

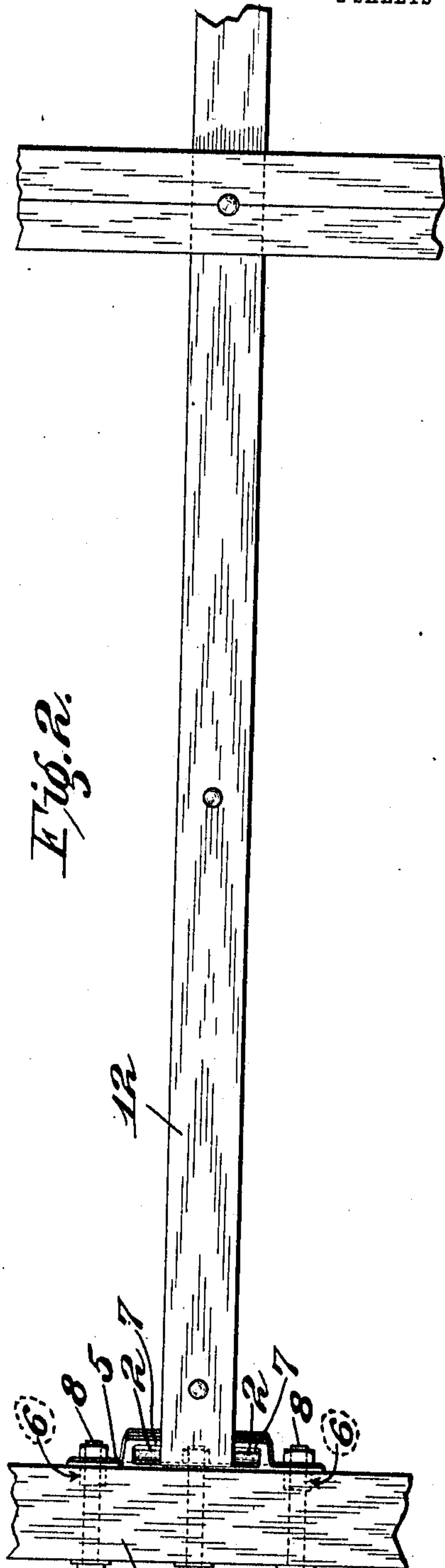
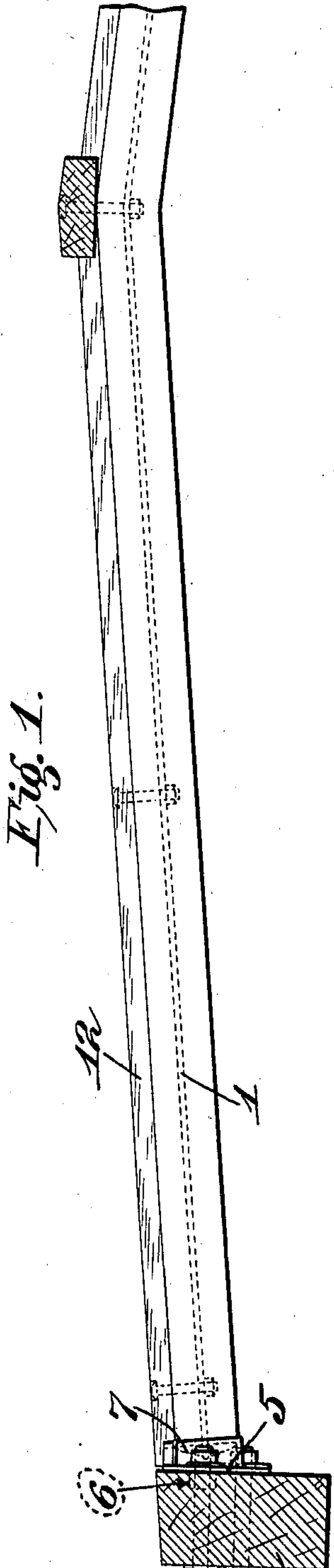
P. H. MURPHY.
CAR ROOF.

APPLICATION FILED MAY 2, 1910.

969,972.

Patented Sept. 13, 1910.

