

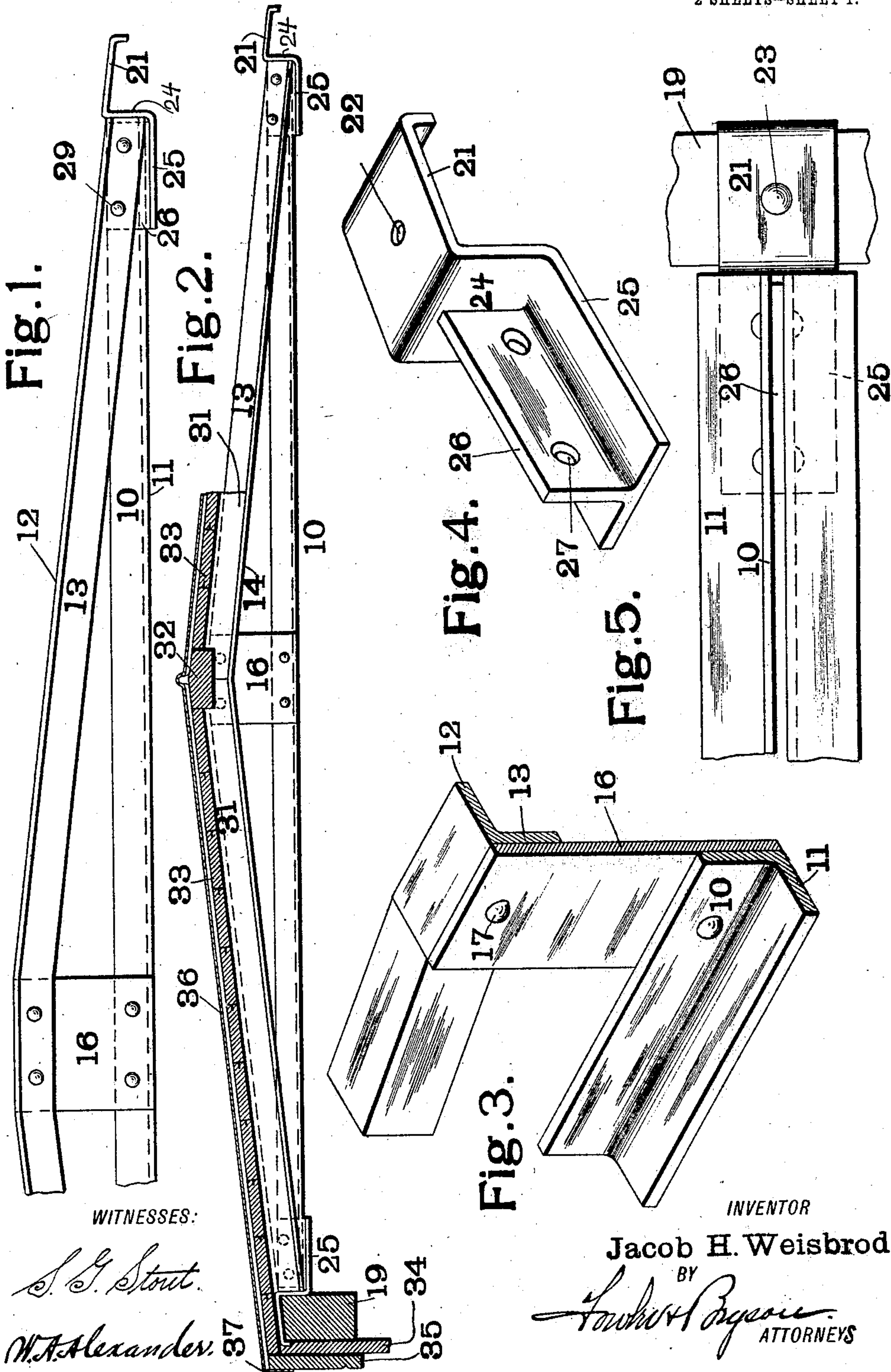
No. 842,597.

PATENTED JAN. 29, 1907.

