P. M. WEGE.

METALLIC STRUCTURE.

APPLICATION FILED AUG. 11, 1908.

913,334.

Patented Feb. 23, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

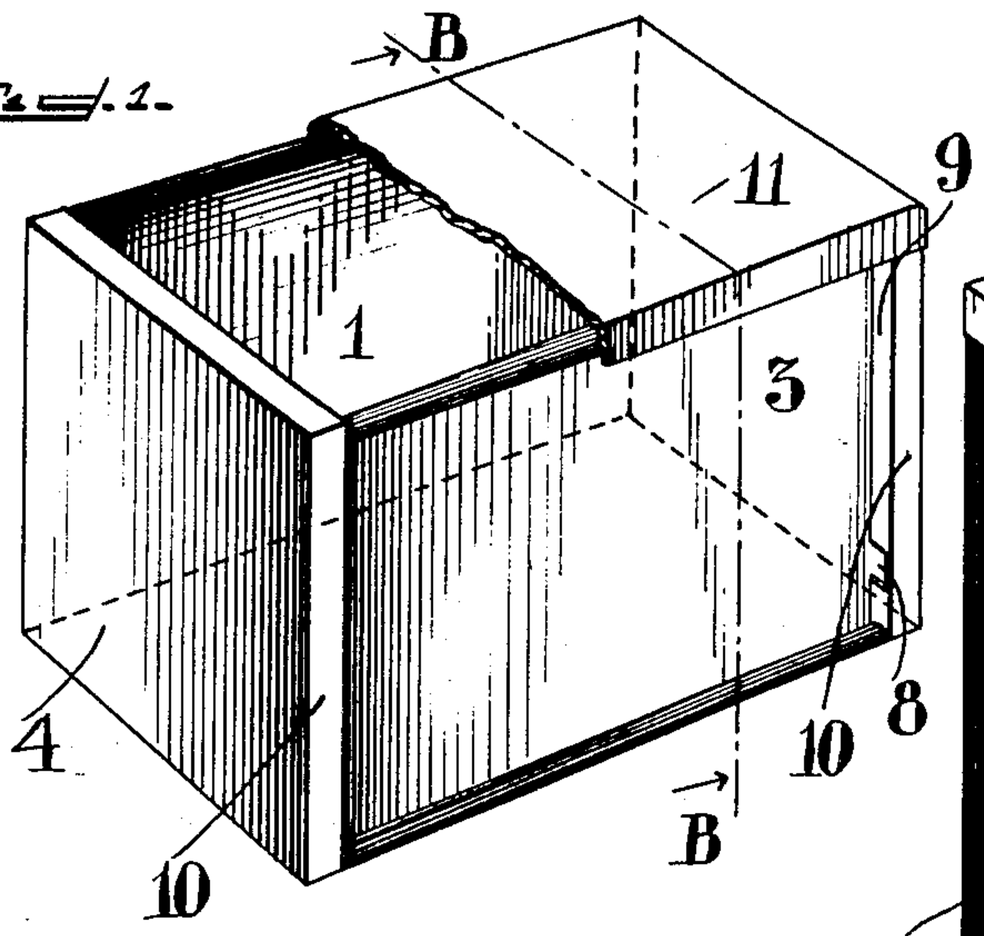


Fig. 2.

