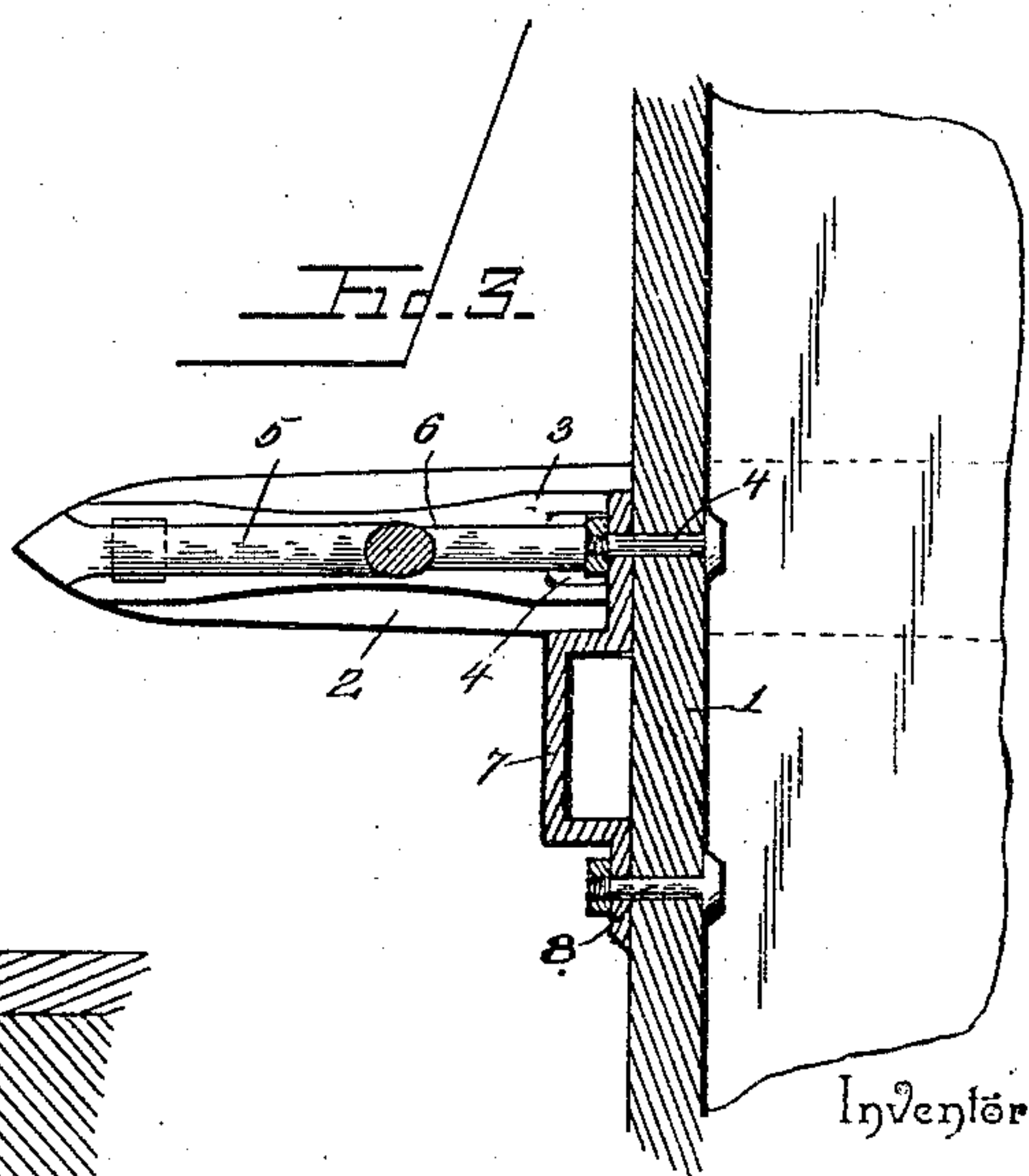
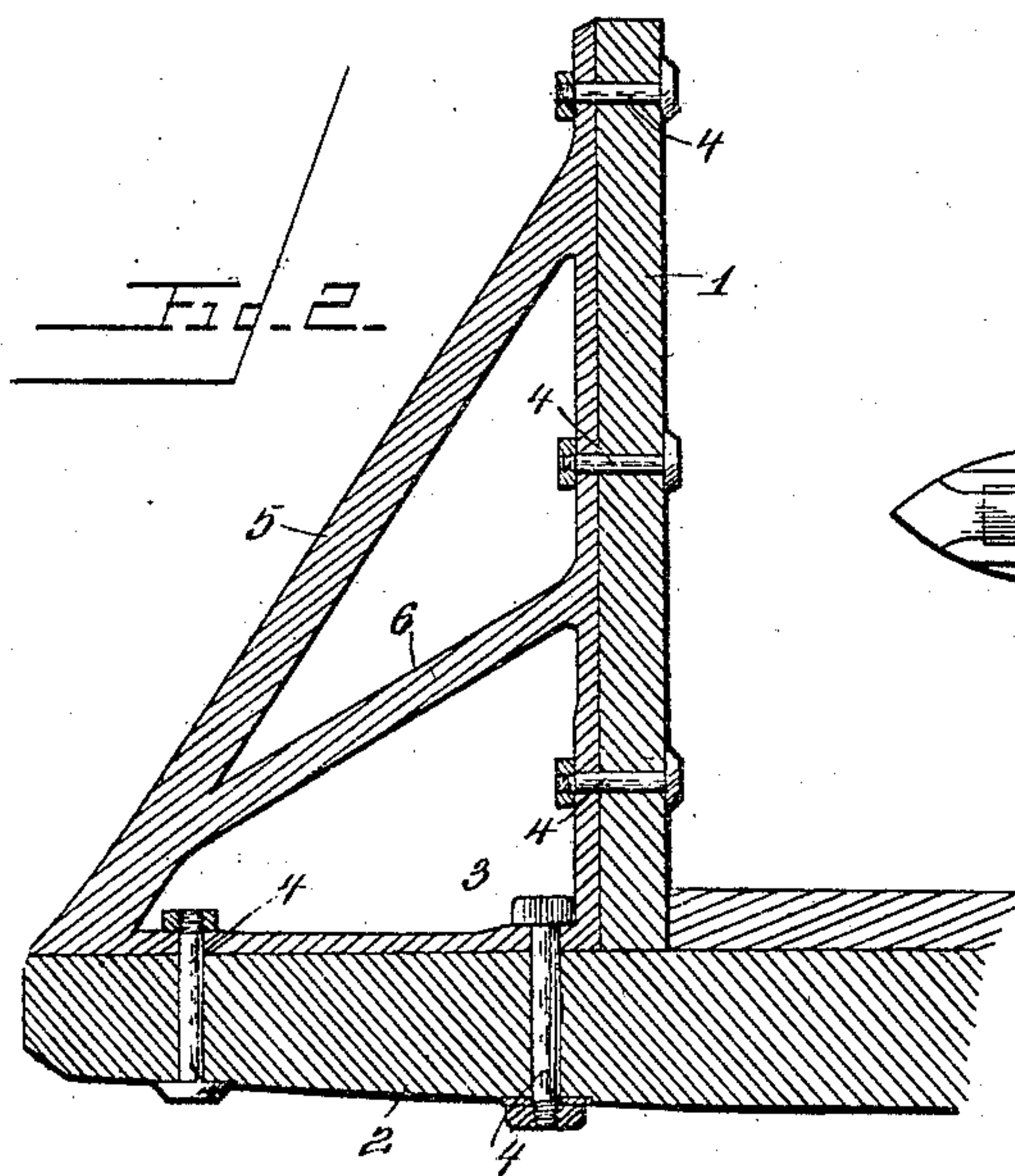
