

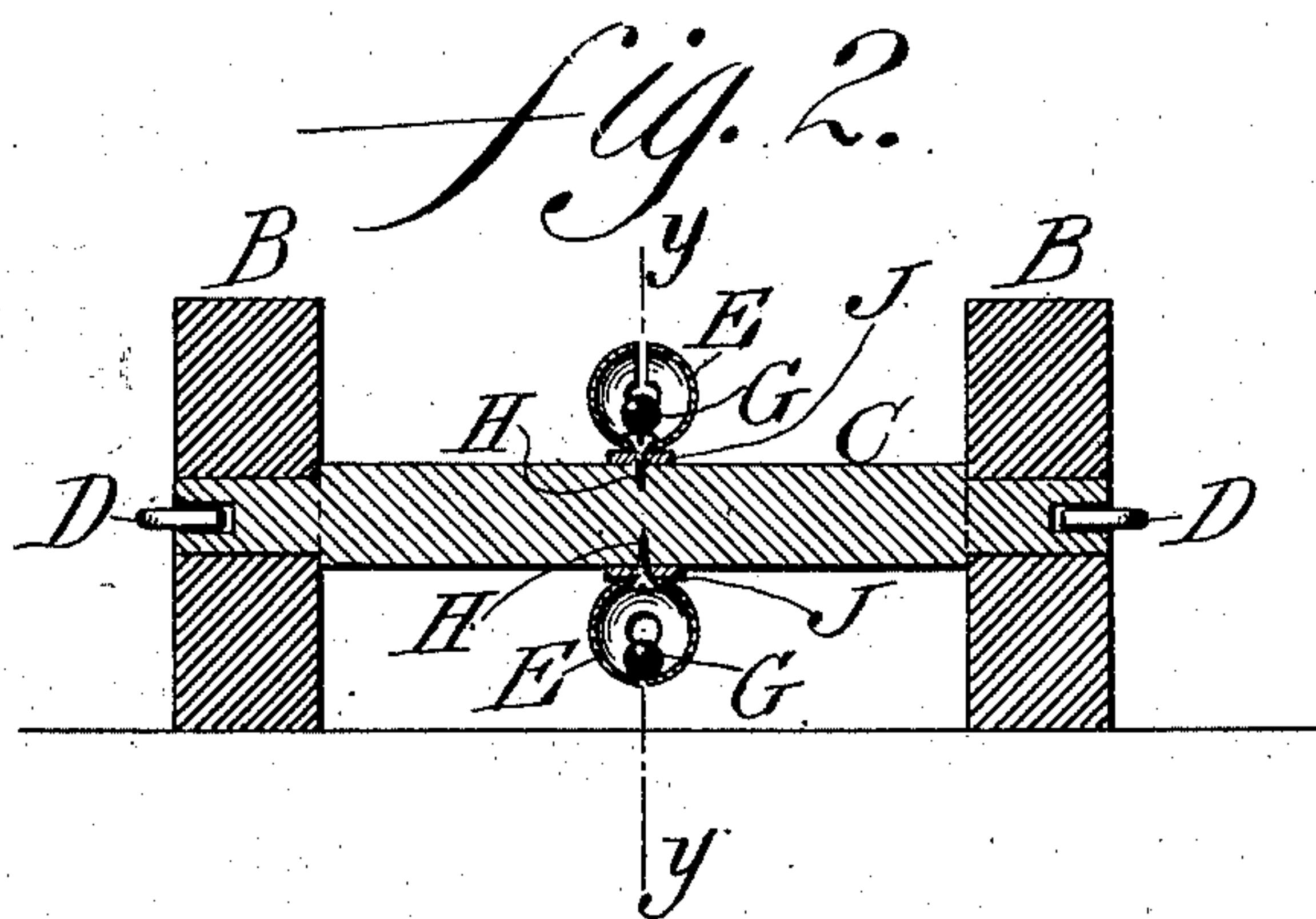