J. H. WEISBROD.  
CARLINE.

APPLICATION FILED MAR. 2, 1906.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

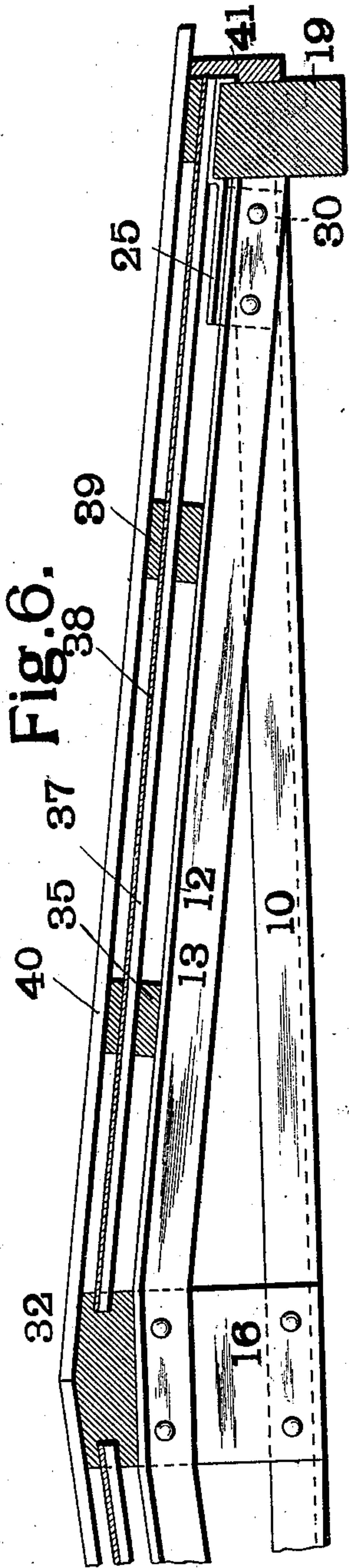


Fig. 6.

