

No. 803,313.

PATENTED OCT. 31, 1905.

J. F. STREIB.

BRAKE BEAM AND METHOD OF MAKING THE SAME.

APPLICATION FILED OCT. 29, 1904.

2 SHEETS--SHEET 1.

Fig. 1.

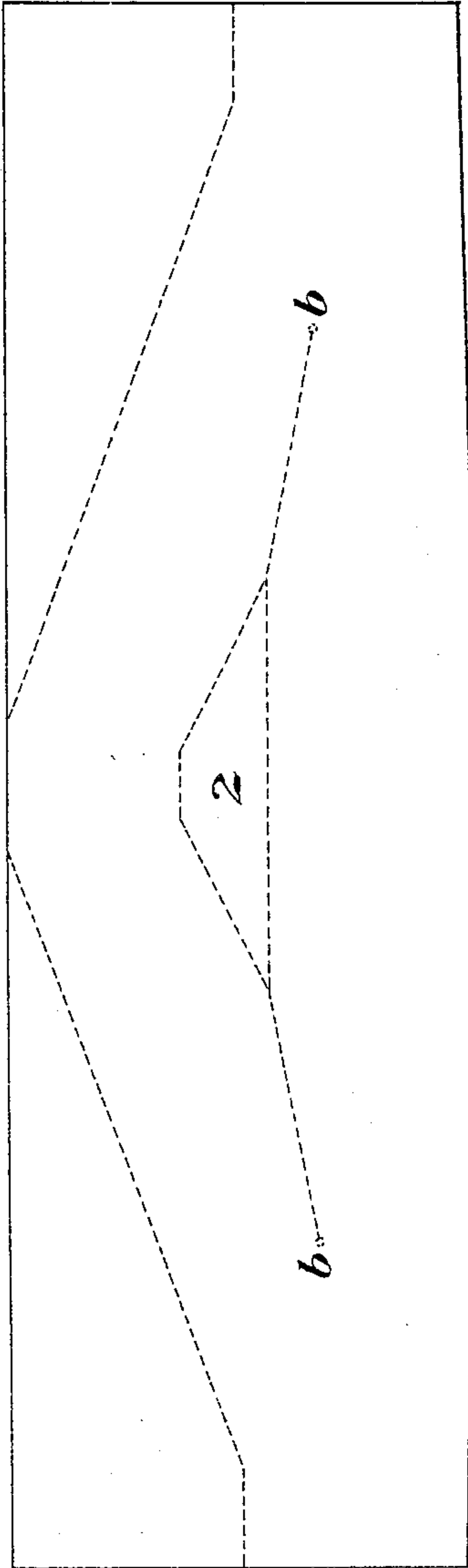
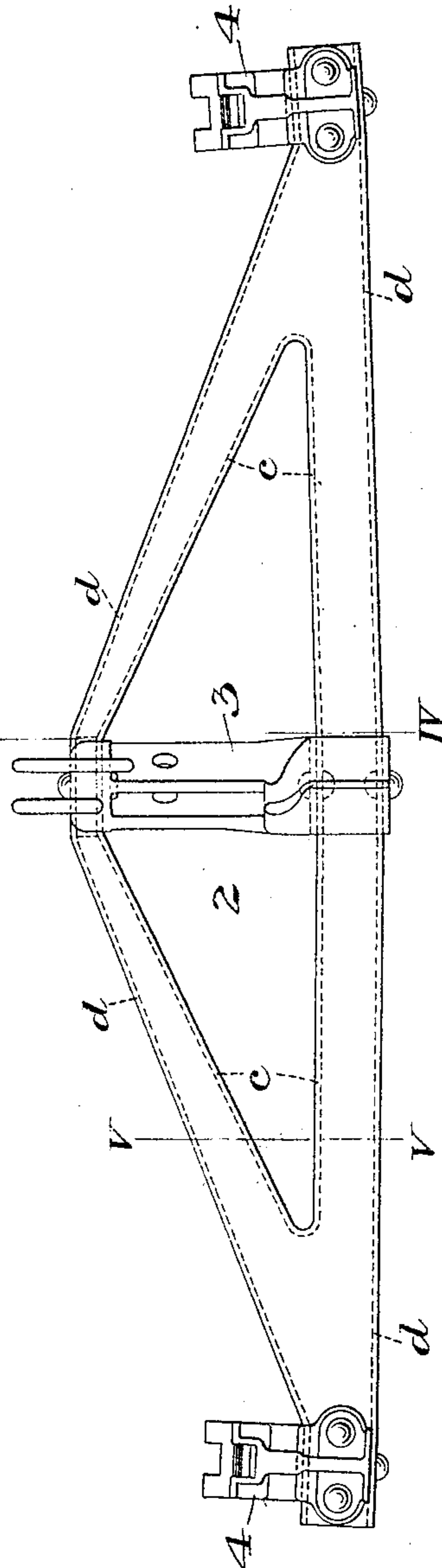