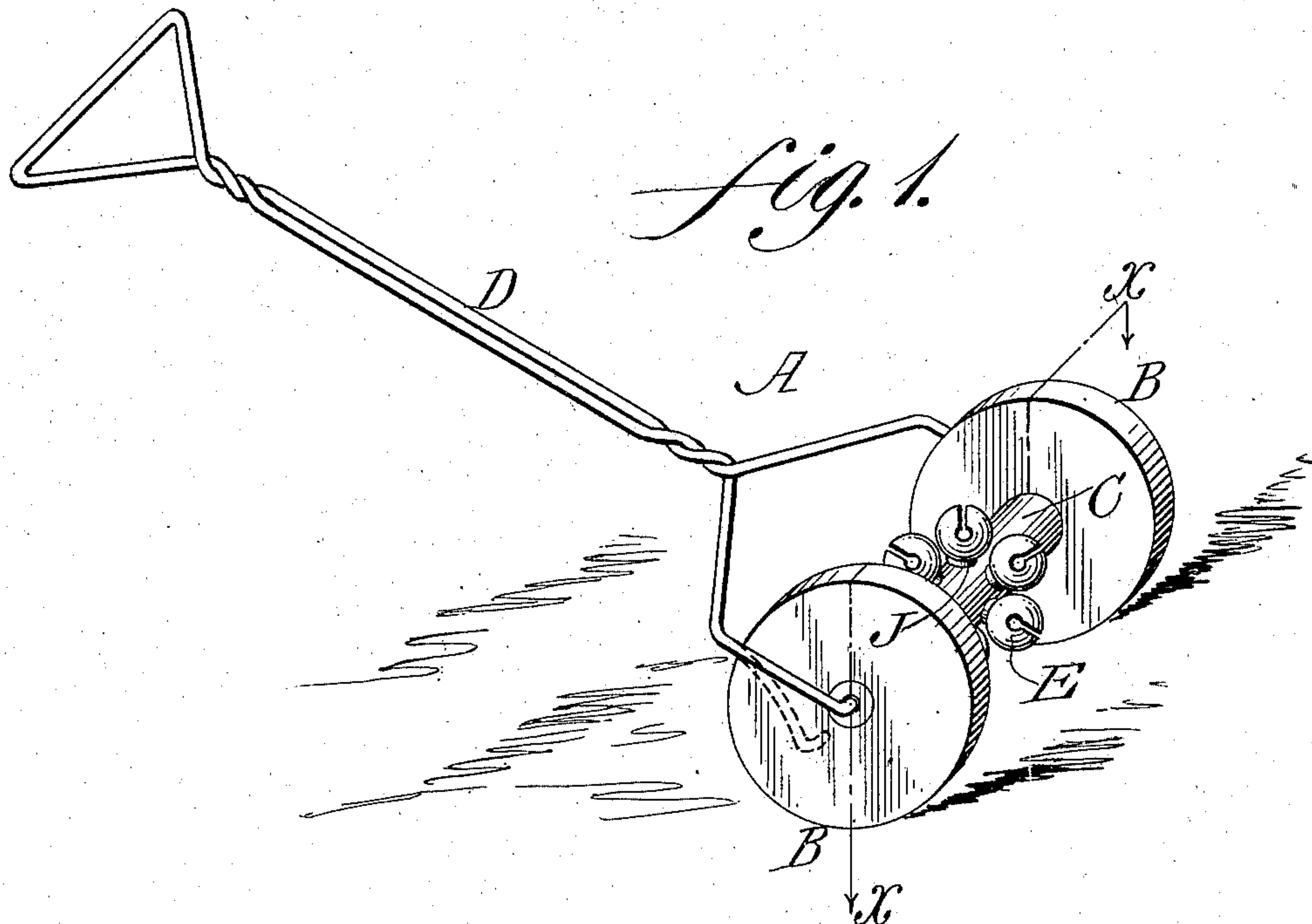
No. 741,963.