2 SHEETS—SHEET 1.



Witnesses:

Edgar T. Farmer.

G. A. Remington

Inventor:

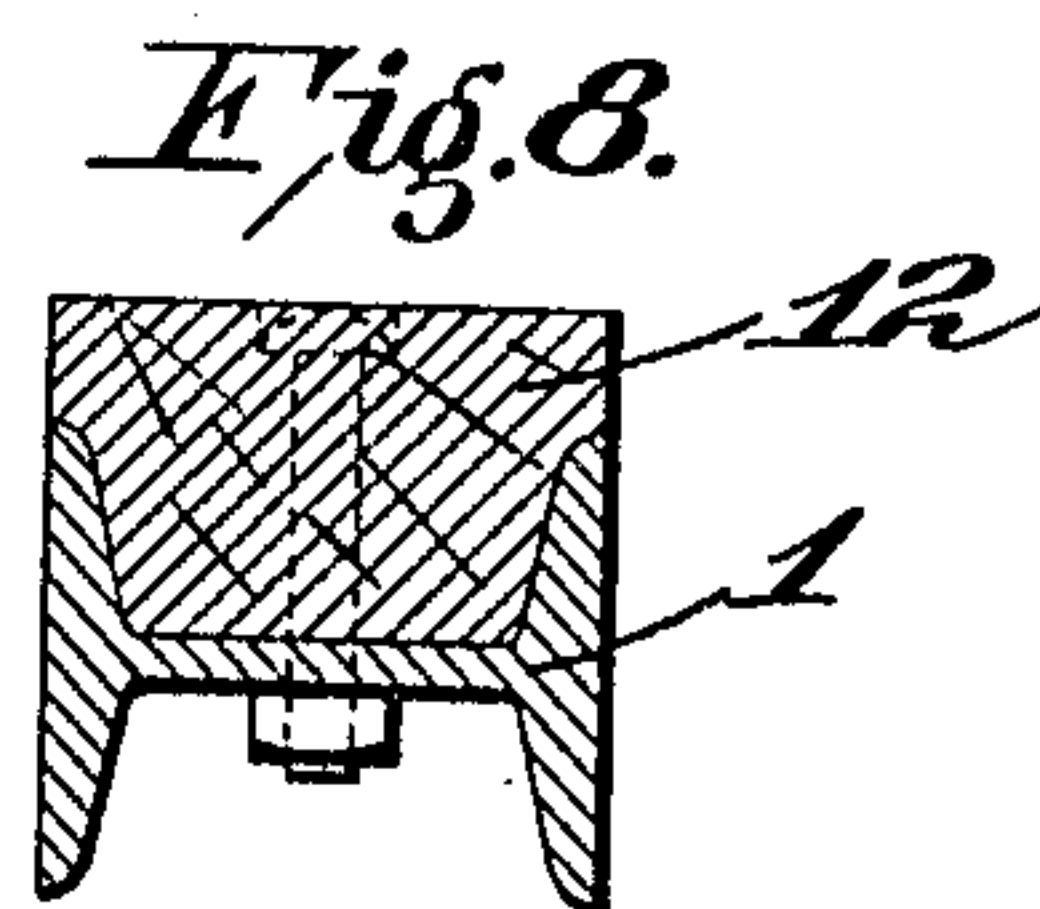
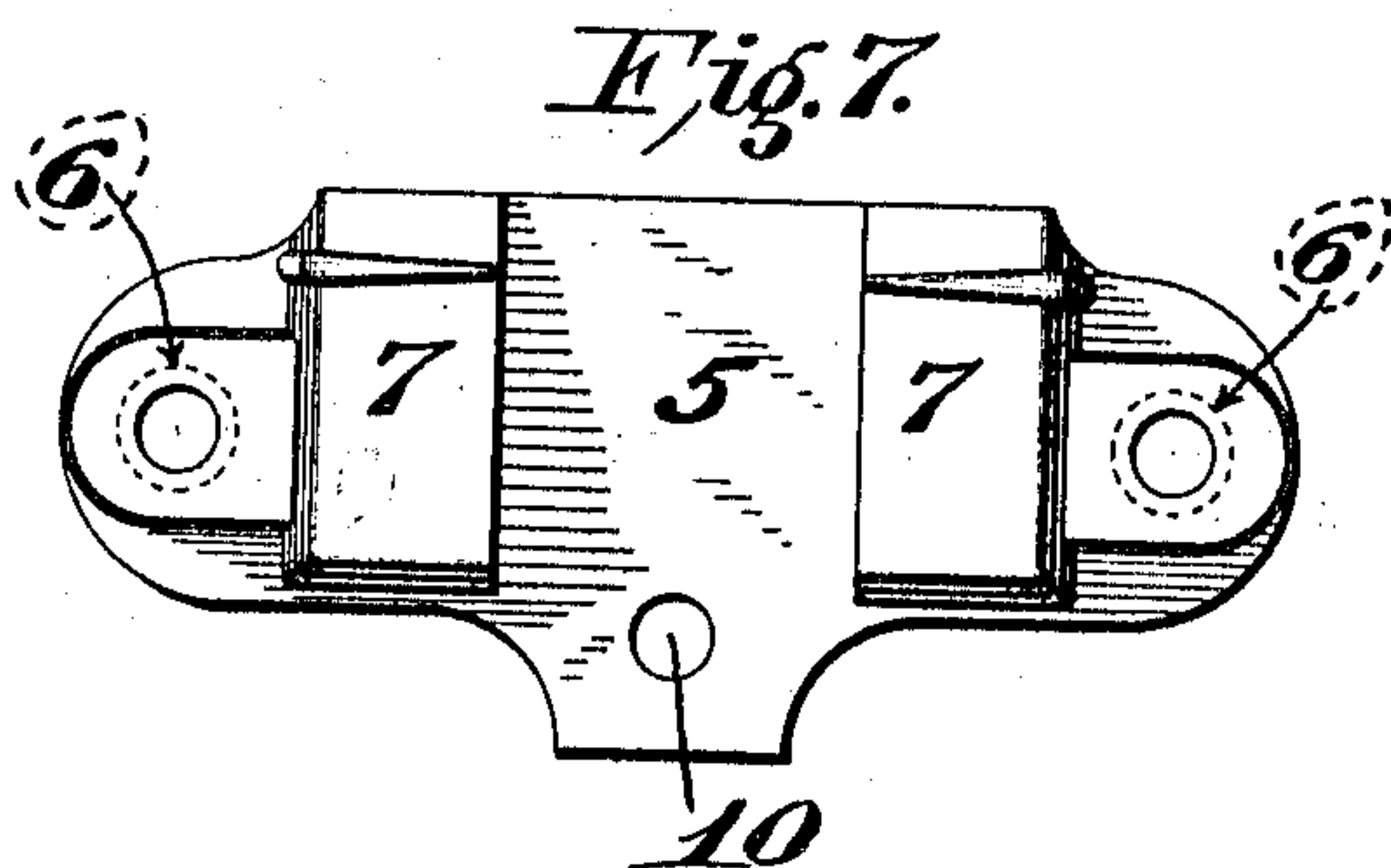
