

June 19, 1923.

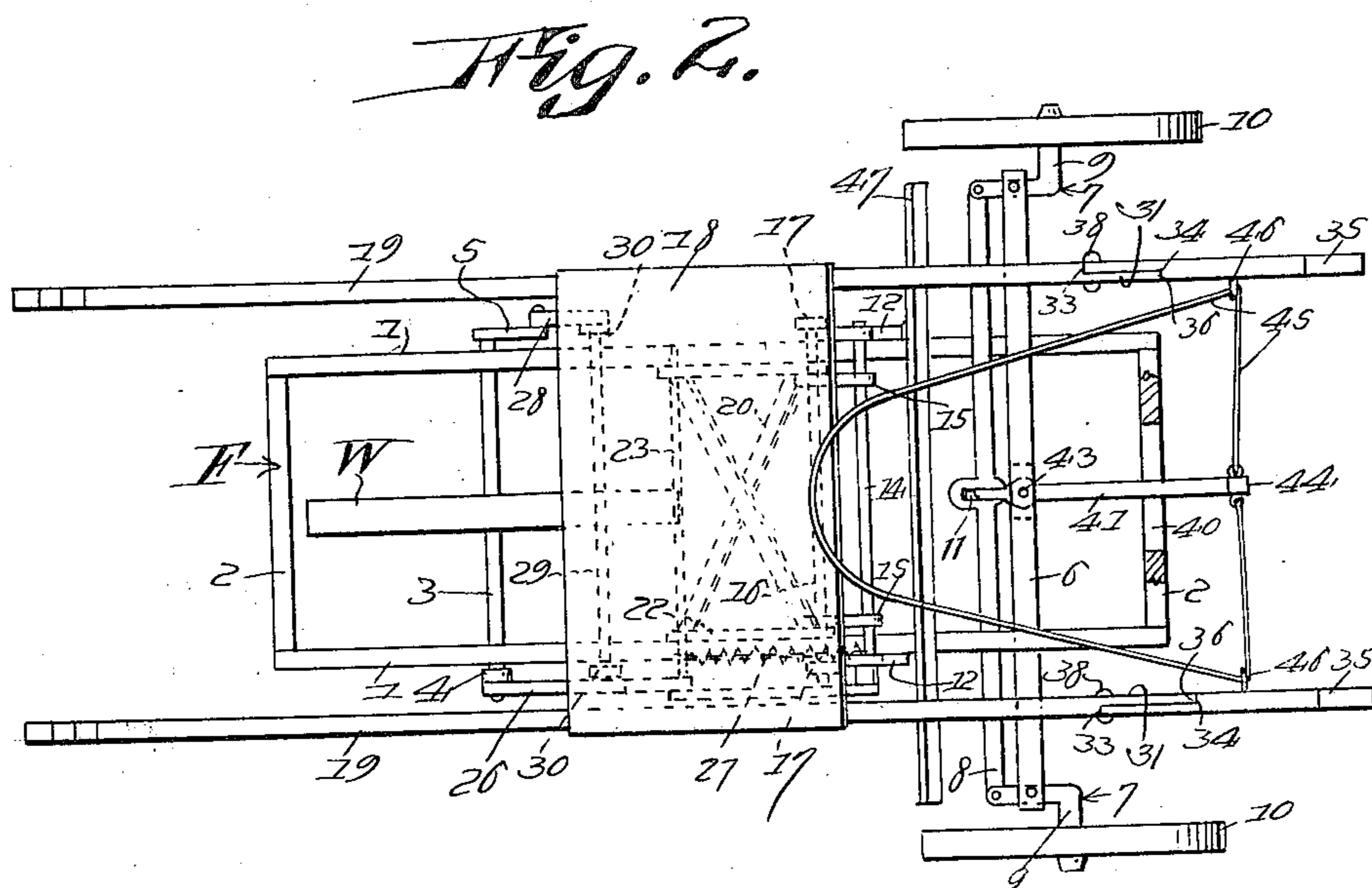
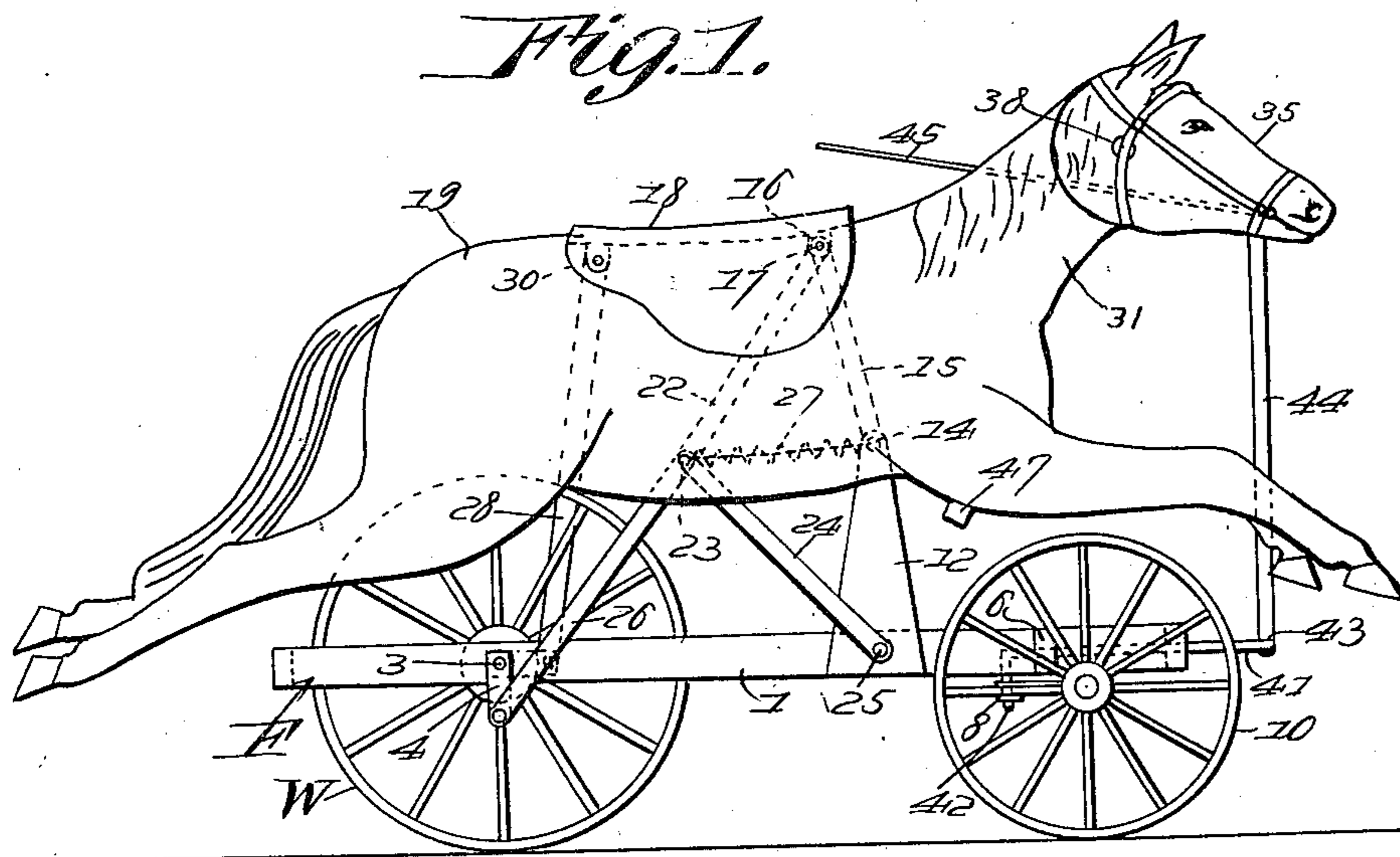
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E. S. SHOWERS

FIGURE TOY

Filed Feb. 20, 1922

2 Sheets-Sheet 1



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FIGURE TOY

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Fig. 3.