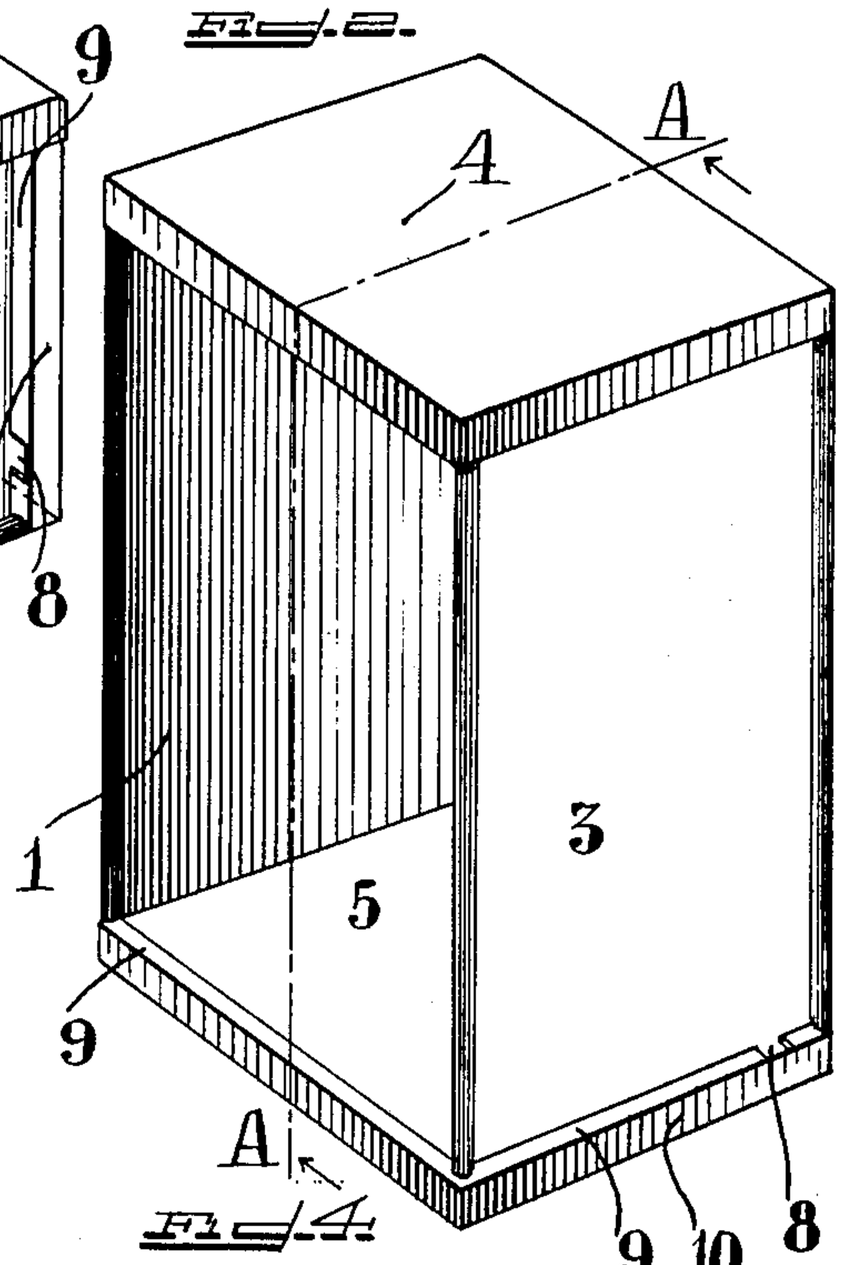


Fig. 3.

