

No. 696,300.

Patented Mar. 25, 1902.

S. E. BANGS.
FIFTH WHEEL.

(Application filed Aug. 15, 1901.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

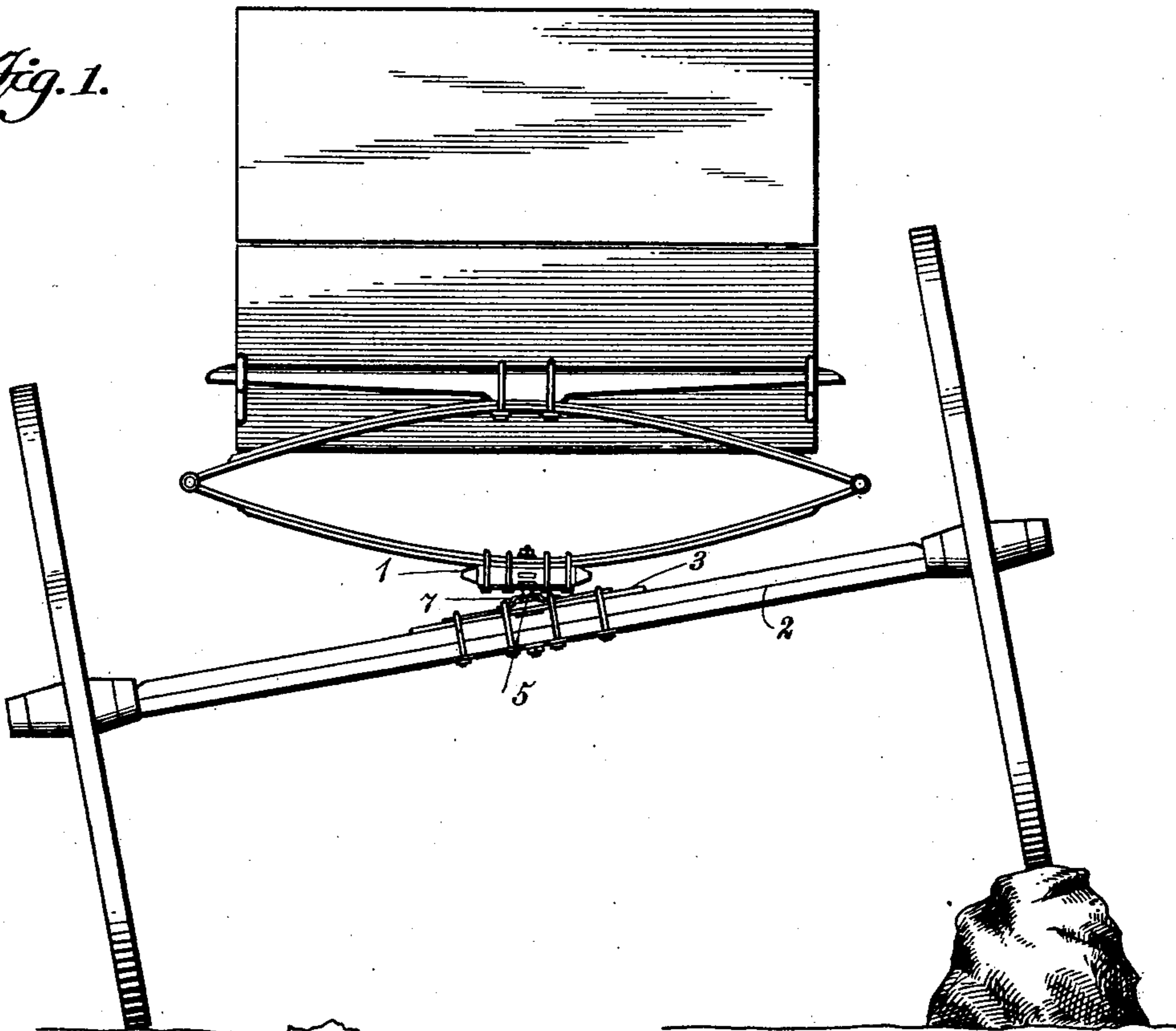
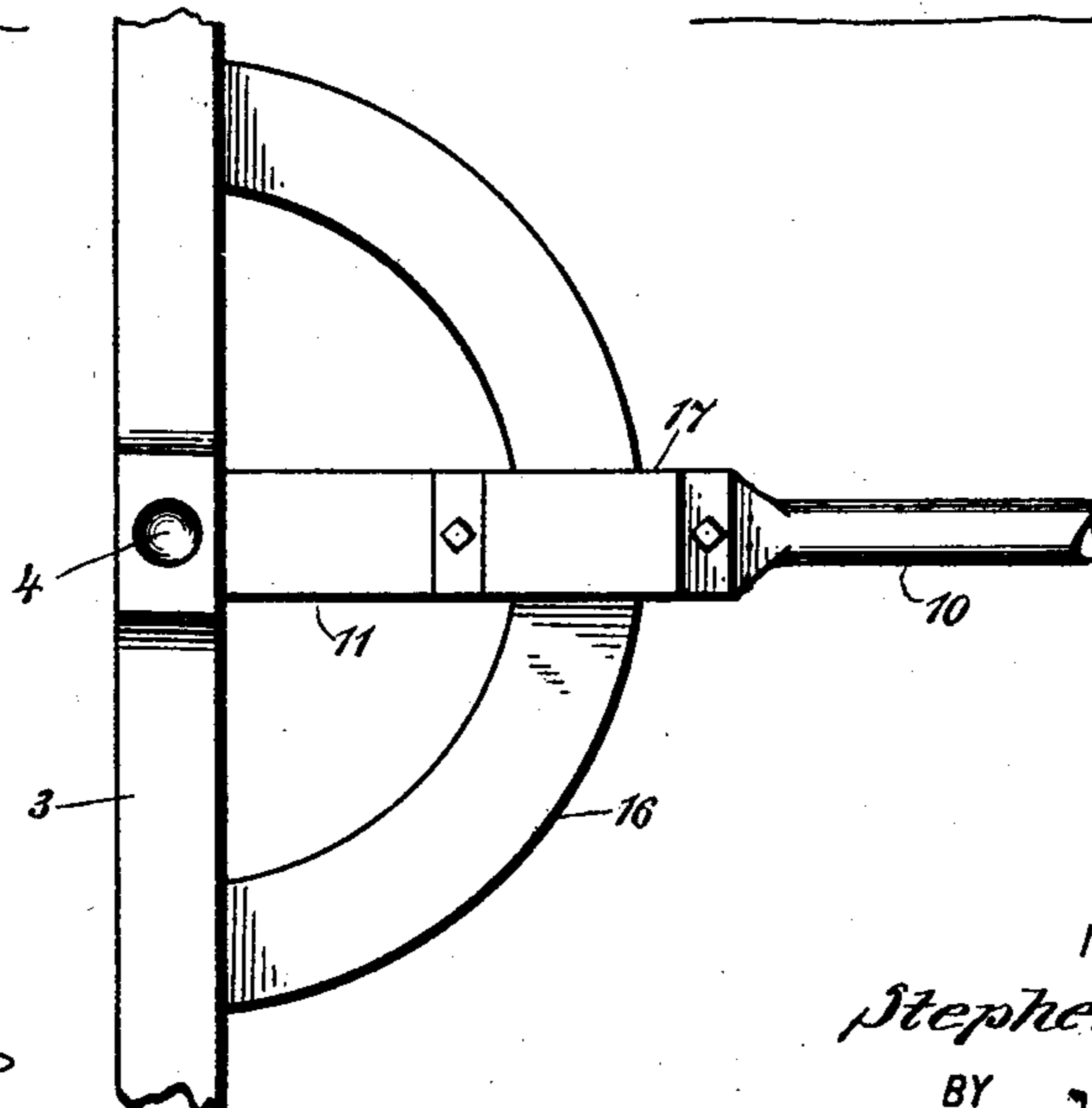