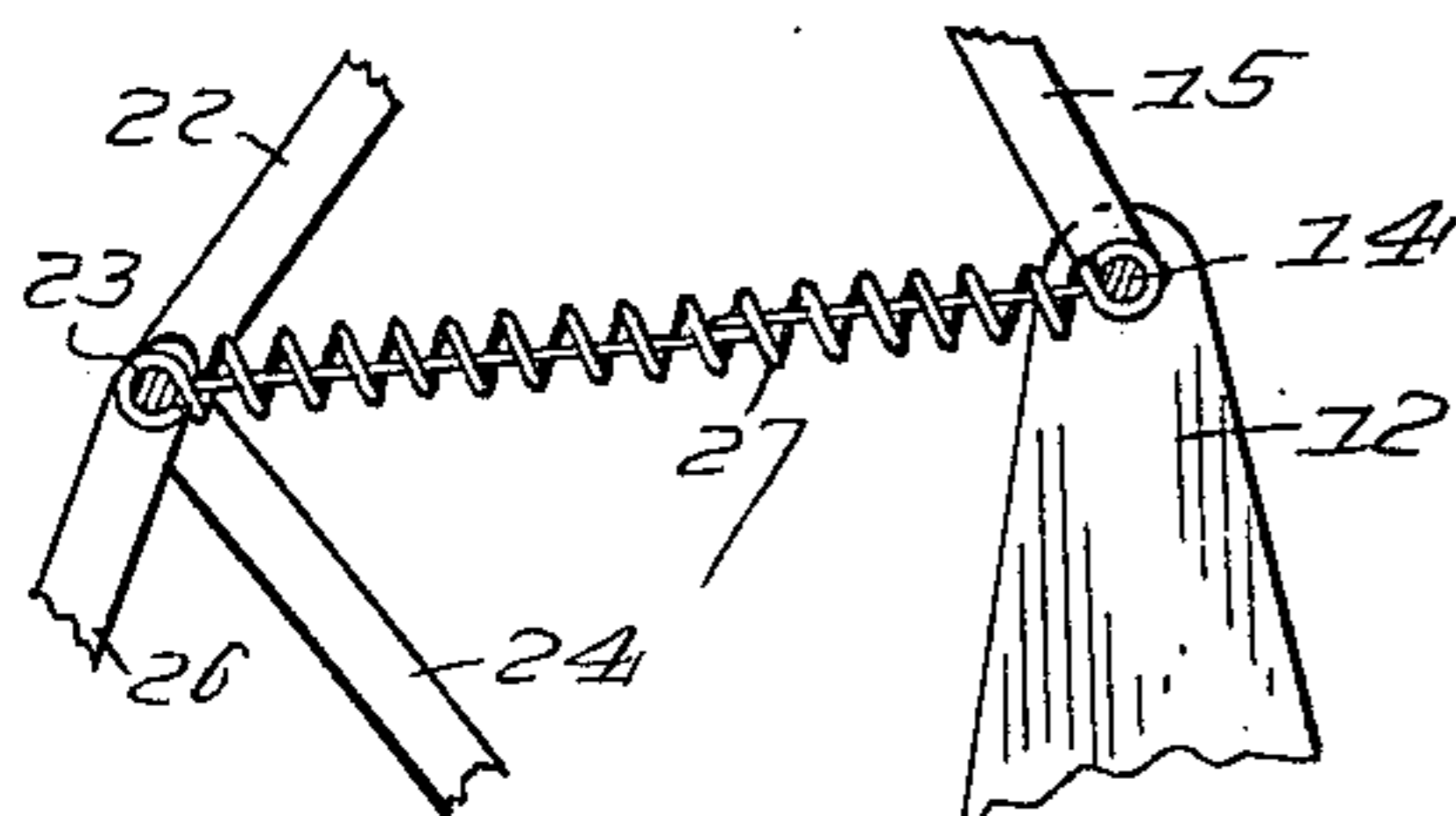