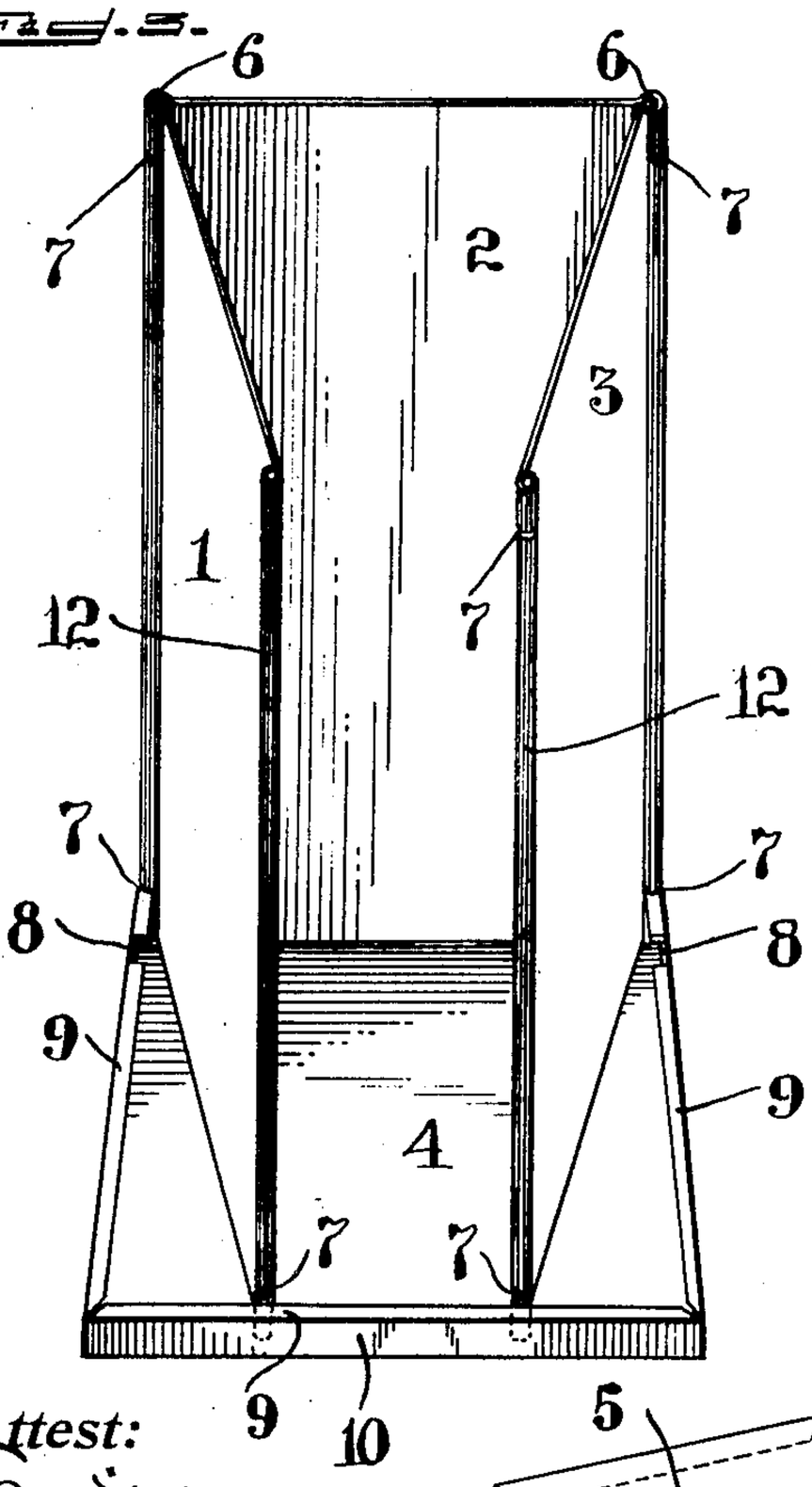


Fig. 4.

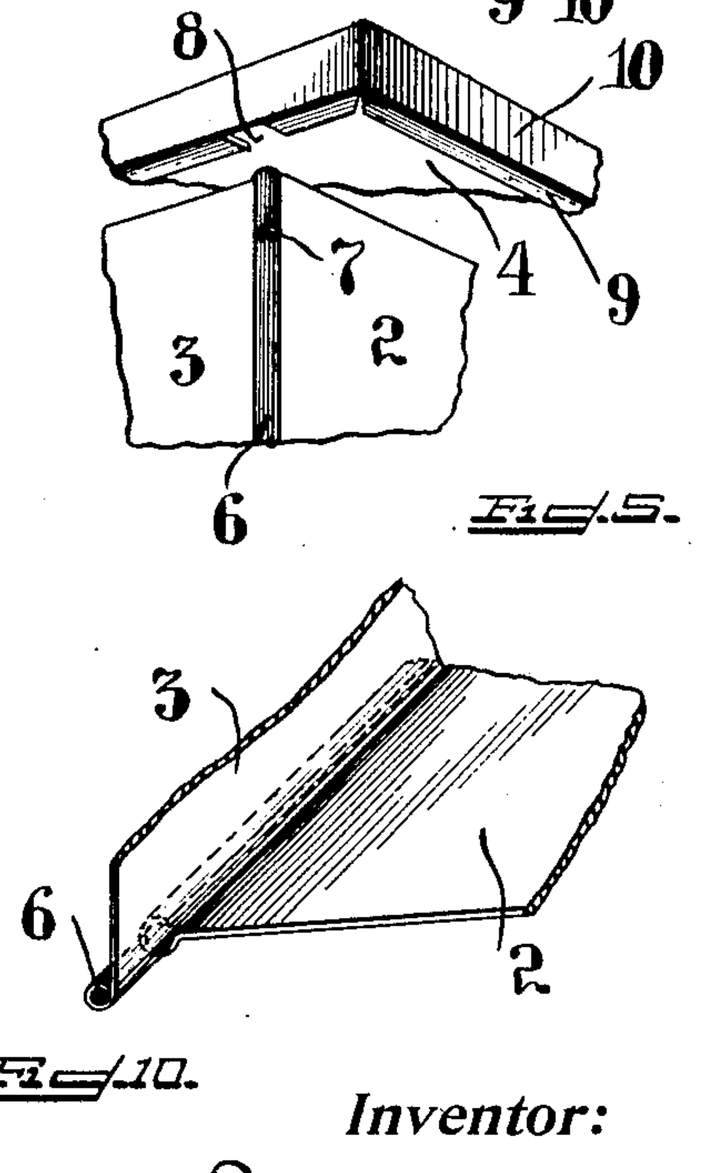
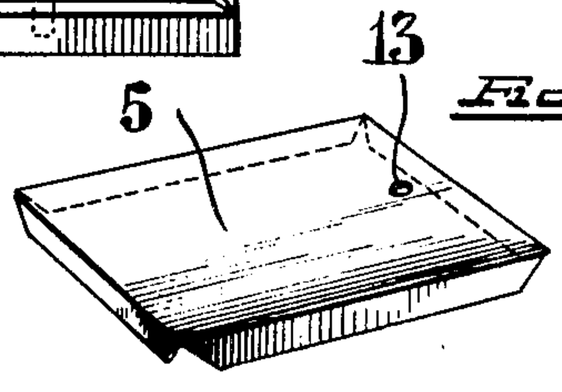


