Feb. 19, 1924. 1,484,491

J. J. GUTERMANN

ELEVATOR LEG

Filed Jan. 26, 1920

Fig. 1.

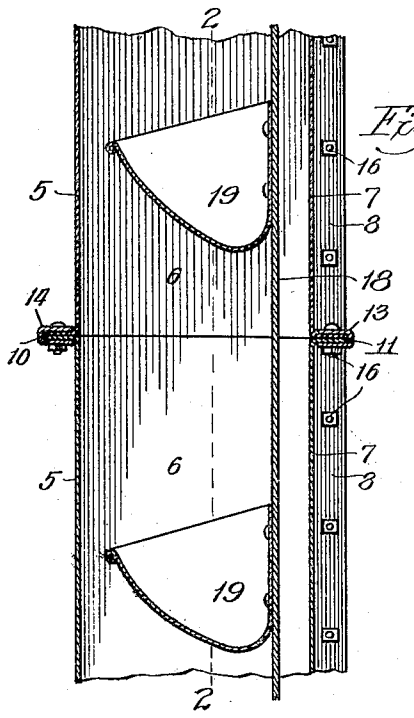


Fig. 2.

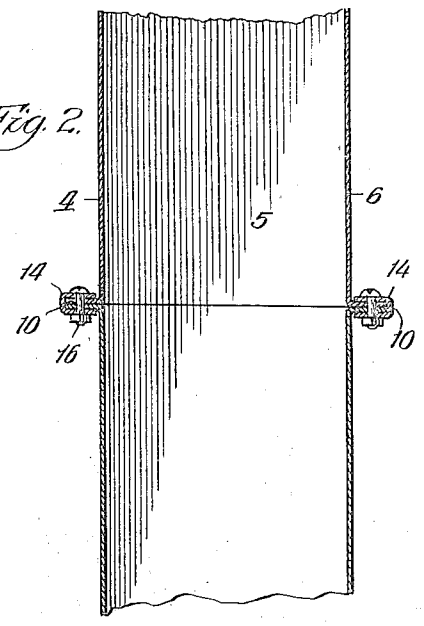
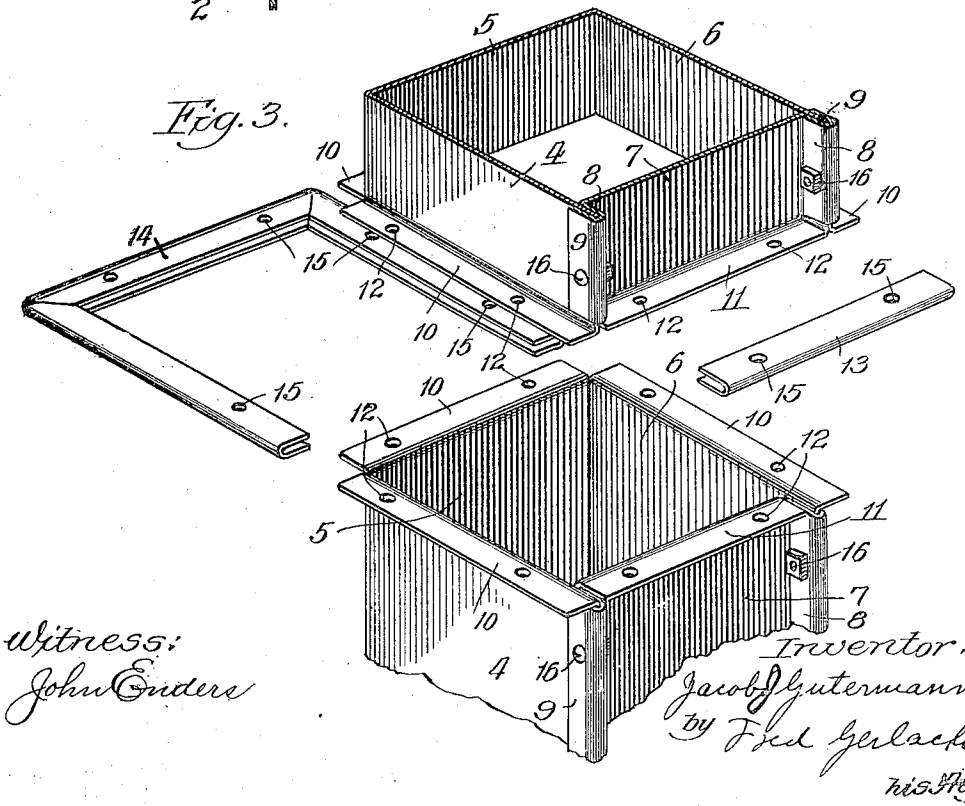


Fig. 3.