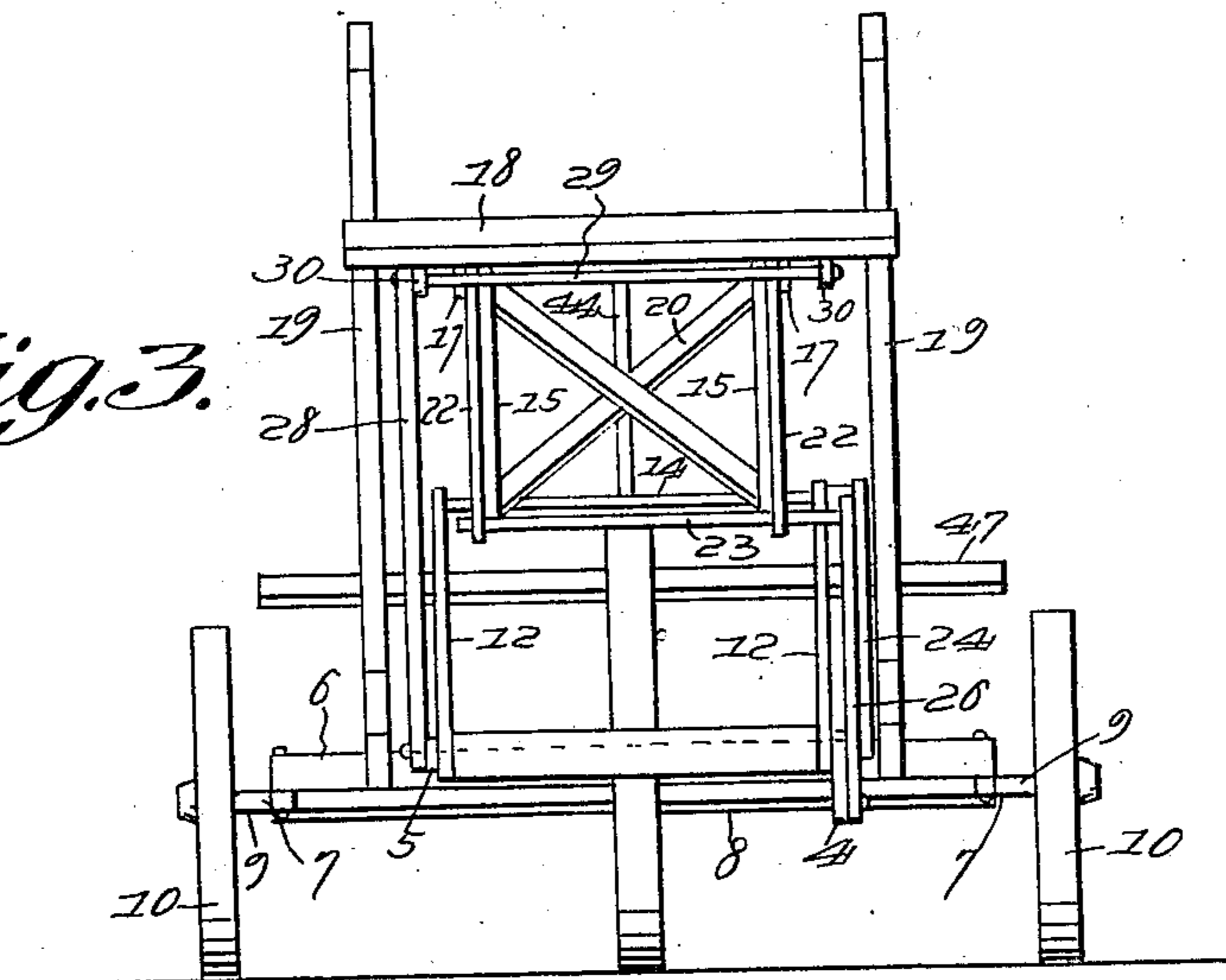