Fig. 5.

Fig. 10.



Attest:

E. F. Mitchell

Inventor:

Peter M. Wege

P. M. WEGE.

METALLIC STRUCTURE.

APPLICATION FILED AUG. 11, 1908.

913,334.

Patented Feb. 23, 1909.

2 SHEETS—SHEET 2.

Fig. 6.

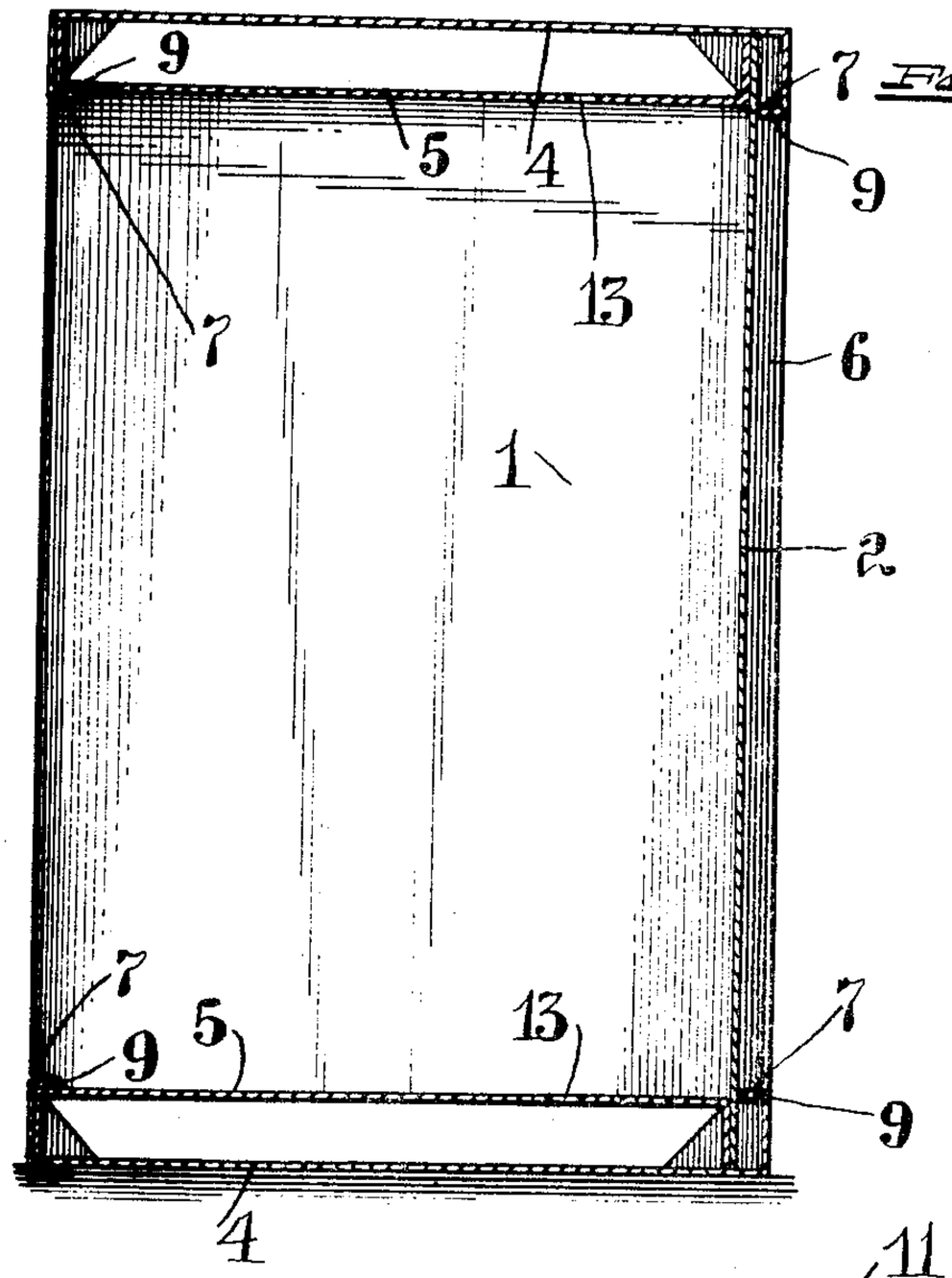


Fig. 8.