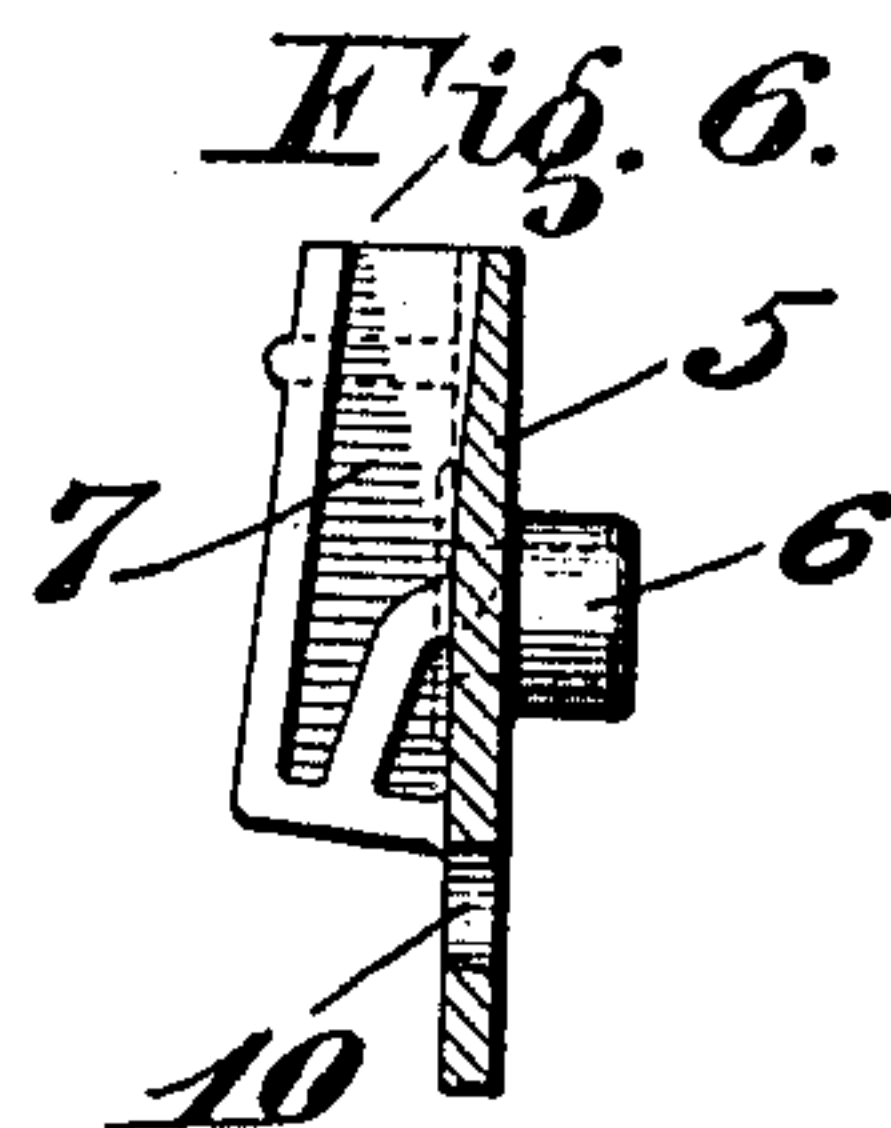
