

(No Model.)

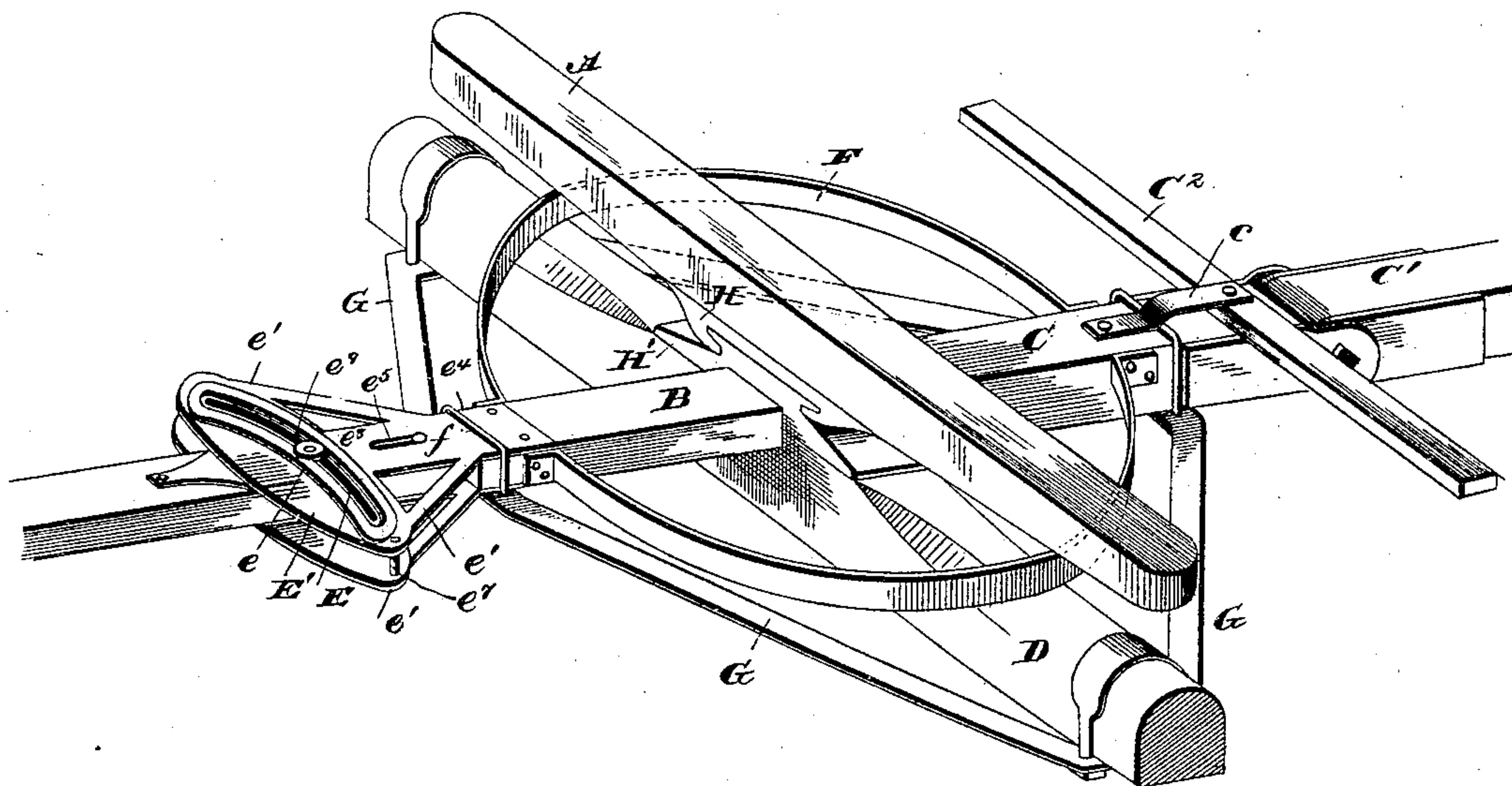
M. KEECH & J. LABERDEE.