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UNITED STATES PATENT OFFICE.

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ELEVATOR LEG.

Application filed January 26, 1920. Serial No. 354,056.

To all whom it may concern:

Be it known that I, JACOB J. GUTERMANN, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Elevator Legs, of which the following is a full, clear, and exact description.

The invention relates to elevator legs. It is now common practice to secure sections of elevator legs together, so they will be of the desired length, by securing angle irons to the sections respectively and securing the angle irons together. One object of the invention is to provide an improved elevator leg in which the sections are joined together without the use of angle irons.

Another object of the invention is to provide an improved elevator leg in which the sections are secured together by strips of sheet metal which are adapted to lap the abutting flanges on the leg sections.

The invention consists in the several novel features hereinafter set forth and more particularly defined by claims at the conclusion hereof.

In the drawings; Fig. 1 is a vertical longitudinal section of an elevator leg embodying the invention. Fig. 2 is a section taken on line 2—2 of Fig. 1. Fig. 3 is a perspective of the several parts of the improved joint disassembled for the purpose of illustration.

The invention is illustrated as applied to an elevator leg adapted to enclose a conveyor belt 18 to which are attached buckets 19. In practice, these legs are so long that sectional construction is necessary. For this purpose, the leg is formed of a series of sections having their contiguous ends secured to one another.

Each leg-section is formed of a sheet of metal bent to form three sides 4, 5 and 6 and the fourth side 7 is formed by a separate sheet of metal which has its margins bent to form inner and outer flanges 8 and 9 for lapping the margins and edges of the sides 4 and 6. The strips forming the sides usually extend continuously throughout the length of a section of the leg. Both ends of each side are provided with an outwardly extending flange, the sides 4, 5 and 6 being each provided with a flange 10 and the sides 7 with a flange 11. The end flanges of contiguous sections are adapted to abut and are provided with registering holes 12. A strip 13, which is U-shaped in cross-section, is adapted to lap the flanges 11 of contiguous sections and a similar three-sided strip 14 is adapted to extend around and lap the flanges 10 on the ends of the sides 4, 5, and 6. Strips 13 and 14 are provided with holes 15 adapted to register with the holes 12 in the end flanges, and bolts 16 are adapted to pass through the U-shaped strips and the end flanges to secure the sections together.

The strips 13 and 14 are formed of sheet metal and when they are bolted to the end-flanges of contiguous sections form a strong joint which will be substantially dust-tight. The strips serve to reinforce the joint so that the connection will be extremely rigid without the use of angle iron bands.

The invention is not to be understood as restricted to the details set forth, since these may be modified within the scope of the appended claims, without departing from the spirit and scope of the invention.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent, is:

1. An elevator leg formed of sheet metal sections, each section comprising a member bent to form three integral sides, a fourth side being formed of a separate strip and having longitudinal integral flanges lapping the inner and outer faces of the margins of the oppositely disposed sides on said member and extending in the planes thereof, means extending through the flanges and end margins to secure the sides together, end flanges on and integral with the three-sided member and strip respectively, and means to secure the end flanges of contiguous sections together.

2. An elevator leg formed of sheet metal sections, each section comprising a member bent to form three integral sides, a fourth side being formed of a separate longitudinal strip, means to secure said fourth side to the oppositely disposed sides of the three-sided member, integral outturned end flanges on the three-sided member and strip, connecting strips having flanges adapted to lap the end flanges of contiguous sections, one of the connecting strips having three sides to lap the flanges on the three-sided

member respectively, and means for securing the connecting strips to the end flanges of contiguous sections.

3. An elevator leg formed of sections, each section having a plurality of sides, one of the sides being formed of a separate strip and having longitudinal flanges lapping the inner and outer faces of the margins and the edges of a plurality of other sides, means extending through the flanges and said margins to secure the sides together, integral outturned end flanges on the sides, strips having flanges adapted to lap the end flanges of contiguous sections, and means extending through the strip flanges and the end flanges to secure the ends of the sections together.

JACOB J. GUTERMANN.