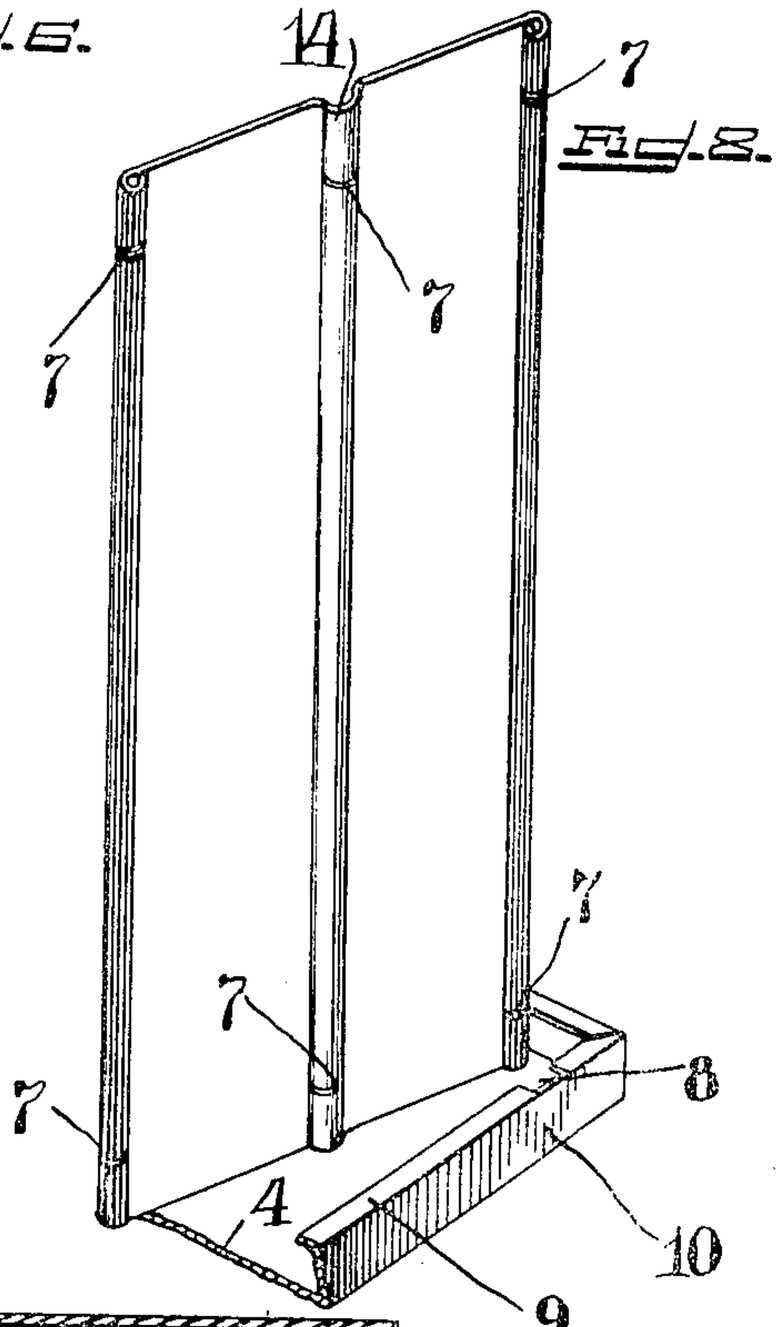


Fig. 7.