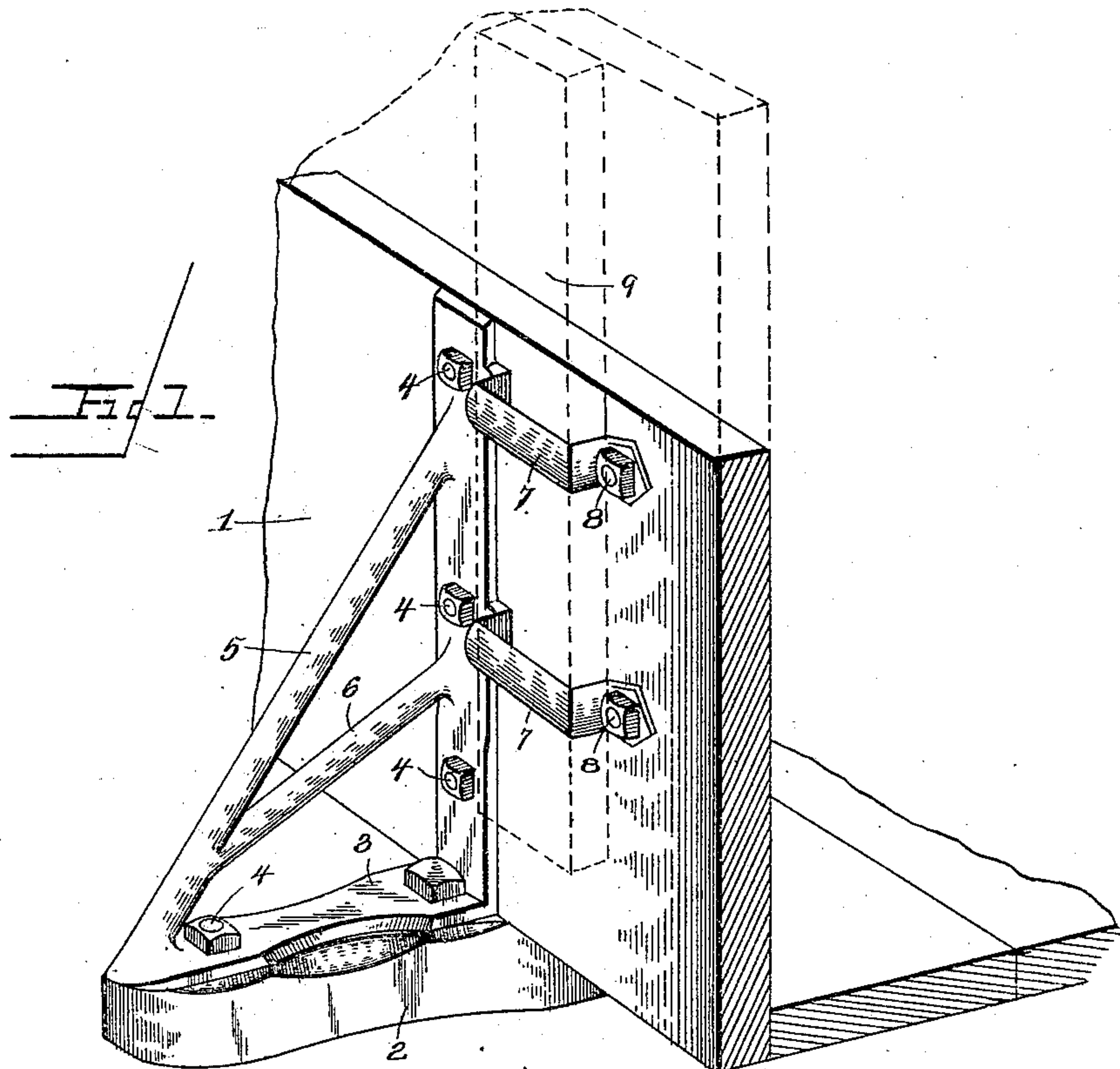


