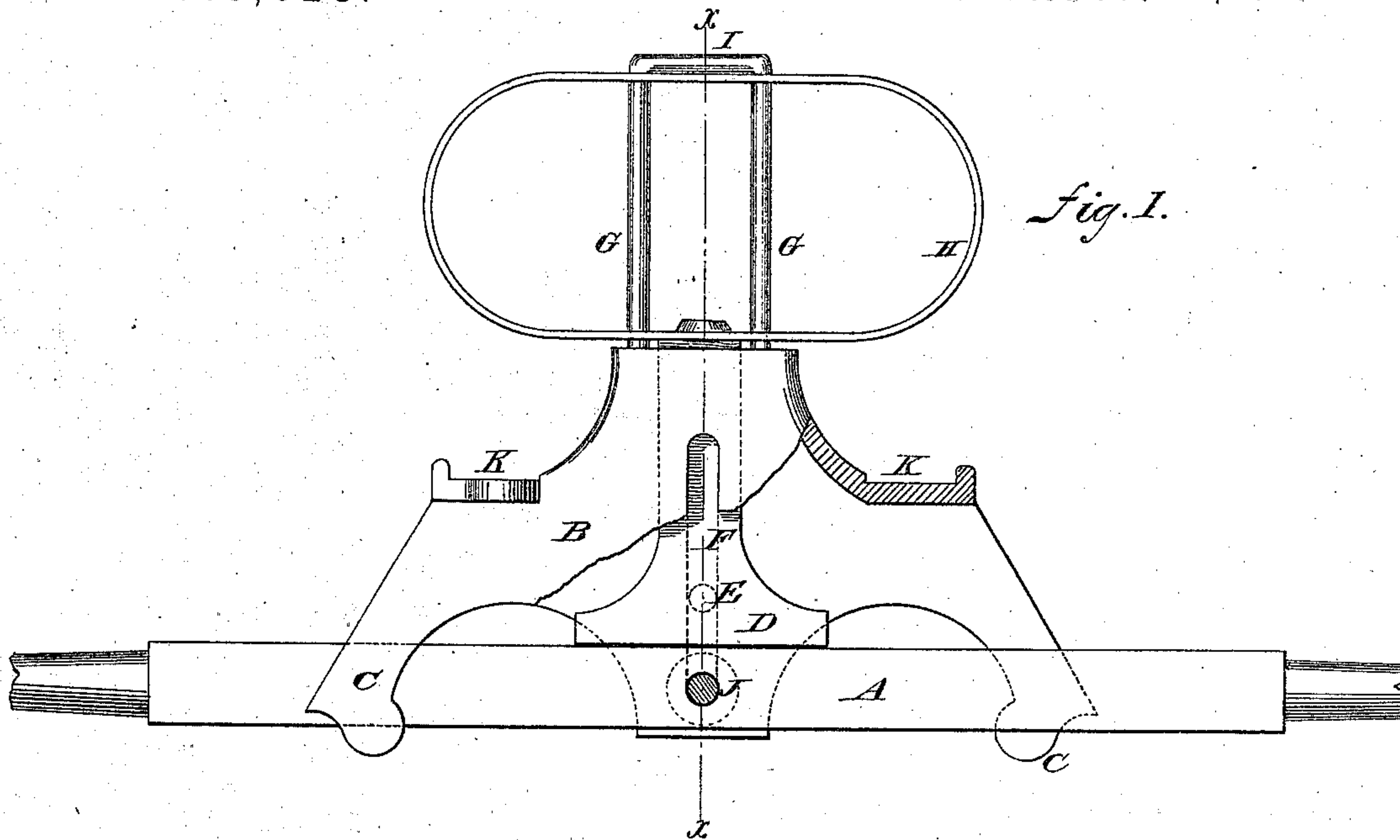


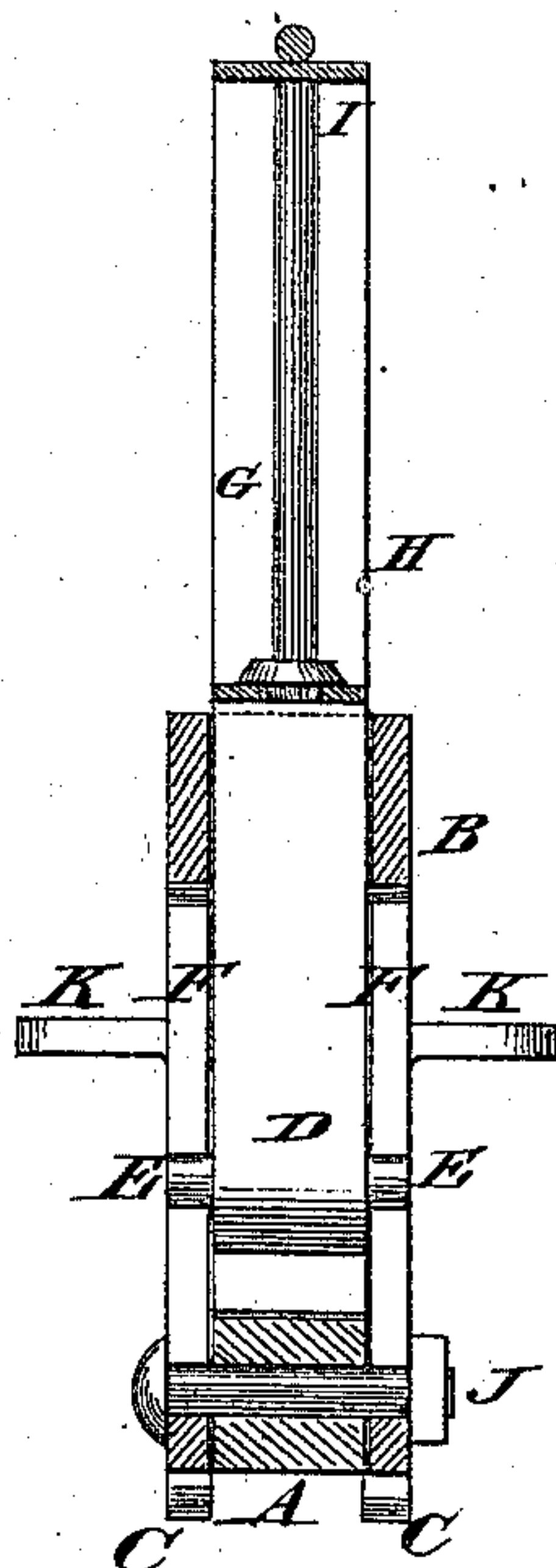
**J. G. KAMPHAUS.**  
**Children's Carriages.**

No. 143,628.

Patented Oct. 14, 1873.



*Fig. 2.*



**Witnesses:**  
*Gustave Dieterich*  
*Julius*

**Inventor:**  
*J. G. Kamphaus*  
**Per** *Wm. Co.*  
**Attorneys.**

# UNITED STATES PATENT OFFICE.

JOHN G. KAMPHAUS, OF PITTSBURG, PENNSYLVANIA.

## IMPROVEMENT IN CHILDREN'S CARRIAGES.

Specification forming part of Letters Patent No. **143,628**, dated October 14, 1873; application filed August 16, 1873.

*To all whom it may concern:*

Be it known that I, JOHN G. KAMPHAUS, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Childs' Carriage, of which the following is a specification:

This invention relates to the construction of carriages for children; and consists in the mode of connecting the axle with the bolster, by means of which concussion and jolting are avoided.

Figure 1 is a front elevation, partly in section. Fig. 2 is a vertical section of Fig. 1 taken on the line *x x*.

Similar letters of reference indicate corresponding parts.

A represents the front axle. B is the bolster, which is a shell having arms C, which extend down from each end and inclose and guide the axle. D is a spring-block, which rests upon the axle, and extends upward through the top of the bolster. E is a pin, which passes through the block D with its ends projecting through the vertical slots F of the bolster. G G are two rods, rigidly connected with the bolster, and connected together at their upper ends, as seen in the drawing. H is a spring. This spring is formed of hoop-steel, or other metal, and is attached to the top of the spring-block at the bottom, and confined at the top by a con-

necting-piece. The rods G G pass through the spring each side. The bolster is attached to the axle by the bolt J, which bolt passes through the lower end of the slots F. This arrangement allows the axle to spring upward when either one or both wheels strike an obstruction. The carriage-body is supported on longitudinal bars, whose forward ends rest on the bolster at the points *k k*, and will maintain its true position and be kept square and steady while the wheels readily conform to all the irregularities of the road.

I am aware that in children's carriages a bolster and leaf-spring have been connected with the axle by a slotted plate, and a pin working in the slot, and wish, therefore, distinctly to disclaim any such device as a part of my invention.

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

The bolster B, spring-block D, spring H, and rods G G, combined and constructed substantially as shown and described, for the purposes set forth.

JOHN G. KAMPHAUS.

Witnesses:

JAMES M. TAYLOR,  
JAMES J. SEXTON.