Fig. 2.



WITNESSES

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2 SHEETS—SHEET 2.

Fig. 3.

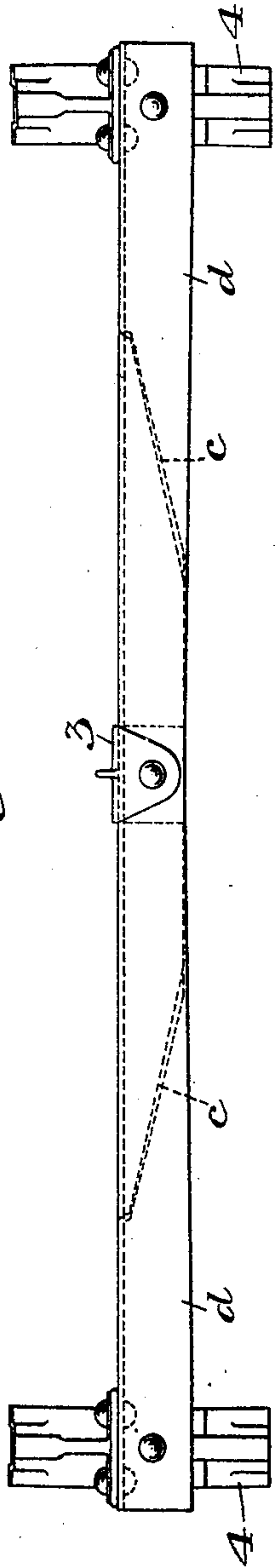


Fig. 6.