PATENTED OCT. 20, 1903.

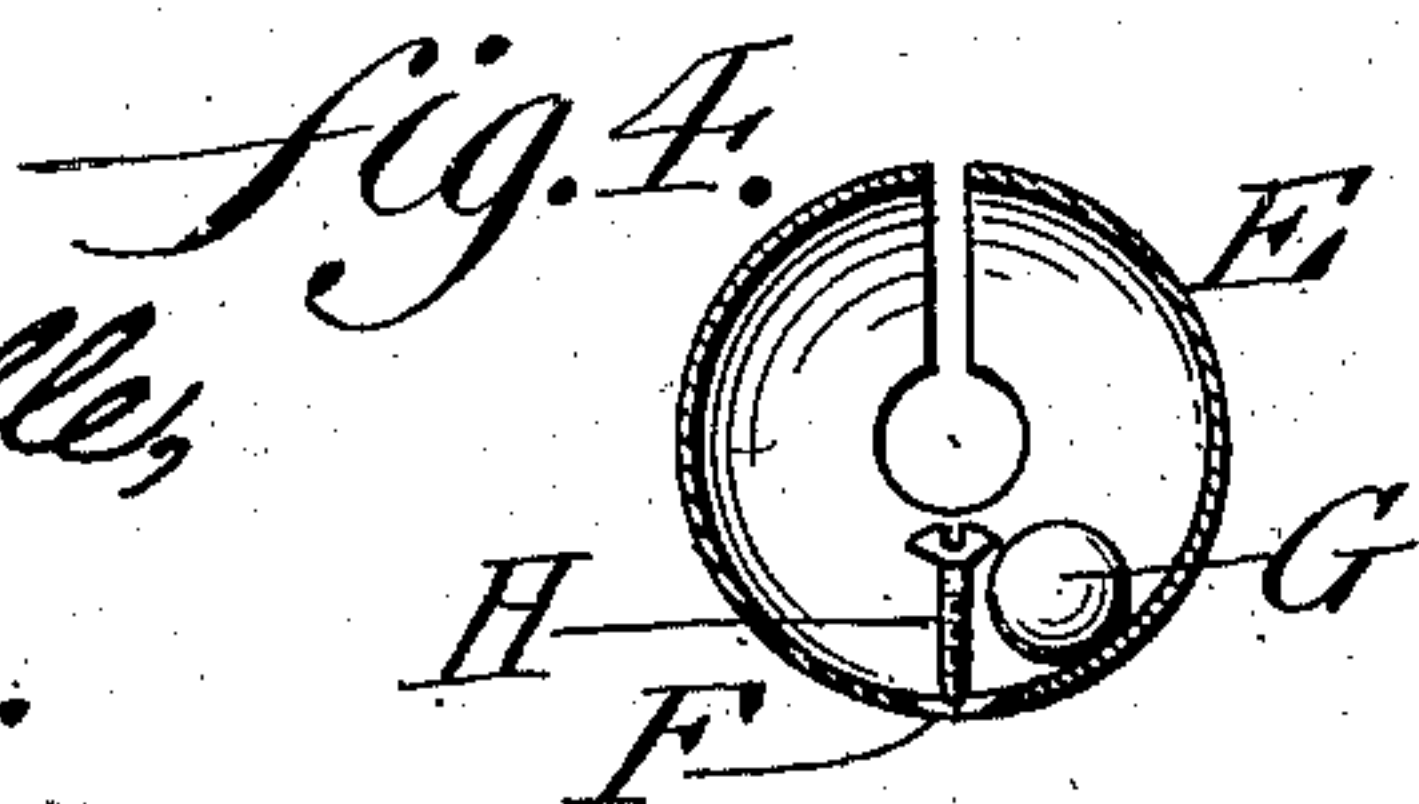
E. S. HALE.  
TOY.

APPLICATION FILED AUG. 7, 1903.

NO MODEL.



Witnesses  
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# UNITED STATES PATENT OFFICE.

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## TOY.

SPECIFICATION forming part of Letters Patent No. 741,963, dated October 20, 1903.

Application filed August 7, 1903. Serial No. 168,590. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD S. HALE, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented new and useful Improvements in Toys, of which the following is a specification.

My invention consists of a toy of the order of a trundle provided with bells which are attached to the axle of the trundle in such manner that they are not liable to be wrenched off nor to impart blows to said axle, lose their clear sound, and be battered, as will be hereinafter described, the novel features being pointed out in the claims.