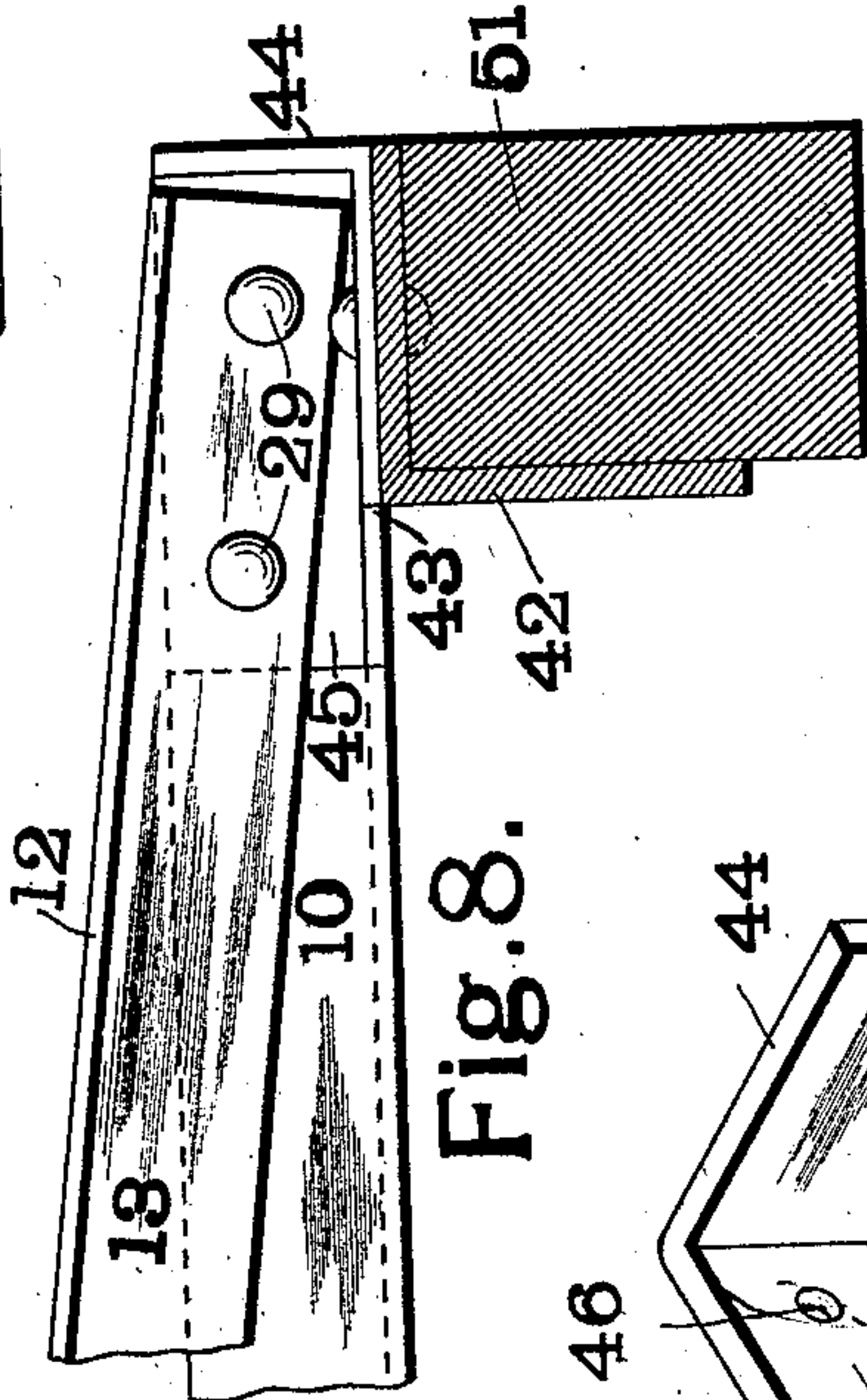


Fig. 8.