## RUNNING GEAR FOR WAGONS.

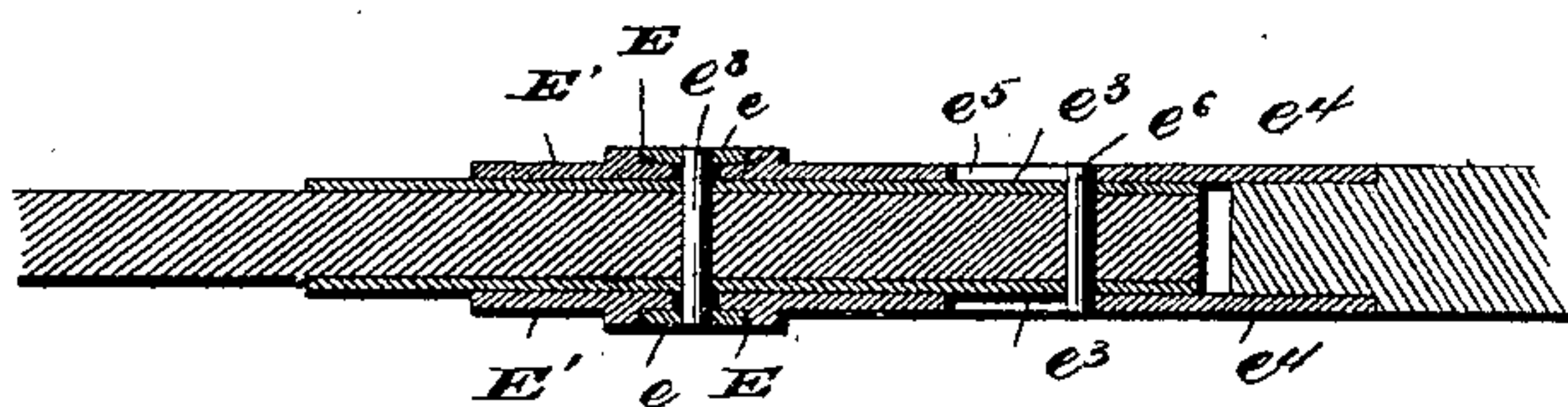
No. 388,282.

Patented Aug. 21, 1888.