(No Model.)

H. MARKUSSEN.  
WAGON STANDARD.

No. 553,171.

Patented Jan. 14, 1896.



Witnesses

*Thos W Riley*

*J. S. Owens*

By his Attorneys.

*Henry Markussen*

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# UNITED STATES PATENT OFFICE.

HENRY MARKUSSEN, OF CROTON, NEW JERSEY.

## WAGON-STANDARD.

SPECIFICATION forming part of Letters Patent No. 553,171, dated January 14, 1896.

Application filed October 20, 1894. Serial No. 526,488. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY MARKUSSEN, a citizen of the United States, residing at Croton, in the county of Hunterdon and State of New Jersey, have invented a new and useful Wagon-Brace, of which the following is a specification.

This invention consists broadly in a brace for lending strength and rigidity to the sides of wagon-bodies, and it has for its principal object to increase the strength and simplicity of such devices.

A second object is to combine with the brace proper means for securing additional sections to the sides of the body, and to make said means equally strong and efficient with the brace proper.

To these ends the invention consists in a brace consisting of an angular section of strap-iron, having a brace-rod extending from its ends across and diagonally with the horizontal portion of the same, and in an auxiliary brace-rod secured to the middle of one portion of the strap-iron and extending diagonally to the main brace-rod, the whole being formed of an integral piece of metal.

The invention also consists in forming integral with or welding to one section of the strap-iron a pair of standard-securing eyes or hasps, by which the top section of the body sides aforesaid may be secured in place. All of these features will be fully described hereinafter, and finally embodied in the claims.