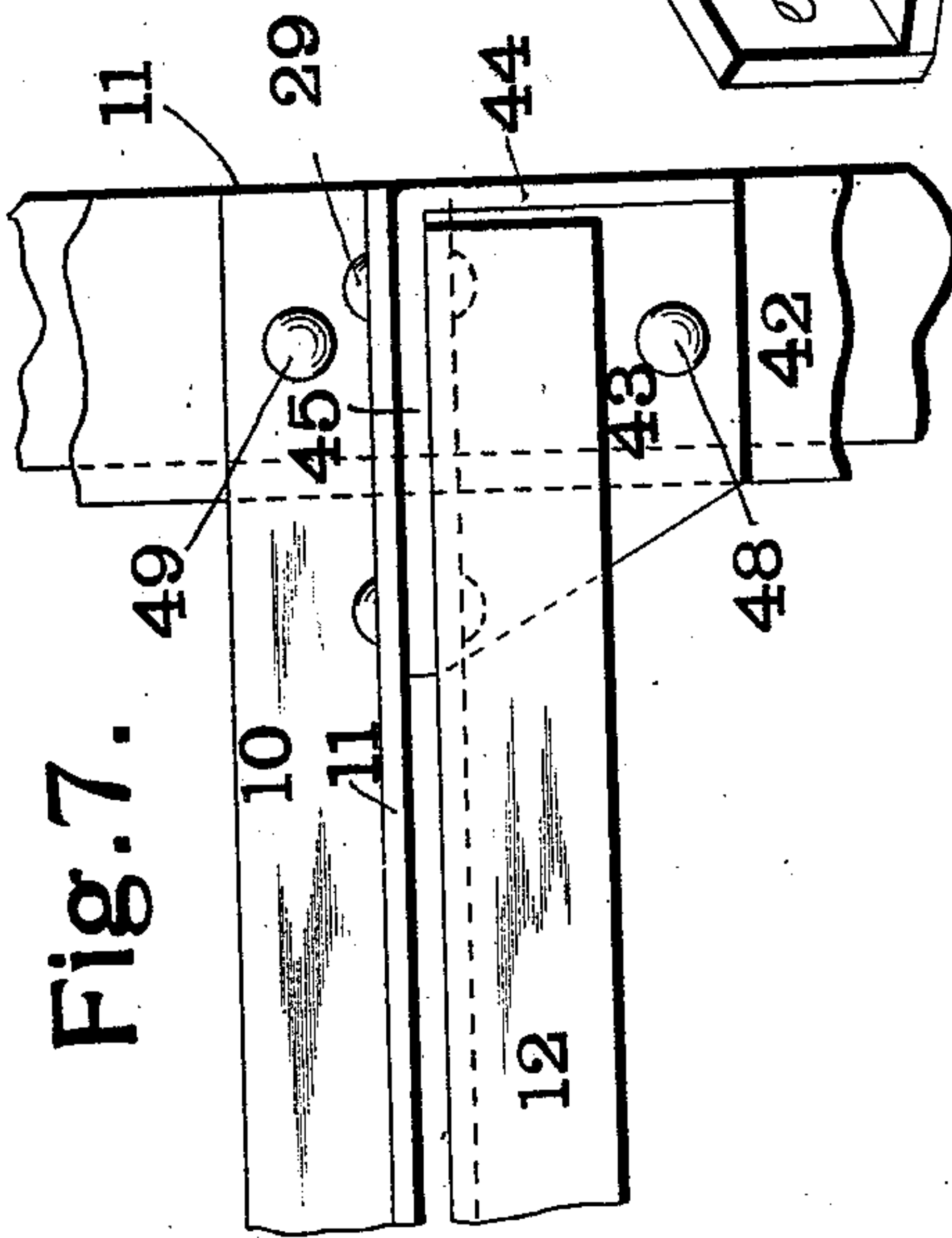


Fig. 7.