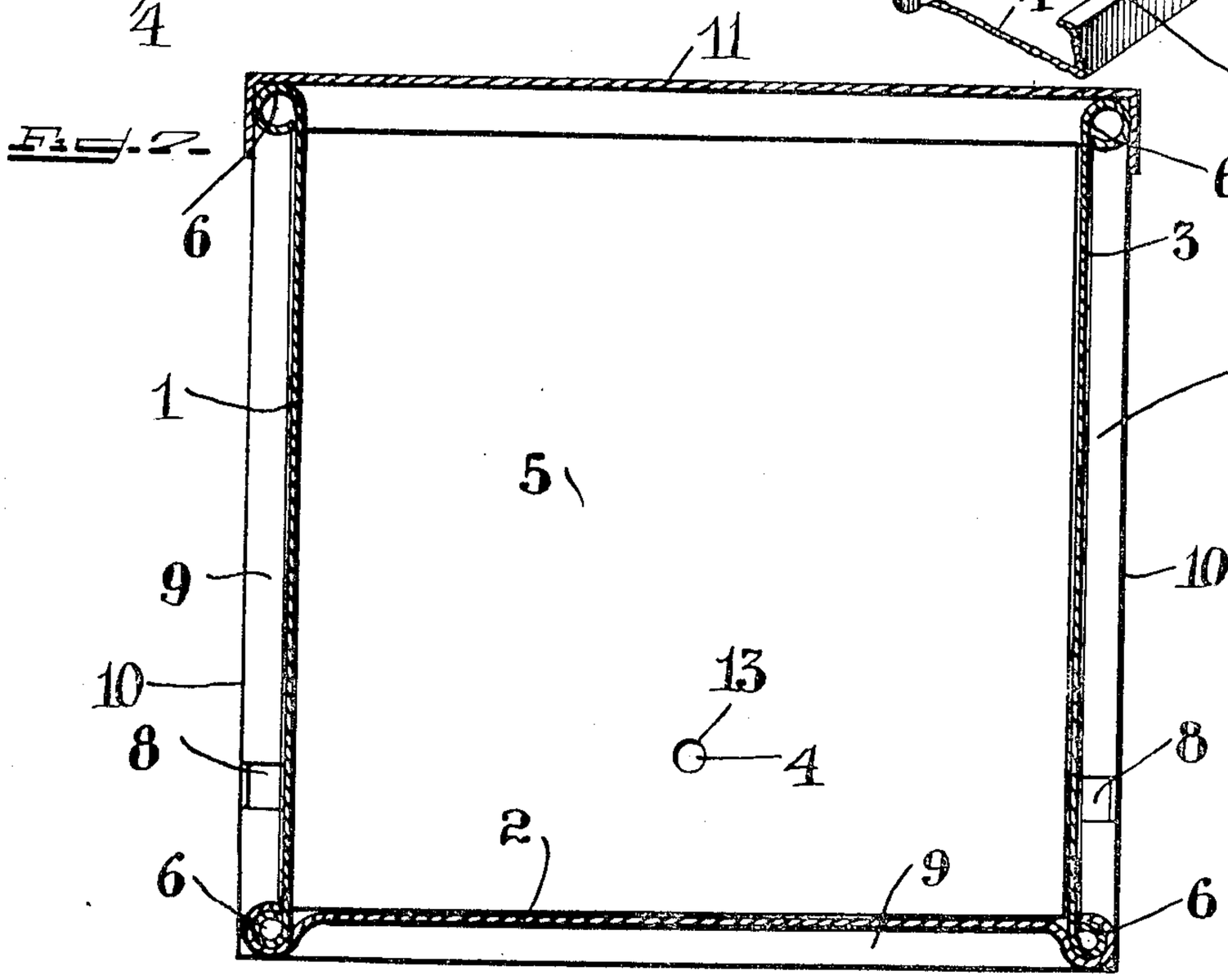
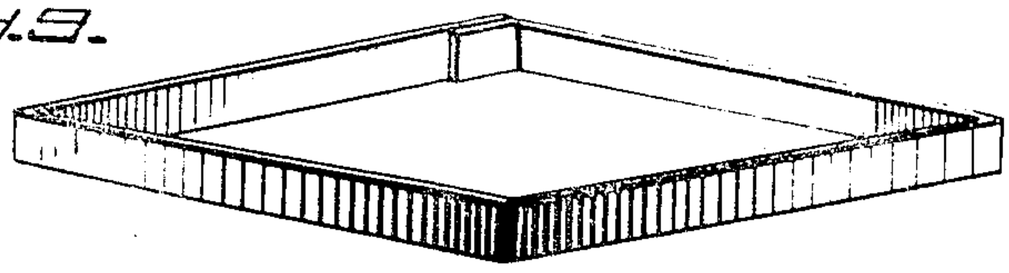