Fig. 4.

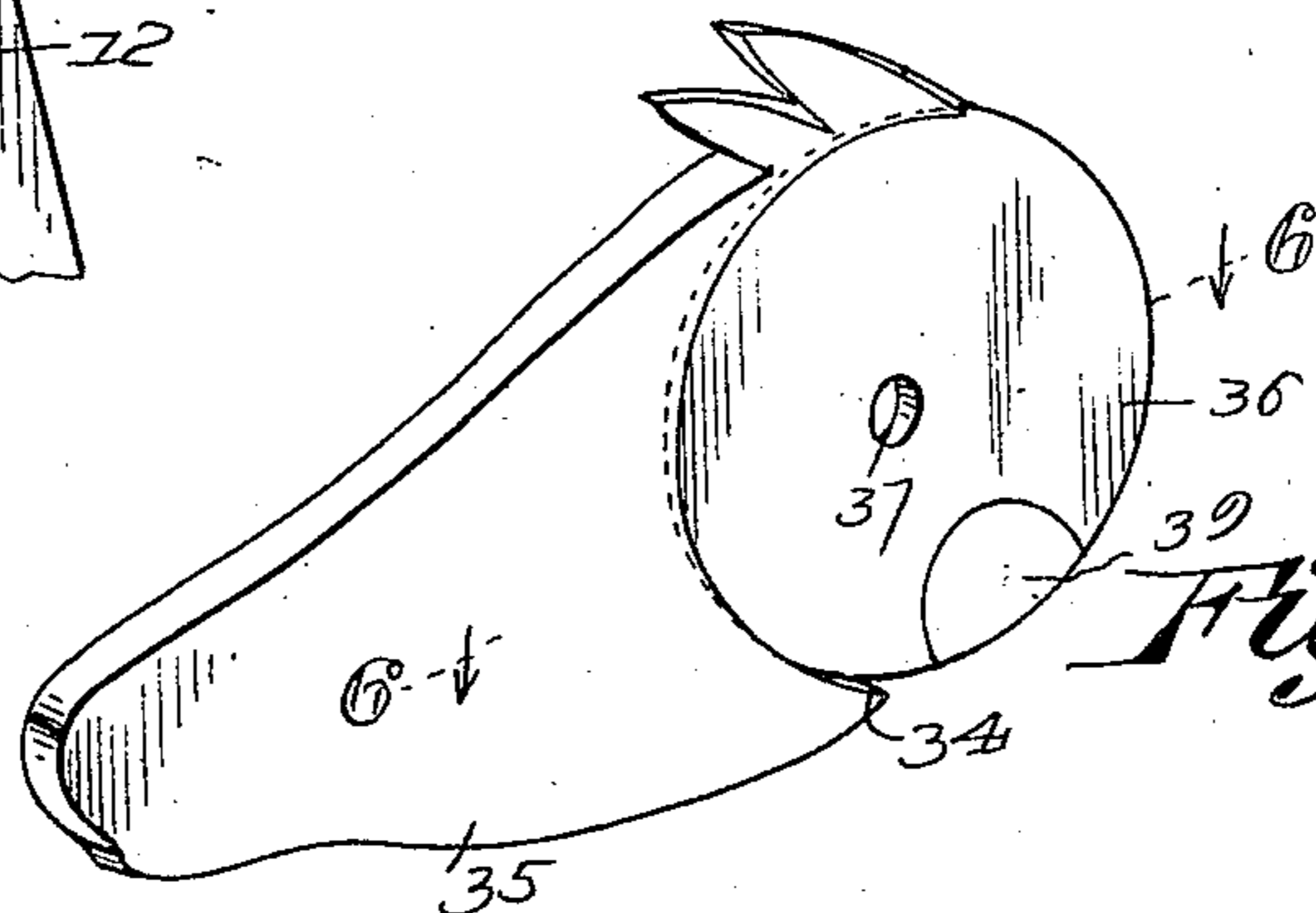


Fig. 5.