Fig. 4.



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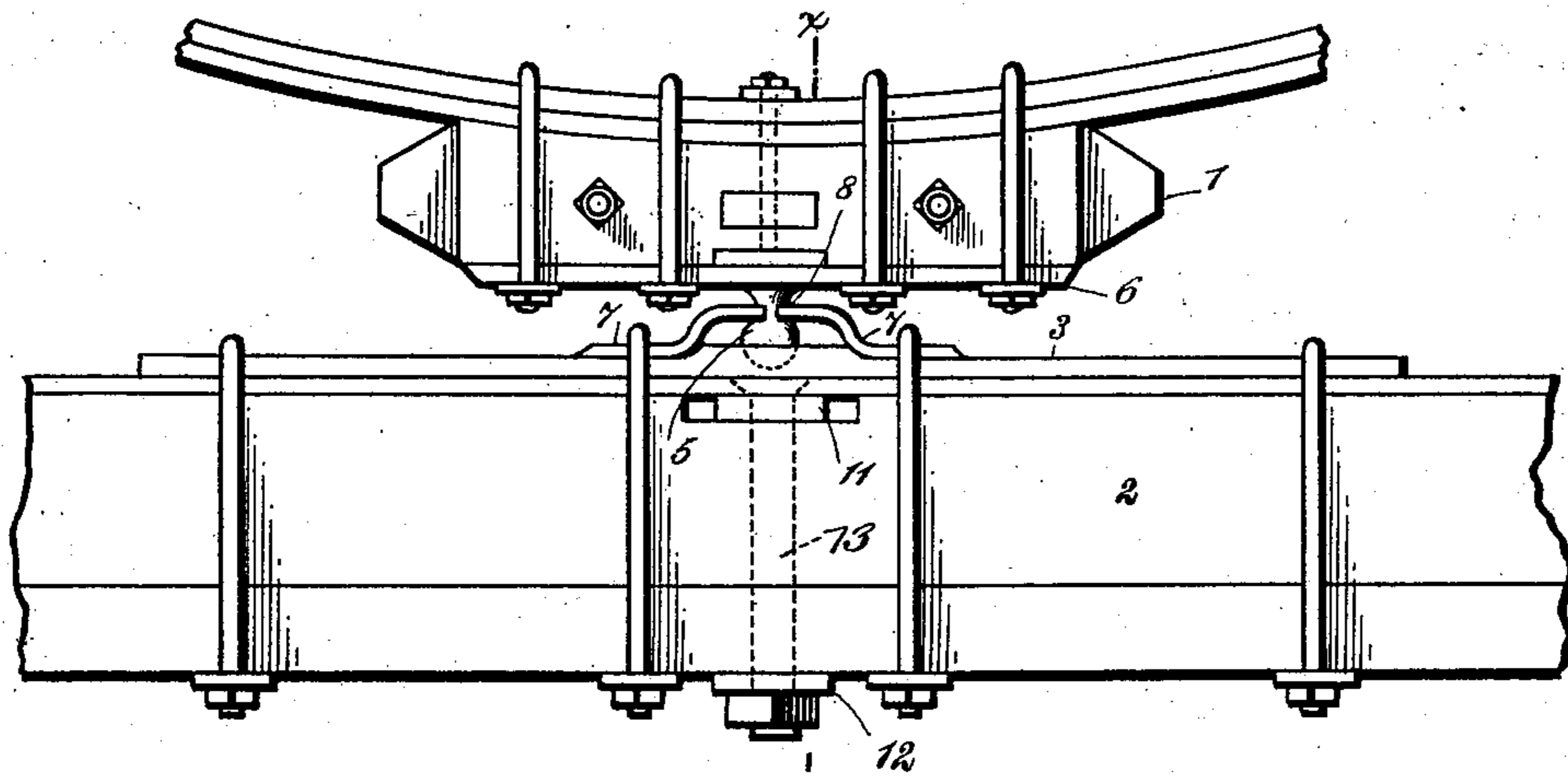


Fig. 2.