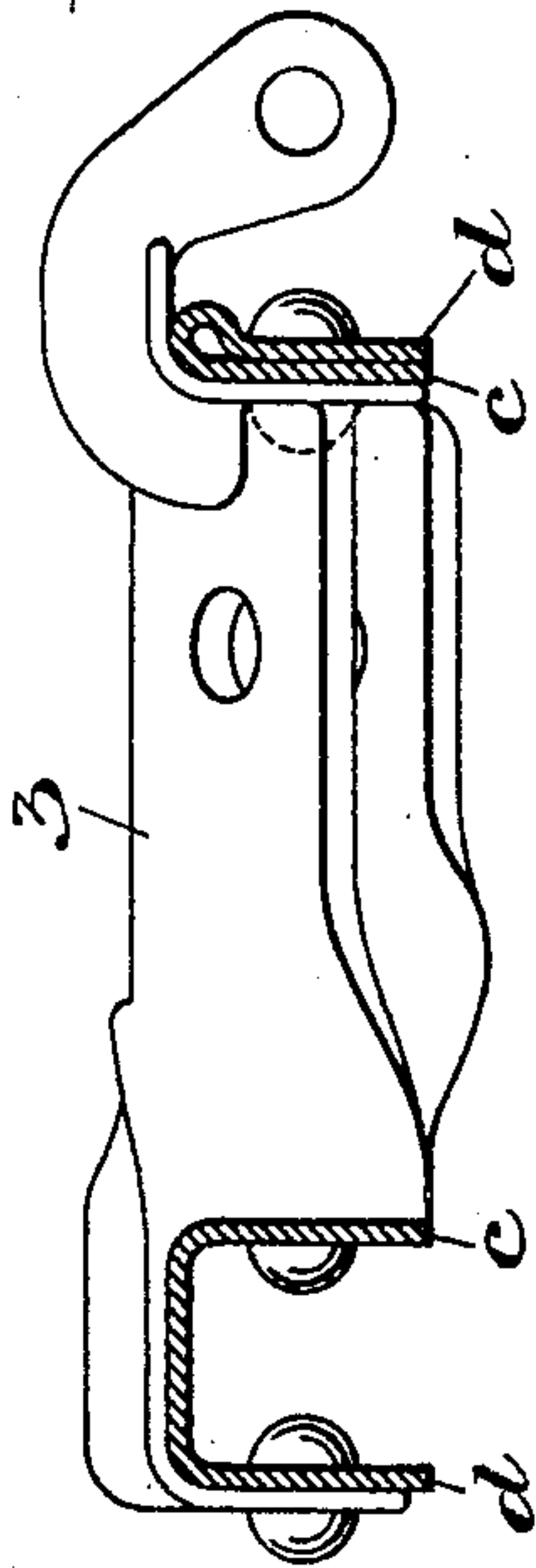


Fig. 4.