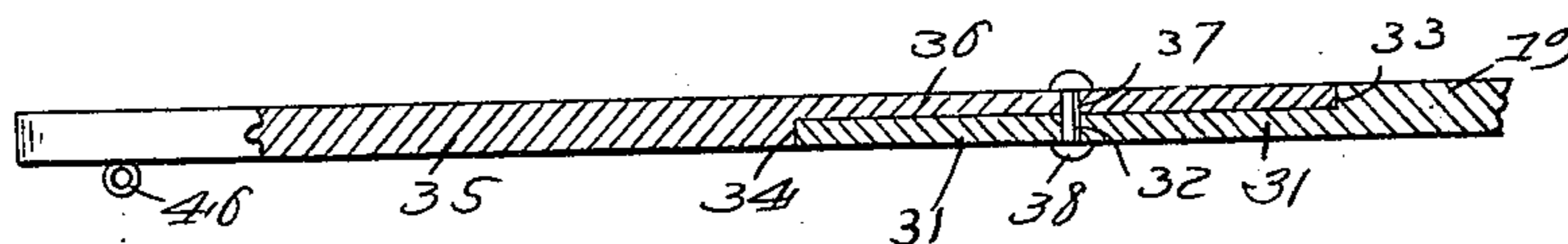


Fig. 6.

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UNITED STATES PATENT OFFICE.

ERNEST SINCLAIR SHOWERS, OF MICHIGAMME, MICHIGAN.

FIGURE TOY.

Application filed February 20, 1922. Serial No. 537,962.

To all whom it may concern:

Be it known that I, ERNEST S. SHOWERS, a citizen of the United States, residing at Michigamme, in the county of Marquette and State of Michigan, have invented certain new and useful Improvements in Figure Toys, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain improvements in figure toys and it is an object of the invention to provide a novel and improved device of this general character embodying a body or member supported for swinging movement and adapted to be occupied by a child, together with means whereby rocking or swinging movement of said body or member serves to propel the device in its entirety.

Another object of the invention is to provide a novel and improved device of this general character in simulation of a horse or other animal and which has associated therewith a ground engaging wheel, together with means operated by an occupant of the device for propelling the same.

An additional object of the invention is to provide a device of this general character having novel and improved means whereby the direction of travel of the device may be readily and conveniently controlled by the child seated upon the device.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved figure toy whereby certain important advantages are attained and the device rendered simpler, less expensive and otherwise more convenient and advantageous for use, as will be hereinafter more fully set forth.

The novel features of my invention will hereinafter be definitely claimed.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein:

Figure 1 is a view in side elevation illustrating a figure toy constructed in accordance with an embodiment of my invention;

Figure 2 is a view in top plan of the device as illustrated in Figure 1;

Figure 3 is a view in rear elevation of the structure as herein disclosed;

Figure 4 is an enlarged fragmentary view partly in elevation and partly in section

illustrating the retractile member to facilitate the operation of the toy;

Figure 5 is a view in perspective of one of the head members detached; and

Figure 6 is an enlarged sectional view taken substantially on the line 6—6 of Figure 5.

As herein disclosed, F denotes a frame comprising two spaced beams 1 arranged in parallelism and having their extremities connected by the cross members 2. Rotatably supported by the rear portions of the beams 1 and bridging the space therebetween is a shaft 3 to which is fixed a ground engaging wheel W, said wheel being positioned substantially midway between the beams 1. The shaft 3 extends outwardly of the beams 1 and secured to the extended portions of said shafts are the cranks 4 and 5 in quarter relation.