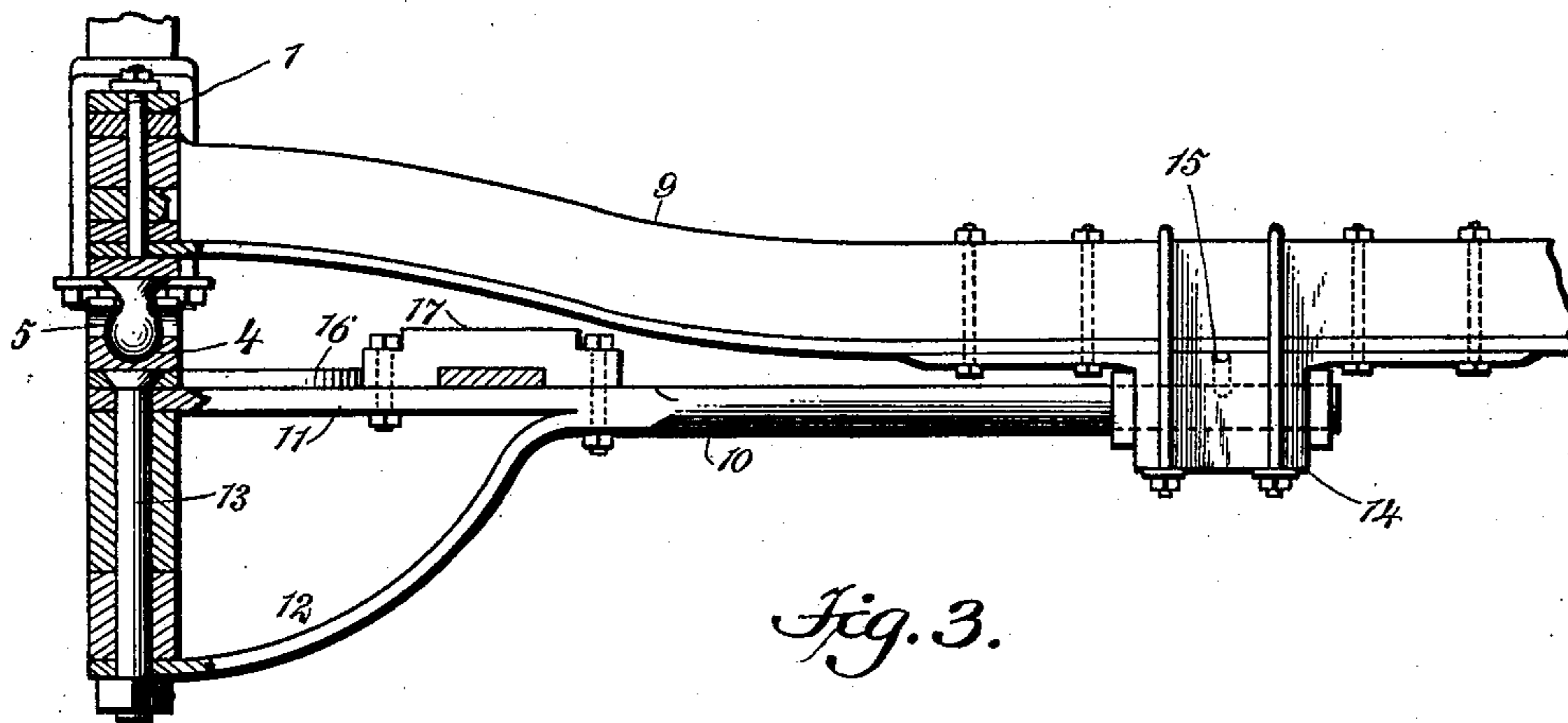


Fig. 3.

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STEPHEN ELI BANGS, OF BOONEVILLE, ARKANSAS.

FIFTH-WHEEL.

SPECIFICATION forming part of Letters Patent No. 696,300, dated March 25, 1902.

Application filed August 15, 1901. Serial No. 72,136. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN ELI BANGS, a citizen of the United States, and a resident of Booneville, in the county of Logan and State of Arkansas, have invented a new and Improved Fifth-Wheel, of which the following is a full, clear, and exact description.

This invention relates to improvements in fifth-wheels for vehicles; and the object is to provide a fifth-wheel so constructed that the body of the vehicle will maintain a horizontal or level position and prevent jar of the vehicle while the front axle is on an angle caused by one of the wheels passing over a large stone or other obstruction.

I will describe a fifth-wheel embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of a vehicle with a fifth-wheel embodying my invention applied thereto. Fig. 2 is a front elevation drawn on a larger scale and clearly showing the invention. Fig. 3 is a section on the line *xx* of Fig. 2, and Fig. 4 is a plan showing one member of the fifth-wheel.

Referring to the drawings, 1 designates the front spring-bolster of a vehicle, and 2 the front axle. Secured to the axle 2 is a plate 3, in which is a socket 4, which forms one member of the fifth-wheel. The other member consists of a ball 5, having a universal movement in the socket and connected to the bolster 1. It is here shown as connected to a plate 6, secured by clips to the bolster, which also secure the spring to the bolster. The ball is held from movement out of the socket by means of straps 7, clipped to the axle and having notches at their inner ends to receive the neck or reduced portion 8 of the ball member. A reach 9 is attached to the bolster in the usual manner, and a connecting-bar 10 has members 11 12 engaging, respectively, on the upper and lower sides of the axle and secured thereto so as to turn by means of a king-bolt 13. The rear end of the connecting-bar is mounted to turn axially in a block 14, secured to the reach, and this block is provided with an oil-hole 15.

A segment-plate 16 has its ends secured to the axle and is adapted to slide in a strap 17, attached to the connecting-bar.

In operation should one of the front wheels pass upon a stone or other obstruction, as indicated in Fig. 1, it will of course be elevated, which will considerably incline the axle. The axle, however, may turn on the ball member 5, while the body of the vehicle will remain level. Upon the tilting of the axle the connecting-bar 10 will turn in the block 14. It may be here stated that the connecting-bar is practically a portion of the reach.

While I have here shown my invention as applied to a light road-wagon, it is obvious that it may be used in connection with other vehicles, such as heavy wagons, traction-engines, threshing-machines, and the like. By my fifth-wheel the friction is reduced to a minimum and the rocking of the front axle is prevented.

While I have described and shown the ball 5 as secured by its plate to the front bolster of the vehicle and the socket 4 as secured by its plate to the axle, the arrangement may be reversed with equally good effect.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a vehicle, a bolster, an axle, a ball-and-socket connection between the bolster and axle, a reach extended from the bolster, a connecting-bar having swinging connection with the axle, and a rotary connection with the reach, and a segment-plate carried by the axle and slidable on the connecting-bar, substantially as specified.

2. In a vehicle, a bolster, a front axle, a ball-and-socket connection between the bolster and axle, a reach extended from the bolster, a connecting-bar having members engaging respectively the upper and lower sides of the axle, a king-bolt passing through said members and through the axle, a segment-plate carried by the axle and movable on the connecting-bar, and a block secured to the reach and in which the connecting-bar is mounted to turn, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

STEPHEN ELI BANGS.

Witnesses:

C. P. TRIMM,
OLES STOFER.