Fig. 9.



Attest:

E. C. Mitchell

W. P. White

Inventor:

Peter M. Wege

UNITED STATES PATENT OFFICE.

PETER M. WEGE, OF YOUNGSTOWN, OHIO, ASSIGNOR TO GENERAL FIREPROOFING COMPANY, OF YOUNGSTOWN, OHIO, A CORPORATION OF OHIO.

METALLIC STRUCTURE.

No. 913,334. Specification of Letters Patent. Patented Feb. 23, 1909.

Application filed August 11, 1908. Serial No. 447,923.

To all whom it may concern:

Be it known that I, PETER M. WEGE, a citizen of the United States, residing at 57 Thornton avenue, Youngstown, county of Mahoning, State of Ohio, have invented a new and useful Improvement in Metallic Structures.

My invention relates to the construction of boxes, cases, drawers, cabinets, frames and like devices and is especially useful in the manufacture of articles of metallic furniture.

The following is a full, clear and true description of my invention.

The object thereof is to simplify and cheapen the construction of such devices from plates or sheets of metal, and I accomplish this end with a novel combination of cuts and bends of the several parts, all being locked together in a strong, rigid and durable device without rivets.

Another advantage of my invention is that it permits such articles to be shipped in knocked down form. The different parts are readily assembled without the necessity of using tools.

The construction is not only useful for making cases, but also for the formation of individual units, a number of which can be assembled in cases in order to form metallic cabinets and other articles of metallic furniture. For example, a number of minor devices made according to this construction may be assembled in a major device, serving as a case also made by the same construction, and the whole when in knocked down form may be shipped in a flat package, requiring comparatively little space. It will also appear obvious from the detailed description which follows, that no particular skill is required to assemble the parts, and that the device can readily be taken apart.

Figure 1 shows a view in perspective of a device made according to this construction. It represents a box with cover or lid partially cut away. Fig. 2 shows another view of the same device. This represents the structure standing on end without the cover piece. Fig. 3 illustrates the construction and method of assembling the parts. Fig. 4 is a view of a corner showing the junction of the sides. It shows also the manner in which the end is formed and locked together with the sides. Fig. 5 shows a hinge joint by which the sides are fastened together. Fig. 6 is a cross section of Fig. 2 on the line A A. Fig. 7 is a cross section of Fig. 1 on the line B B. Fig. 8 shows a side with a modification consisting of a bead intermediate the edges. This figure also shows a portion of an end piece illustrating how the edges of the end piece are fitted into slots in the side for the purpose of holding the parts together. Fig. 9 is a modified form of key piece by which the sides are held in position in locking relationship with the ends. Fig. 10 is a view of another form of key piece serving the same purpose as that shown in Fig. 9. The difference is, that the one shown in Fig. 10 is in the form of a pan, whereas that shown in Fig. 9 is in the form of a frame, that shown in Fig. 10 being the type illustrated by 5, Fig. 2.