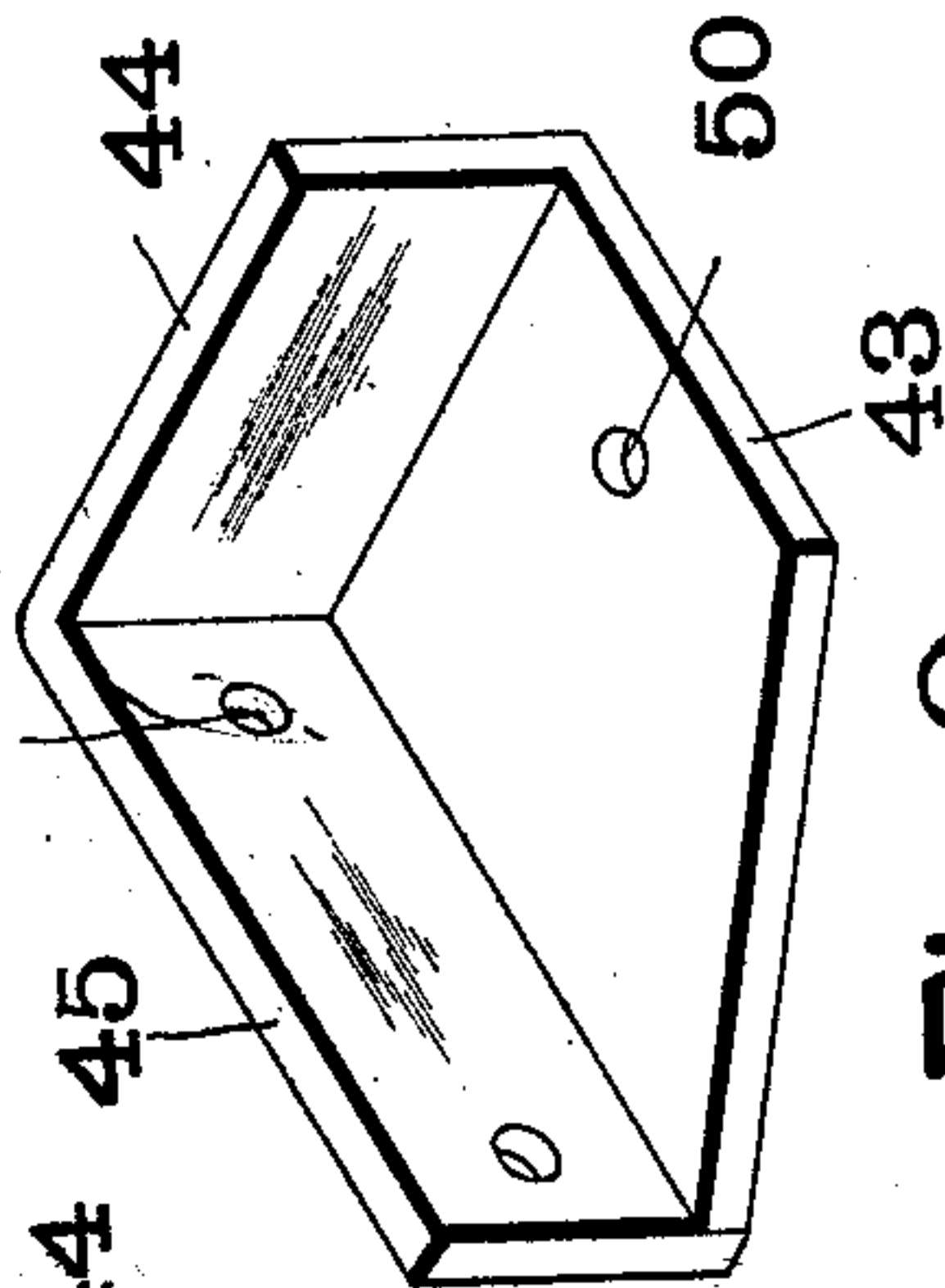


Fig. 9.

WITNESSES:

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# UNITED STATES PATENT OFFICE.

JACOB H. WEISBROD, OF ST. LOUIS, MISSOURI, ASSIGNOR TO HERBERT W. WOLFF, OF ST. LOUIS, MISSOURI.

## CARLINE.

No. 842,597.

Specification of Letters Patent.

Patented Jan. 29, 1907.

Application filed March 2, 1906. Serial No. 303,744.

*To all whom it may concern:*

Be it known that I, JACOB H. WEISBROD, a citizen of the United States, residing at the city of St. Louis, in the State of Missouri, have invented a certain new and useful Carline, of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

My invention relates more particularly to a carline formed of a plurality of separate pieces which are of such shape that they may be conveniently rolled and afterward fastened together to form the completed device.

In the drawings, in which like characters of reference refer to similar parts in the different views, Figure 1 is a side elevation of one end of the carline, the other end being broken away. Fig. 2 shows my carline as applied to an outside car-roof. Figs. 3, 4, and 5 are enlarged detail views. Fig. 6 shows my carline applied to an inside car-roof, and Figs. 7, 8, and 9 are enlarged detail views showing a modified form of my invention suitable for cars provided with metal frames.

The carline is composed, essentially, of three separate parts, a tie-beam of rolled angle-iron or steel, and comprising two flanges 10 and 11, disposed at right angles, a truss-beam, also of rolled angle-iron and comprising two similar flanges 12 and 13. A slightly-different form of truss-beam is found in Fig. 2, where instead of a flange 12 at the upper edge of this beam the same is provided with a flange 14 at the lower edge thereof. The flanges 11 and 12 project in opposite directions, as shown in Fig. 3, and the tie-beam and the truss-beam are united at approximately their middle points by a strut 16, fastened to the outer sides of the flanges 10 and 13 by means of bolts 17. Each end of the carline is provided with a knee-iron for supporting the same from and fastening the same to the side plates 19 of the car. One of the forms of this knee-iron is shown, Figs. 4 and 5. It consists of a hook portion 21, provided with a bolt-hole 22, through which the bolt 23 passes, which secures it to the side plate. This hook has a shank portion 25, provided with an upwardly-projecting flange 26, having bolt-

holes 27, registering with similar bolt-holes in the flanges 10 and 13 of the truss and tie-beams, so that when the truss and tie-beams are bolted together in forming the carline by means of bolts 29 the flange 26 is fastened between these beams, as best shown in Figs. 1 and 5, the shank 25 of the knee-iron extending beneath the lower edge of the beams. The hook portion 21 and the shank 25 of the knee-iron are connected by means of a vertical plate 24. When the carline is in position, this plate 24 is situated between the end of the carline and the side plate of the car. A slightly-different form of this knee-iron is shown in Fig. 6, where instead of having a flange 26 projecting upwardly the shank 25 is provided with a downwardly-extending flange 30, which is fastened between the flanges 10 and 13 in a manner similar to that already above described, the shank 25 extending in this case laterally over the ends of the beams.

In Fig. 2 my carline is provided, as above described, with a flange 14 at the lower edge of the truss-beam to adapt it for use with an outside roof. In this case the roof timbers or rafters 31 are suitably fastened in the channel formed by the flanges 13 and 14. 32 is the ridge-pole, and 33 the longitudinal sheathing, of the roof. 34 is the sheathing forming the side of the car, and 35 the facia-plate. The whole is covered by a metal roofing 36, the outer edge of which is bent at 37 over the facia-plate.