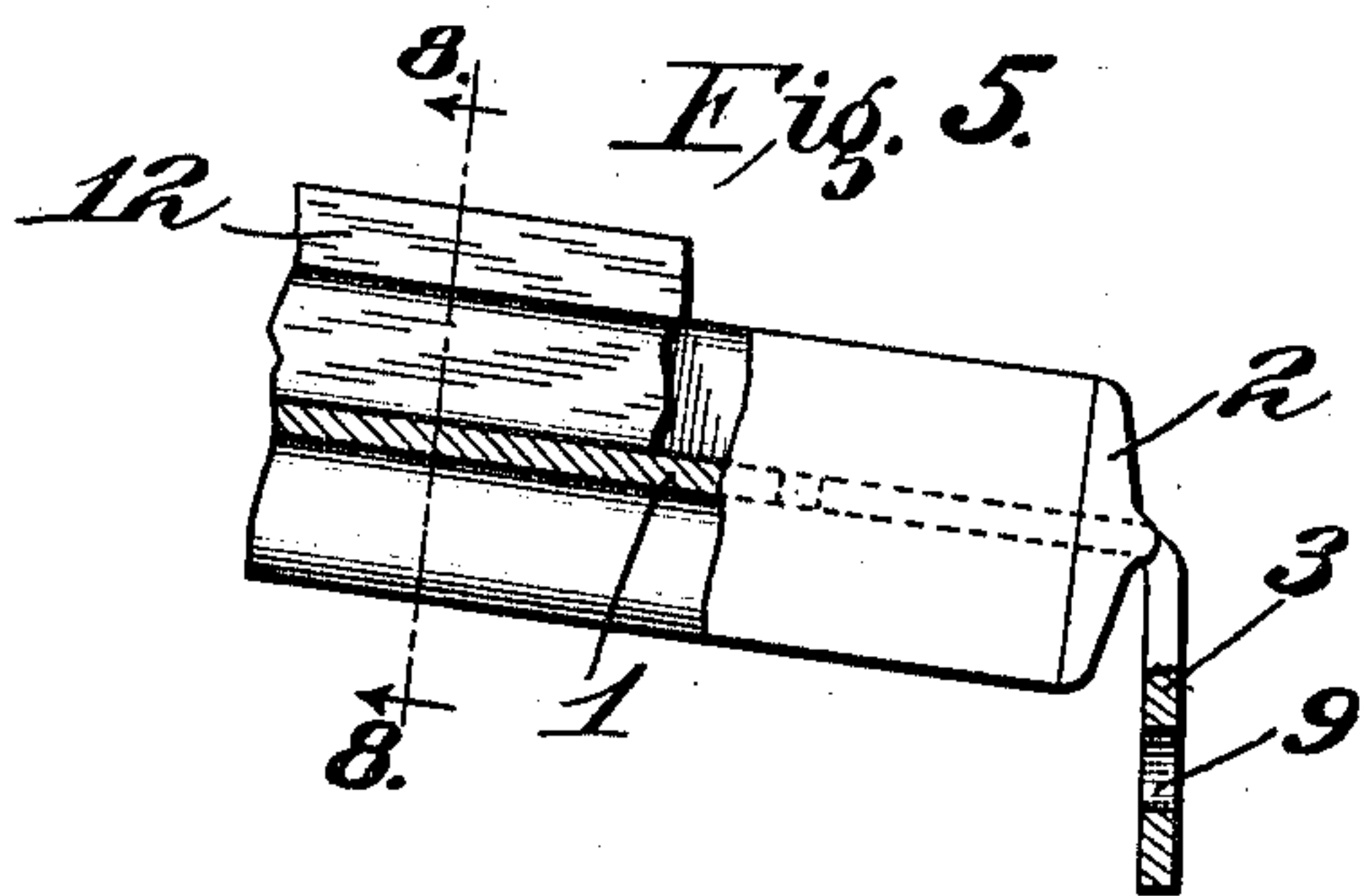
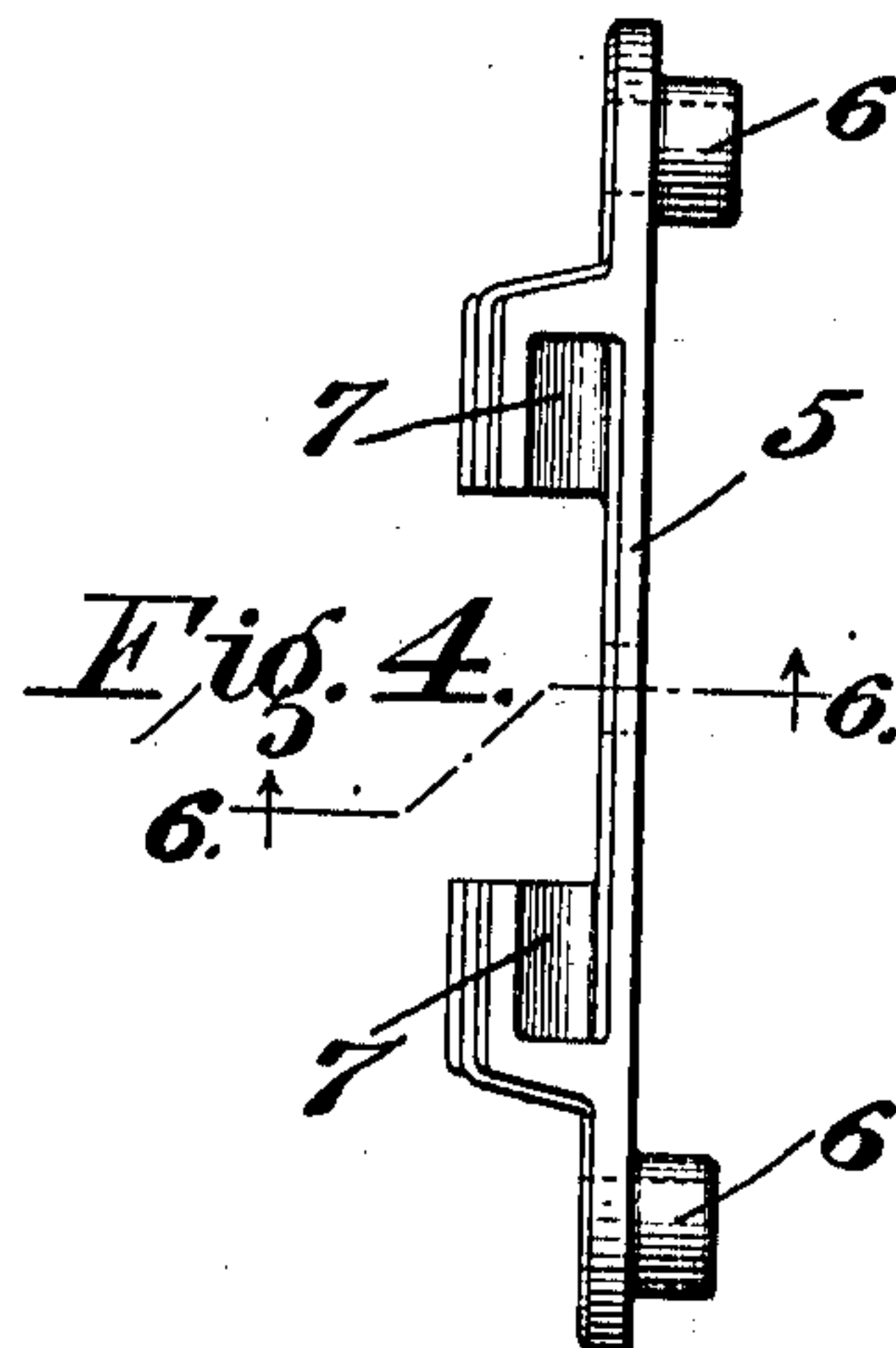