Secured to the forward end portions of the beams 1 is a transversely disposed member or bolster 6, said member or bolster extending a predetermined distance outwardly of the beams 1. Pivotaly engaged with the extremities of the member or bolster 6 are the spindle arms 7. These arms 7 are of a length to extend forwardly and rearwardly of the member or bolster 6 and the rear end portions of said arms 7 are operatively connected with the rod 8 whereby the spindle arms 7 are maintained in substantially parallel relation and have unitary swinging or rocking movement. The forward end portions of the arms 7 are provided with the outstanding spindles 9 upon each of which is mounted a ground engaging wheel 10. The central portion of the connecting rod 8 is provided with a slot 11 disposed in a direction longitudinally of the frame F, the purpose of which will be hereinafter more particularly referred to. Upon endwise movement of the connecting rod 8, the direction of travel of the device may be readily controlled.

Extending upwardly from the beams 1 at a predetermined distance in advance of the wheel W are the standards 12, the upper end portions of which engage the extremities of and support a transversely disposed rod 14. Loosely engaged with the rod 14 adjacent the standards 12 are the rigid links 15, the opposite or upper extremities of said links being loosely engaged with a rod 16. The rod 16 is supported by the transversely

spaced bearing 17 depending from a seat structure 18. This seat structure 18 is secured to the upper marginal portions of the side members 19, said side members being substantially in duplicate and in simulation of the body of a horse or other animal. Connecting the opposite end portions of the links 15 are the crossed braces 20.

Also loosely engaged with the rod 16 are the end portions of the rigid links 22, said links extending inwardly and downwardly and having their opposite end portions loosely engaged with a rod 23. The rod 23 also has loosely engaged therewith the upper end portions of the links 24 which extend forwardly and downwardly and are operatively engaged with the extended extremities of a rod 25 extending transversely of the frame F and supported by the beams 20 thereof, said rod 25 being positioned below and substantially in vertical alinement with the rod 14.

Loosely engaged with an extended end portion of the rod 23 is the upper end portion of a pitman 26, the lower end portion of said pitman being operatively engaged with the crank 4. Connecting the rod 14 and the extended end portion of the rod 23 with which the pitman 26 is engaged is a retractile member or coiled spring 27 which operates to facilitate the propulsion of the device and to compensate to a certain extent for the weight of the child occupying the seat structure 18.

Operatively engaged with the crank 5 is an end portion of a pitman 28, said pitman extending upwardly and having its opposite end portion operatively engaged with a rod 29 supported by and bridging the space between a pair of depending bearings or blocks 30 arranged at the rear portion of the seat structure 18.

As the body of the child or other occupant of the seat structure 18 is swayed backward and forward, the seat structure 18, together with the side members 19, are caused to rock and in a manner whereby such motion is transmitted through the pitmen 26 and 28 to the axle or shaft 3 resulting in the desired rotation of the wheel W whereby the device in its entirety is caused to be propelled. By having the cranks 4 and 5 in quarter relation, the running action of a horse or other animal is closely simulated and the possibility of the wheel W getting on a dead center is substantially eliminated.

Each of the side members 19 at its upper forward end is provided with an outwardly disposed extension 31 having its margin substantially concentric to an opening 32. The rear portion of the extension 31 at its opposite sides is defined by the arcuate shoulders 33 also substantially concentric to the opening 32. Each of the extensions 31 snugly engages within a kerf 34 produced in the in-

ner end of a member 35, said member 35 being in simulation of the head of a horse or other animal.

The rear portion of the head member 35 is arcuate in form for substantially close contact with the shoulders 33 while the inner closed wall 36 of the kerf 34 is arcuate in form for substantially close contact with the arcuate margin of the extension 31. The rear portion of the head member 35 is provided with an opening 37 adapted to register with the opening 32 of the extension 31 and disposed through said registering openings 32 and 37 is a pin 38 whereby the head member 35 is supported by a side member 19 for swinging movement in a vertical direction.

The head member 35 is adapted to be normally disposed in substantially a horizontal position and in order to facilitate the maintenance of such position as the side members 19 oscillate in a vertical direction, the rear portion of each of the head members 35 is provided with a suitably positioned balancing weight 39.