In the accompanying drawings, Figure 1 represents a perspective view of a wagon-brace constructed after the manner of my invention; Fig. 2, a vertical section thereof; Fig. 3, a horizontal section taken through one of the standard-securing hasps.

The reference-numeral 1 indicates a portion of the side of the wagon-body, and 2 the usual bottom cleat or bar thereof. It will be understood that only a portion of the wagon-body is shown, and that the cleats or bars 2 are greatly increased in number in the complete arrangement. The end of the cleat or bar 2 is projected beyond the sides of the body, and is so formed that the brace may be secured thereto.

3 indicates the strap-iron aforesaid, which forms the main portion of the brace, and which is bent so as to form two right-angled

portions, one of which lies snugly against the upper side of the projecting end of the cleat or bar 2, while the other portion extends vertically along the outer side of the body 1.

4 indicates a series of bolts which are passed through the strap 3 and through the body and cleat or bar, respectively, and which are provided to hold the strap in the proper position. Welded to the outer end of the horizontal portion of the strap 3 is the main brace 5, which extends upwardly and inwardly from said horizontal portion and has its upper extremity welded to the upper end of the vertical portion of the strap. Thus it will be seen that substantially a right-angled triangle is defined by the strap and brace 5.

6 indicates the auxiliary brace aforesaid, which is welded to the vertical portion of the strap 3, about midway the upper end of the brace 5 and the lower end of the vertical portion, and which projects outwardly and downwardly toward the brace 5, it being welded thereto at a point above the lower end of the said brace, said point being in a horizontal plane slightly less than midway between the plane of the upper end of the brace 6 and the horizontal portion of the strap. By this means the vertical portion of the strap 3 is braced upon the horizontal portion, and at two points, while the strength and efficiency of the auxiliary brace are greatly increased by securing it to the brace 5, as distinguished from the horizontal portion of the strap. This is so owing to the fact that the nearer one can come to putting strain longitudinally on a brace the stronger the brace will be. Thus by connecting the brace to the main brace it is possible to extend it diagonally, which is a little less than horizontal. The brace is not extended truly horizontally, since this would make it engage the brace 5 too far up, and thus impair the strength of said brace 5.

The standard-securing eyes or hasps are indicated by the numeral 7, and are two in number, they having their outer ends rigidly secured to the wagon-body by means of the bolts 8, and having their inner ends welded to the vertical portion of the strap 3. The eyes or hasps are formed by bending the metal of which they are composed outwardly and thence horizontally, so as to form two vertically-aligned staple-like devices through



which the standards 9 (see dotted lines in Fig.1) may pass. The standards 9 are usually the standards of an additional section to the wagon-body, though they may be merely props or standards provided to enlarge the capacity of the wagon, and without the sides attached thereto.

From the foregoing description it will be seen that a thoroughly efficient and durable brace is provided, and that its peculiar construction is productive of this increased efficiency and durability, owing to the reasons explained hereinbefore. The use of the invention will be apparent from the drawings and from the foregoing description. Therefore no further explanations are necessary.

Having described the invention, I claim—

1. A wagon brace consisting of a section of strap iron bent to form two portions extending at right angles to each other, one of which is vertically disposed and adapted to lie against the body of the wagon and the other portion horizontally disposed and capable of lying upon the wagon bolster, and a diagonally extending brace having one end welded to the horizontal portion of the strap and having its remaining end forked or branched to form two upwardly diverging brace rods, one branch being welded to the upper end of the vertical portion of the strap and the other branch welded at its end approximately to the

middle of the vertical portion of the strap, and a laterally disposed standard-receiving loop or eye, substantially as specified.

2. A wagon body brace consisting of a section of strap iron bent to form a horizontal portion secured to an outwardly-projecting cleat or bar of the wagon body, and a vertically-extending portion secured to the side of the wagon-body, a main brace welded to the outer end of the horizontal portion and projecting upwardly and inwardly to the upper end of the vertical portion, to which upper end the main brace is also welded, an auxiliary brace welded to the vertical portion of the strap at a point between its ends and projecting downwardly and outwardly and welded to the main brace at a point slightly above the lower end thereof, and two vertically-aligned standard-securing eyes or hasps welded to the vertical portion of the strap and having their outer ends secured to the wagon body by bolting thereto, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HENRY MARKUSSEN.

Witnesses:

JOHN L. CONNET,  
RICHARD S. KUHL.