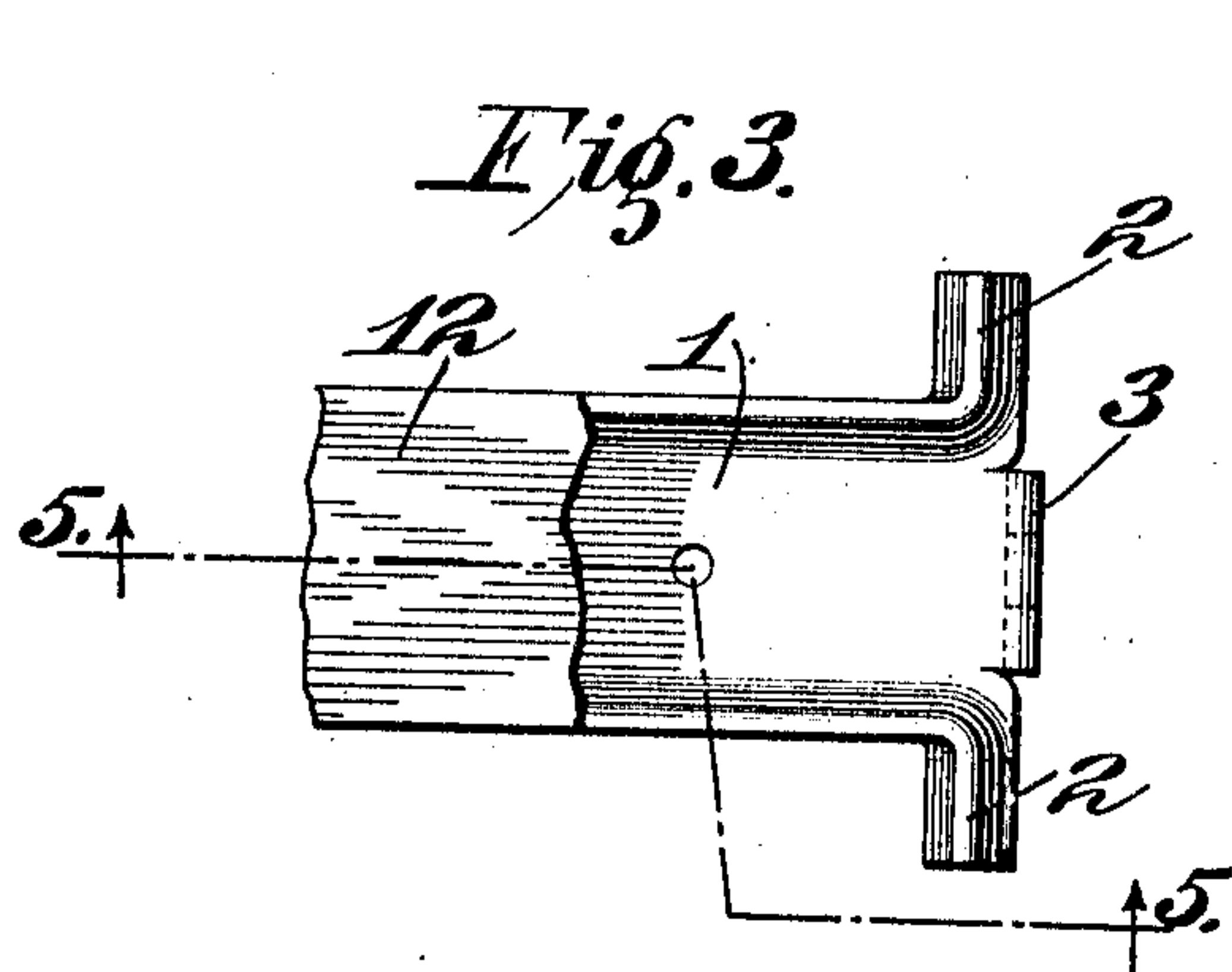
P. H. Murphy,
By Cant & Davis,
Attys.

