In the event that the strip of material is not long enough for the purpose desired an additional strip may be spliced thereto by means of a lap joint 17. 50 After the strip has been bent in the desired

form the rectangular openings are closed by means of slides 18 having flanges 19 inclined to enter the pockets 15 and interlock therewith. After said slides or meeting strips 18 have been inserted the edges of the door 55 are bound by channel irons 20, the latter being held in position by suitable securing rods 21 and nuts 22.

From the foregoing it will be observed that I have produced a sheet metal door of 60 simple construction, and that by constructing the walls in the manner specified the necessity for using double lock and rivet joints or seams is obviated, the whole presenting a structure of maximum strength 65 and rigidity for the quantity of metal employed.

I claim as my invention:—

1. A sheet metal door comprising a body formed of a sheet metal strip bent into ap- 70 proximately rectangular corrugations and having inclined pockets formed at the corners of said corrugations, slides having inclined flanges engaging said pockets, and channel irons binding the edges of said 75 body.

2. A sheet metal door comprising a body formed of a sheet metal strip bent into ap- proximately rectangular corrugations and having inclined pockets formed at the cor- 80 ners of said corrugations, slides having inclined flanges engaging said pockets, a fire proof filling for said body, and means for binding the edges of said body.

3. A sheet metal door comprising a body 85 formed of a sheet metal strip bent into approximately rectangular corrugations and having inclined pockets formed at the corners of said corrugations, slides hav- ing inclined flanges engaging said pockets, 90 and means for binding the edges of said body.

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

JACOB F. WEITZEL.

Witnesses:

N. F. USTICK,

FRED. H. SCHOEDINGER.