Figure 1 represents a perspective view of a toy embodying my invention. Fig. 2 represents a transverse section thereof on line *x x*, Fig. 1. Fig. 3 represents a longitudinal section on line *y y*, Fig. 2. Fig. 4 represents a section of one of the bells of the toy on an enlarged scale.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates the toy, the same consisting of the wheels B, the axle C, fixed thereto, the handle D, the bells E, the counter-openings F in the walls of said bells, the loose balls or hammers G within the bells, the screws H, and pads J, of soft or pliable material, it being noticed that the toy is propelled after the order of a trundle, whereby the bells are rotated with the axle C, and so are struck by the balls or hammers, and thereby rung, which adds to the interesting nature of the trundle.

Special attention is directed to the manner of securing the bells to the axle. The opening F in each bell is at what may be termed the "inner" portion of the wall thereof, and said portion rests on a pad J. A screw H is passed through one of the enlarged sound-emitting recesses in the bell and its shank dropped into said opening F. A screw-driver is now inserted through the narrow slot which joins said recesses and fitted in the nick in the head of said screw. The point of the screw is then presented to the pad J and the screw rotated and driven through said pad into the axle C, whereby the bell is secured to the latter, while the head of the screw con-

tacts with the inner wall of the opening F and tightens thereagainst, thus holding the bell rigidly in position while it is seated on the pad as a cushion, the screw thus being a common connection for the bell and pad with the axle.

It will be seen that the bells cannot strike the axle, and so produce the sound of blows on the wood or material of the axle, nor be battered thereagainst and wrenched from the axle, while as the bells are seated on the pads as soft and pliable cushions their sound will not be deadened or made dull, but, on the contrary, will be clear and musical.

The bells are of the order of spherical, globular, or bulbous, it being noticed that the balls or hammers G are of greater diameter than the openings or inlets in the bells through which the screws and screw-drivers are inserted, whereby said balls or hammers are prevented from escaping from the bells, to which extent the bells may be said to be closed. When the screws are rotated to full extent, their heads are seated upon the countersunk walls of the openings F, and so take firm hold of the bells, whereby the latter are tightly and rigidly held on the axle with the pads interposed between the same, providing reliable connections for the bells with the axle considering the small holding-surfaces provided. Again, as the heads of the screws occupy the countersunk walls of the openings F their exposed faces do not project materially from the inner walls of the bells. Consequently the loose balls or hammers G may roll freely over the same without perceptibly changing the sound imparted to the bells by being struck by said hammers. Furthermore, a bell may be removed and replaced by another one without requiring one expert in the work to disconnect the existing bell. Withdraw the screw therefrom, place the same in the opening of a fresh bell, and drive it through the pad into the axle, this being accomplished without disturbing the other bells and pads.

Various changes may be made in the details of construction without departing from the general spirit of my invention, and I do not, therefore, desire to be limited in each case to the same.



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

1. In a toy of the order of a trundle, a closed bell on the axle thereof, the same having an opening and seat in the inner portion of its wall and an inlet in another portion thereof, a loose hammer within the bell, and a screw passed through said opening into said axle, the head of said screw tightly occupying said seat.

2. In a toy of the order of a trundle, a bell on the axle thereof, the same having an opening and seat in the inner portion of its wall, a cushion interposed between said bell and axle, the bell resting thereon and a screw passed through said opening and through said pad into said axle, the head of the screw tightly occupying said seat, said hammer being of greater diameter than said inlet, and said screw being of less diameter than the same.

3. In a toy of the order of a trundle, a closed bell on the axle thereof, a cushion interposed between said bell and axle, said bell having

an opening and a countersunk seat in the inner portion of its wall and an inlet in another portion of said wall and a screw passed through said opening and pad into said axle and having its head tightly occupying said seat and rigidly sustaining said bell on said pad, said screw forming a common connection for said bell and pad with said axle.

4. In a toy of the order of a trundle, a closed bell on the axle thereof, a loose hammer in said bell, a cushion interposed between said bell and axle and a screw forming a common connection for said bell and pad with said axle, said bell having an opening and a countersunk seat in the inner portion of its wall and an inlet in another portion thereof, the head of said screw occupying said countersunk seat, said hammer being of greater diameter than said inlet and said screw being of less diameter than the same.

EDWARD S. HALE.

Witnesses:

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