In the detailed description which follows, like numerals indicate the same parts in the different drawings.

In carrying out my invention I make three side parts as shown by 1—2 and 3 in Fig. 3, and join them together preferably with a flexible joint, as shown at 6 and 6 in Fig. 3. In this illustration I use a hinge like joint because in placing the sides in the end piece 4, Fig. 3, it is necessary to make the free edges of sides 1 and 3, Fig. 3 converge at the free edges as shown in Fig. 3.

It will be seen that the flexible joint facilitates the assembling of the parts but it is not absolutely essential as the metal sides can be bent and sprung into position. The free edges of the sides 1 and 3 are bent to form beads 12, Fig. 3, and in the beads 12, and in the joint parts 6, I cut slots 7. I form end pieces one of which is shown by 4 in Fig. 3, by making the bend 10 at right angles to the plane of the sheet piece and further bending it at right angles to 10 at 9, Fig. 3, thus forming what, for convenience of description may be termed a pan with an inwardly bent flange 9. I cut away portions of this flange 9 as shown at 8, Fig. 3, in order to facilitate the assembling of the sides and ends. In inserting the sides into the ends I pass the corner joints 6 through the space 8 Fig. 3, made by cutting away as aforesaid, a portion of the flange 9. The sides are then pushed back so that the flange 9 will enter the slots 7. The key pieces 5 Fig. 10 are then inserted by passing one edge of them under the flange 9, Fig. 3. The key pieces are readily inserted by holding them

in an inclined position in order to permit the edge to pass under the flange 9, and, having so placed the edge under the flange, I press the key piece down into permanent position. In the key piece 5, Fig. 10, I have shown an aperture 13 which is merely for convenience in taking the device apart after it is once assembled. By inserting any hooked instrument into this aperture, the key piece can be pulled up into an inclined position in which it is readily removed. When fitted in tightly, the key pieces are held in position by frictional contact, but it is obvious that a bolt or rivet in each will hold them more tightly, if it should be desirable to make them more secure. With this description it is apparent that the key piece as shown in Fig. 9, can be substituted for that shown in Fig. 10, and that beads like 14, Fig. 8, can be made available for stiffening the structure.

Without departing from the spirit of my invention, the corners can be made square without the hinge joints and the sides locked with the ends by means of slots intermediate the corners. If a lid or cover is required it can be made in any manner desirable.

What I claim and desire to secure by Letters Patent is:—

1. In a metallic structure, the combination of sides, one at least, having a slot therein, an end piece with a double flange thereon formed by bending the edge upwardly and inwardly, a portion of which flange is adapted to be inserted into said slot, and a separate key piece inserted between the sides to hold the parts in place.

2. In a metallic structure, the combination of two parallel sides having slots therein, end pieces with double flanges thereon, formed by bending the edges upwardly and inwardly, portions of which flanges are adapted to be inserted into said slots, and a separate key piece inserted between the sides to hold the parts in place.

3. In a metallic structure, the combination of two parallel sides joined to a rear side member by a flexible joint formed by interlocking bent edges, slots in said joints, ends with edges thereof fitted into said slots and a key piece holding the parts in position.

4. In a metallic structure, the combination of two parallel sides, a rear side member, beads or raised portions on the surface of said parallel sides, slots in said beads or raised portions, ends with edges thereof fitted into said slots, and a key piece holding the parts in position.

5. In a metallic structure the combination of sides, one at least having a beaded rib intermediate the edges thereof, a slot in the said side, an end piece with an edge thereof fitted into said slot and a key piece holding the parts in position.

6. In a metallic structure, the combination of sides, one at least having a beaded rib at the edge thereof, a slot in the said side, an end piece with an edge thereof fitted into said slot and a key piece holding the parts in position.

In testimony whereof I affix my signature in the presence of two subscribing witnesses, this 5th day of August, 1908.

PETER M. WEGE.

Witnesses:
H. R. GLENN,
H. E. WHITE.