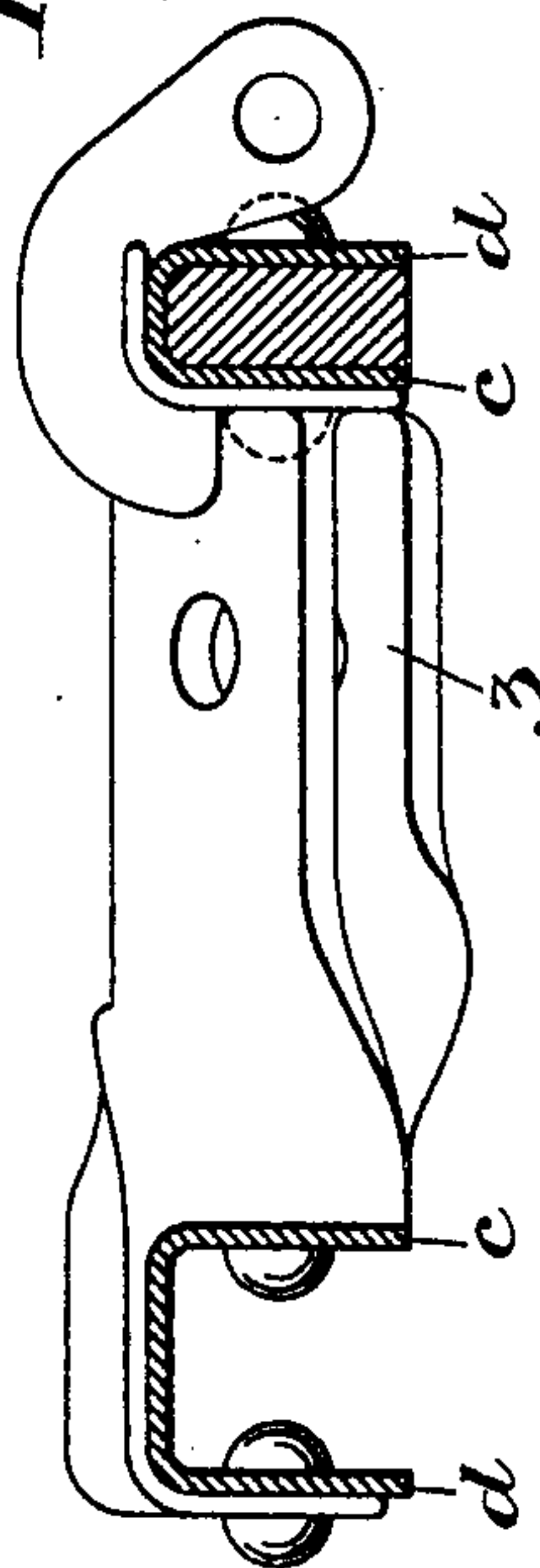
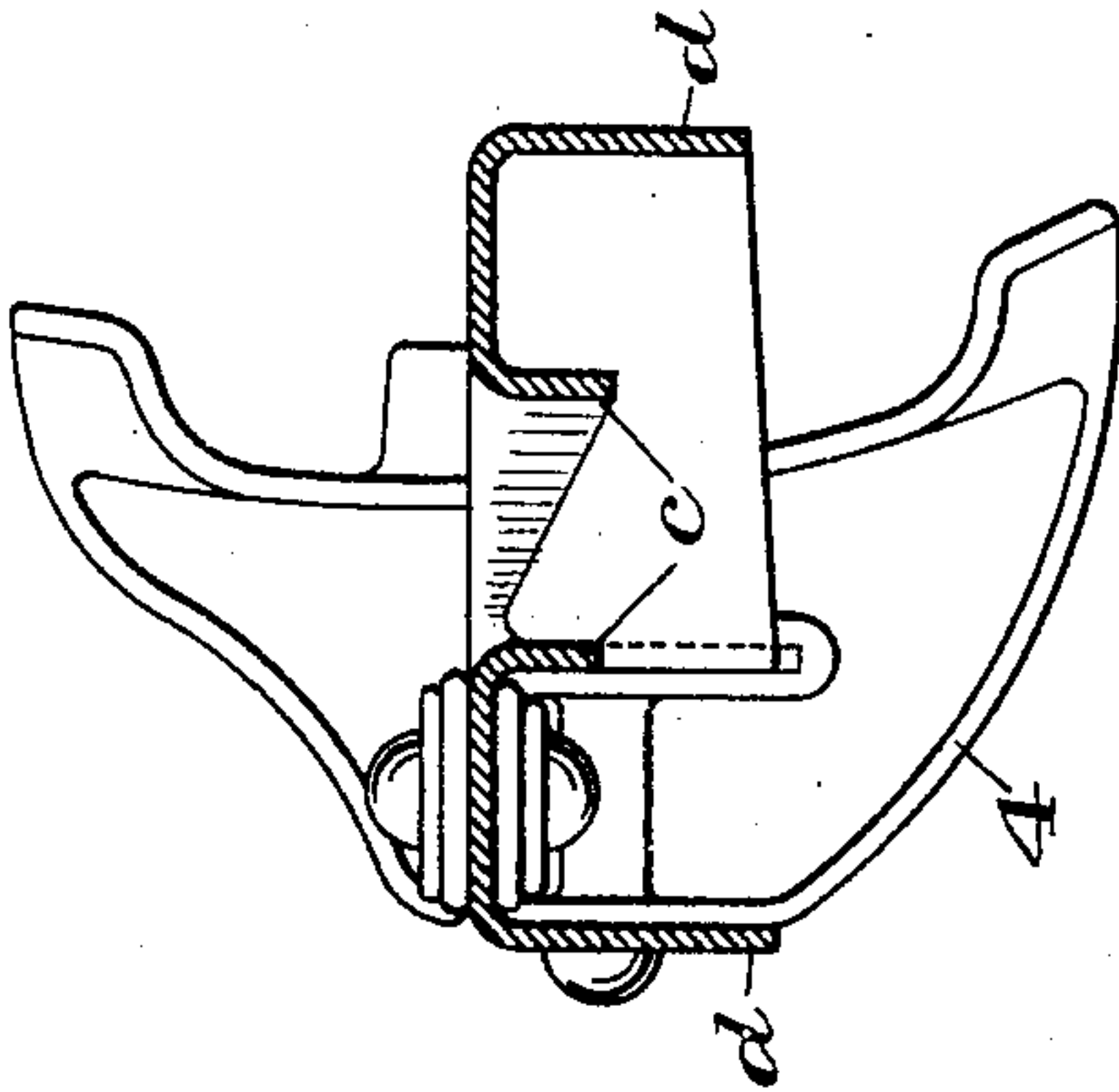


Fig. 5.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN F. STREIB, OF AVALON, PENNSYLVANIA, ASSIGNOR TO THE
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BRAKE-BEAM AND METHOD OF MAKING THE SAME.