The forward cross member 2 is provided with an opening 40 through which is disposed the rear end portion of a horizontally directed rod 41, said opening 40 permitting the rod 41 to be laterally swung in substantially a horizontal direction. The inner or rear end portion of the rod 41 is provided with a depending extension or arm 42 which engages within the slot 11 in the connecting rod 8 so that, upon lateral swinging movement of the rod 41, the rod 8 will be moved in a direction to effect the desired steering movement of the wheels 10 so that the direction of travel of the device may be readily determined.

Pivotally engaged, as at 43, with the forward end portion of the rod 41 is an upstanding arm 44 of a length to have its upper extremity terminate between the forward end portions of the head members 35. Secured to the upper extremity of the arm 44 are the flexible members 45 which serve as steering lines or reins. Each of these members 45 is disposed in opposite directions from the upstanding arm 44 and said members 45 are disposed through the inwardly directed guide eye members 46 carried by the forward portions of the head members 35. The flexible members 45 are of a length to extend rearwardly to be conveniently grasped by the occupant of the seat structure 18. By pulling upon either of the members or reins 45, the direction of travel of the device may be readily controlled and in the same manner employed in driving a horse or other animal.

Connecting the forward portions of the side members 19 and in advance of and below the seat structure 18 is a cross member 47 which, in addition to further maintain-

ing the side members 19 in proper relation, also provides a foot rest which facilitates the child occupying the seat structure 18 effecting the desired rocking or oscillatory movement of the body as afforded by the side members 19 and the interposed seat structure 18.

From the foregoing description it is thought to be obvious that a figure toy constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated, and it will also be obvious that my invention is susceptible of some change and modification without departing from the principles and spirit thereof and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice except as hereinafter claimed.

I claim:

1. In combination, a frame, a supporting wheel therefor, a body, a link connecting the body and the frame to permit the body to have movement relative to the frame, a driving connection between the body and the wheel, a link pivotally connected with the body, another link pivotally connected with the frame, means for pivotally connecting the last named links, and a driving connection between the last named links and the wheel.

2. In combination, a frame, a supporting wheel therefor, a body, a link connecting the body and the frame to permit the body to have movement relative to the frame, a driving connection between the body and the wheel, a link pivotally connected with the body, another link pivotally connected with the frame, means for pivotally connecting the last named links, a driving connection between the last named links and the wheel, and automatic means for imparting movement to the last named links in one direction.

3. In combination, a frame, a supporting wheel therefor, a body, a link connecting the body and the frame to permit the body to have movement relative to the frame, a driving connection between the body and the wheel, a link pivotally connected with the

body, another link pivotally connected with the frame, means for pivotally connecting the last named links, a driving connection between the last named links and the wheel, and a spring associated with the last named links for constantly urging the same in one direction.

4. In combination, a frame, a supporting wheel therefor, a body, a link connecting the body and the frame to permit the body to have movement relative to the frame, a driving connection between the body and the wheel, a link pivotally connected with the body, another link pivotally connected with the frame, means for pivotally connecting the last named links, a driving connection between the last named links and the wheel, and a retractile member operatively engaged with the frame and with the last named links for constantly urging said last named links in one direction.

5. In combination, a frame, a shaft carried thereby, a body, a supporting wheel fixed to the shaft, angularly related cranks carried by the shaft, means interposed between the frame and body and operatively engaged therewith to permit the frame and body to have movement one relative to the other, a driving connection between said means and one of the cranks of the shaft, and a second driving connection between the body and the second crank of the shaft.

6. A device of the class described, comprising in combination, a body supported for rocking movement, a head member, means for pivotally connecting the head member to the body, and means carried entirely by the head member for automatically tending to maintain the head member always in the same balanced position irrespective of the position of the body during its rocking movement.

7. A device of the class described, comprising in combination, a body supported for rocking movement, a head member, and weighted means carried entirely by the head member tending to maintain the head member always in the same balanced position irrespective of the position of the body during its swinging movement.

In testimony whereof I hereunto affix my signature.

ERNEST SINCLAIR SHOWERS.