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CAR ROOF.
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3 SHEETS—SHEET 2.



Witnesses:

Edgar T. Farmer.

G. A. Pennington

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UNITED STATES PATENT OFFICE.

PETER H. MURPHY, OF PITTSBURG, PENNSYLVANIA.

CAR-ROOF.

969,972.

Specification of Letters Patent. Patented Sept. 13, 1910.

Application filed May 2, 1910. Serial No. 558,986.

To all whom it may concern:

Be it known that I, PETER H. MURPHY, a citizen of the United States, and a resident of the city of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Car-Roofs, of which the following is a specification.

This invention relates to car roofs and more particularly to the carlines for supporting the same. It has for its principal objects to secure a simple and inexpensive construction which is light and rigid, to overcome the weaving motion of the roof structure, and to attain certain advantages hereinafter more fully appearing.

The invention consists in the parts and in the arrangements and combinations of parts hereinafter described and claimed.

In the accompanying drawings which form part of this specification and wherein like symbols refer to like parts wherever they occur; Figure 1 is a transverse section through one of the side plates of a car, showing a pocket casting secured thereto and an I-shaped metal carline with a wooden filler piece bolted thereto; Fig. 2 is a top plan view; Fig. 3 is a fragmentary top plan view of one end portion of the carline; Fig. 4 is a top plan view of a pocket casting adapted to receive the counterpart end portions of the carline; Fig. 5 is a section on the line 5—5 of Fig. 3; Fig. 6 is a section on the line 6—6 of Fig. 4; Fig. 7 is a face view of the pocket casting; and Fig. 8 is a transverse section through the I-shaped metal carline with the wooden filler piece thereon.

As shown in Figs. 1 to 8, inclusive, the carline comprises an ordinary commercial I-beam 1 with its web portion disposed horizontally. The opposite end portions of the I-beam are split on opposite sides at the base of the flanges and the flange portions 2 thus severed from the web are bent laterally and the end portions 3 of the web are turned downwardly.

Secured to the inner faces of the side plates 4 are pocket members or castings 5 each comprising a plate portion having bosses 6 on its outer face near its ends. The bosses 6 are fitted in seats or mortises provided therefor in the side plate. On the inner face of each of the castings 5 are a pair of oppositely disposed pockets 7 whose lower portions are counterparts of the lat-

erally-turned flange portions 2 of the I-beam. These castings are secured by bolts 8 which are passed through the side plates and bores in the bosses 6.