No. 803,313.

Specification of Letters Patent.

Patented Oct. 31, 1905.

Application filed October 29, 1904. Serial No. 230,502.

To all whom it may concern:

Be it known that I, JOHN F. STREIB, of Avalon, Allegheny county, Pennsylvania, have invented a new and useful Brake-Beam and a
5 Method of Making the Same, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

10 Figure 1 is a plan view of a sheet showing in dotted lines the lines upon which the blank is cut to form a brake-beam constructed in accordance with my invention. Fig. 2 shows in plan view my improved brake-beam. Fig. 3
15 is an edge view. Figs. 4 and 5 are cross-sections on the lines IV IV and V V of Fig. 2, and Fig. 6 is a cross-sectional view illustrating a modification.

My brake-beam is made by pressing from a
20 blank of sheet steel or iron. The blank which I prefer to use is indicated in outline by the dotted line in Fig. 1. I take this blank, cut it to the required outline, as by cuts *b b*, Fig. 1, cut out also from the middle of it an oblong
25 hole 2, preferably triangular in outline, and then by means of suitably-constructed dies I press marginal flanges *c d*, thus forming a brake-beam with sides which are trough shape in cross-section, as shown in Fig. 4. One or
30 more of the marginal flanges may be omitted, if desired, and the shape of the beam may be changed by changing the outlines of the blank and of the hole 2, which may be triangular or diamond-shaped. The flanges *c* at the interior
35 of the beam preferably taper from the middle toward the ends, thus affording the greatest width of flange and the greatest strength at the strut, where the stress is greatest. A strut
40 3, which may be made of malleable iron, is interposed in the beam thus formed and is secured thereto by riveting. Suitable brake-heads 4 4 are also applied and riveted to the ends of the beam.

45 The brake-beam thus made affords all the advantages of a truss-beam without loose connections between the compression and tension members, which are integral and made of one sheet of metal. No edgewise bending or

stretching of the material is required, and the beam is therefore not weakened in the process
50 of manufacture. The metal at the apex of the beam may either be of U shape in cross-section, as shown in Fig. 4, or its flanges may be pressed together, as shown in section in Fig. 6.

55 Modifications in the shape of the beam may be made by those skilled in the art, since

What I claim is—

1. A beam made from a sheet of metal having a hole in its body and cuts extending from said
60 hole, said beam having pressed flanges on both inner and outer margins; substantially as described.

2. A beam made from a sheet of metal having a hole in its body portion, said beam having
65 pressed flanges on its inner and outer margins and having an interposed strut; substantially as described.

3. A brake-beam made from a sheet of metal having an oblong hole extending lengthwise
70 in its body portion, said beam having pressed flanges on its inner and outer margins, and having a cross-bracing member; substantially as described.

4. A beam of oblong form made of a sheet of
75 metal having a hole in its body portion, cuts extending from said hole and pressed with marginal flanges on the inner and outer margins; substantially as described.

5. A beam made of a sheet of metal having a
80 hole in its body portion and pressed with marginal flanges on the inner and outer margins, the inner flanges tapering from the middle toward the ends; substantially as described.

6. The method herein described of making
85 beams which consists in cutting out an oblong hole in the middle part of a metal plate, forming slits extending from the ends of the hole, and bending flanges on the inner and outer margins; substantially as described.

90 In testimony whereof I have hereunto set my hand.

JOHN F. STREIB.

Witnesses:

H. L. CUNNINGHAM,
THOMAS J. JONES.