Fig. 6 shows my invention applied to an inside car-roof, and in this case the truss-beam is provided with a flange 12 at its upper edge, as shown in Fig. 1, the purlins 35' being laid upon the flanges and also the ridge-pole 32. Upon the purlins 35 are the transversely-disposed parting-strips 37' of the inside roof, and 38 is the metal covering upon which the roof-strips 39 are fastened to support the outside roof, the transversely-disposed boards of which are shown at 40. 41 is the facia-plate attached to the side plate 19 and covers the ends of the strips 37 and the metal plate 38 of the inside roof.

In Figs. 7, 8, and 9 I have shown a modification of my invention adapted for use with cars having metal frames. Here the device for fastening the carlines in position on the metal side plates 42 is shown in top view in Fig. 7, in side elevation in Fig. 8, and in pro-



jection in Fig. 9. It will be seen to consist of a base-plate 43, an end flange 44, and a side flange 45. This last-mentioned flange projects upwardly between the flanges 10 and 13 and is fastened thereto by means of bolts 29, which pass through the perforations 46 in the plate 45. These perforations 46 register with similar perforations in the flanges 10 and 13. The plate 43 extends laterally beneath the truss-beam and is fastened to the side plate 42 by a bolt 48, a bolt 49 passing through the flange 11 of the tie-beam, also fastening the carline to the side plate 42. The base-plate 43 is provided with a perforation 50 for the passage of the bolt 48. 51 is a timber fastened to the side plate 42 and forming part thereof and to which the sheathing of the car may be fastened.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a railway-car, the combination with the roof and side plate, of a carline supporting said roof, said carline consisting of a rolled-metal truss-beam, a separate rolled-metal tie-beam, a strut connecting said beams and a knee-iron secured to the end of said carline and provided with an upwardly-extending vertical plate situated between the end of the carline and the side plate of the car, and a horizontal plate extending from the top of said vertical plate and bearing on the top of the side plate of the car.

2. In a railway-car, the combination with the roof and side plate, of a carline supporting said roof, said carline consisting of a rolled-metal truss-beam, a separate rolled-metal tie-beam, a strut connecting said beams and a knee-iron provided with a T portion, the upwardly-extending flange of which is secured to the end of said carline, said knee-iron being provided with an upwardly-extending vertical plate situated between the end of the carline and the side plate of the car and a horizontal plate extending from the top of said vertical plate and bearing on the top of the side plate of the car.

3. In a carline, the combination with a rolled-metal tie-beam, of a separate rolled-metal truss-beam secured to said tie-beam, a strut connecting said beams, and a member

provided with a plate bearing on the side plate of the car and a flange extending between and secured to said beams.

4. In a carline, the combination with a rolled-metal tie-beam, of a separate rolled-metal truss-beam secured at its ends to the ends of said tie-beams, a strut connecting said beams, and a member provided with a plate bearing on the side plate of the car and a flange extending between and secured to said beams.

5. The combination with a flanged rolled-metal tie-beam, of a separate flanged rolled-metal truss-beam secured at its ends to the ends of said tie-beam, a strut connecting said beams, and a member provided with a plate bearing on the side plate of the car and a flange extending between and secured to said beams.

6. In a carline, the combination with a rolled-metal tie-beam, of a separate rolled-metal truss-beam secured at its ends to the ends of said tie-beam, a strut connecting said beams, and a knee-iron provided with a hook-plate engaging the side plate of the car and a flange extending between and secured to said beams.

7. In a carline, the combination with a rolled-metal tie-beam, of a separate rolled-metal truss-beam secured to said tie-beam, a strut connecting said beams, and a knee-iron provided with a hook-plate engaging the side plate of the car and a T member the flange of which extends between and is secured to the said beams.

8. In a carline, the combination with a rolled-metal tie-beam, of a separate rolled-metal truss-beam secured at its ends to the ends of said tie-beam, a strut connecting said beams, and a knee-iron provided with a hook-plate engaging the side plate of the car and an inverted-T member the flange of which extends between and is secured to the side beams.

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

JACOB H. WEISBROD. [L. s.]

Witnesses:

JAMES H. BRYSON,  
BENNETTE PIKE.