The downturned web portions 3 of the carline are perforated, as at 9, in register with a perforation 10 in the plate portion of the castings 5, and a securing bolt 11 is passed through said perforations after the laterally-bent flange portions 2 are seated in their respective pockets 7. By having the pockets 7 arranged to snugly fit the laterally-bent flange portions 2 and securing the web portions 3 and castings 5 to the side plates 4 of the car by the bolts 11, a rigid connection is effected. By reason of the castings 5 being secured to the side plates 4 at points a considerable distance on each side of the longitudinal center of the carline and the bosses 6 being sunk into the side plates 4, the substructure of the roof is materially stiffened; that is, the effect is substantially the same as if beams of relatively wide transverse sections had been used.

A wooden filler or nailing strip 12 is bolted to the top face of the horizontal web of the I-beam and its lower corners are preferably chamfered to correspond with the contour of the inner faces of the flanges of the beam.

Obviously, the device admits of considerable modification without departing from my invention. Therefore, I do not wish to be limited to the specific construction and arrangement shown.

What I claim is:

1. In a car roof, the combination with the side plates, of a carline comprising an I-beam whose web is parallel with the pitch of the roof, the ends of the web being slit parallel and close to the flanges and turned downwardly, and the slit portions of the flanges being turned outwardly parallel with and secured to the side plates.

2. In a car roof, the combination with the side plates, of pocket members secured to the inner faces of said side plates, said pocket members having a pair of oppositely disposed pockets on their inner faces, and a strut comprising an I-beam whose web portion is horizontally disposed and whose opposite end portions are split and turned laterally and fitted in the respective pockets of said pocket members.

3. In a car roof, the combination with

the side plates, of pocket members comprising plate portions which are bolted at their opposite ends to the inner faces of said side plates and having a pair of oppositely disposed pockets on their inner faces, and an I-beam whose web portion is horizontally disposed and whose opposite end portions are split at the bases of its flanges, and the portions of said flanges which are severed from the web being turned laterally and fitted in the pockets on said pocket members.

4. In a car roof, the combination with the side plates, of pocket members comprising plate portions which are bolted at their opposite ends to the inner faces of said side plates and having a pair of oppositely disposed pockets on their inner faces, and an I-beam whose web portion is horizontally disposed and whose opposite end portions are split at the bases of its flanges, and the severed portions of said flanges being turned laterally and fitted in the pockets of said pocket members, and the web portion of the opposite ends of the beam being turned downwardly and bolted to the adjoining side plate.

5. A metal carline comprising an I-beam whose web portion is horizontally disposed and whose opposite end portions are split parallel with the longitudinal axis of said beam at the bases of the flanges thereof, the severed flange portions being turned outwardly at right angles and the web portion at the ends of the beam being turned downwardly, and castings which are adapted to be secured to the side plates of the

car, comprising plate portions having a pair of oppositely disposed pockets on their inner faces which are counterparts of the laterally-turned flange portions of the beam, the end portions of said castings being perforated to receive securing bolts, and said downturned web portion of the beam having a perforation arranged to register with a perforation in the adjoining casting to receive a securing bolt.

6. A metal carline comprising an I-beam whose opposite end portions are split parallel with the longitudinal axis thereof at the bases of the flanges, the portions of the flanges which are severed from the web being turned outwardly at right angles and the web portion at the ends of the beam being turned downwardly, castings adapted to be secured to the inner faces of the side plates of the car and comprising plate portions having perforated lugs on their outer faces near their ends, a pair of oppositely disposed pockets on the inner faces of said castings which are counterparts of the out-turned flange portions of the beam, and the downturned web portions of said beam being perforated to register with a bolt hole in the adjoining casting after the flange portions are seated in the pockets on said casting.

Signed at New Kensington, Pennsylvania, this 27th day of April, 1910.

PETER H. MURPHY.

Witnesses:

A. A. Potts,
O. F. Voss.