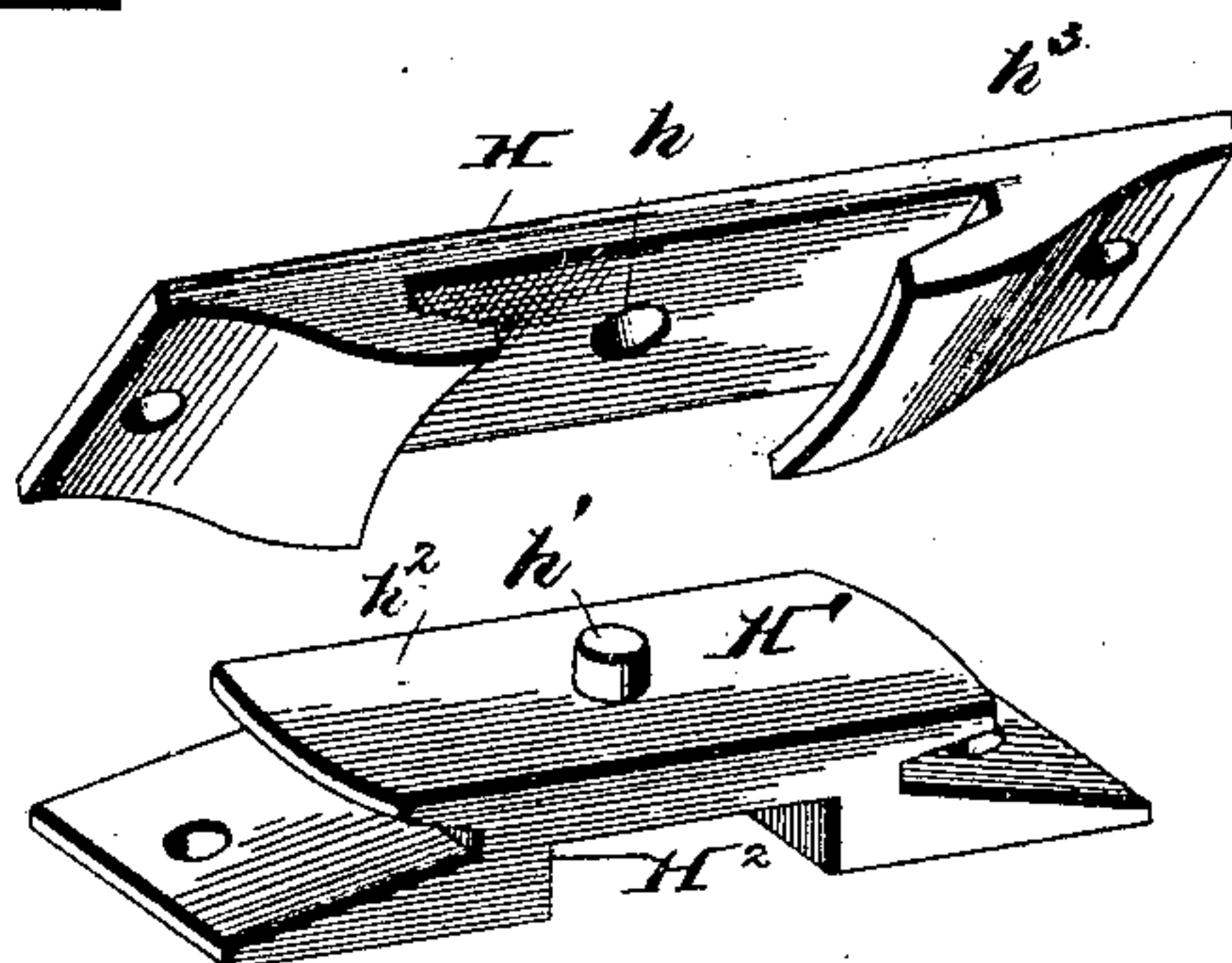
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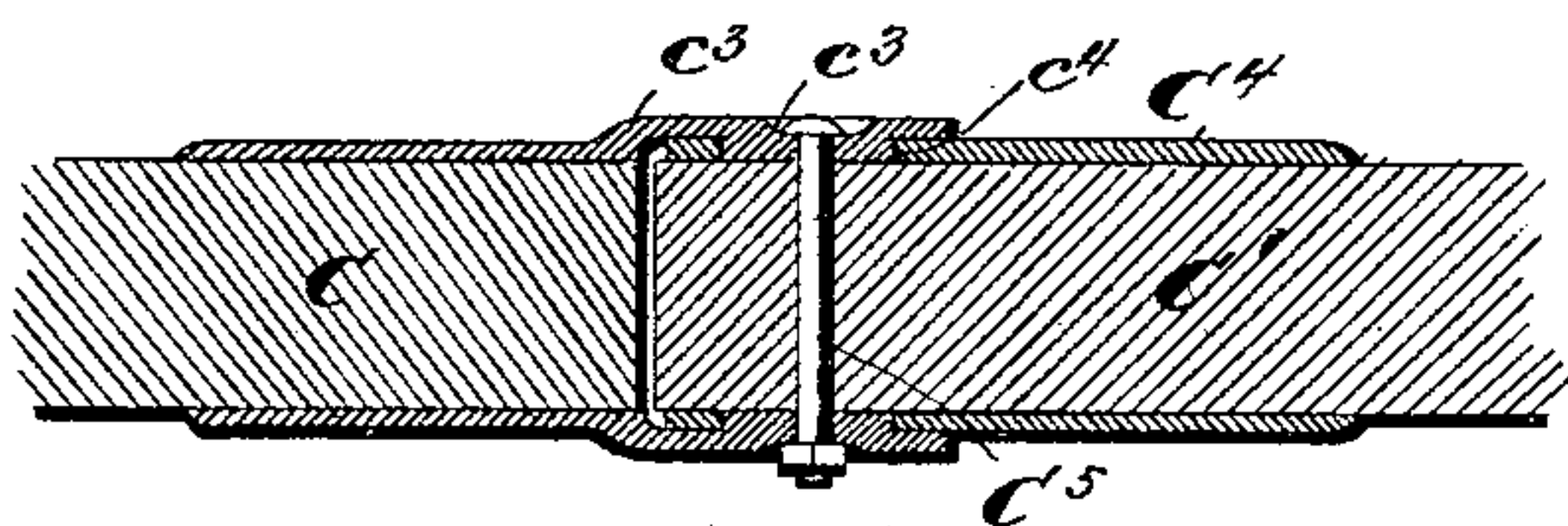
Fi. 22.



F. 2. 3.



H = 44



Milton Keech.  
—and—  
Joseph Laberdee.

WITNESSES.

WITNESSES:  
G. S. Elliott,  
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# UNITED STATES PATENT OFFICE.

MILTON KEECH AND JOSEPH LABERDEE, OF GOUVERNEUR, NEW YORK.

## RUNNING-GEAR FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 388,282, dated August 21, 1888.

Application filed February 23, 1888. Serial No. 264,995. (No model.)

*To all whom it may concern:*

Be it known that we, MILTON KEECH and JOSEPH LABERDEE, citizens of the United States of America, residing at Gouverneur, in the county of St. Lawrence and State of New York, have invented certain new and useful Improvements in Running-Gears for Wagons, &c.; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Our invention relates to certain new and useful improvements in running-gears for vehicles; and it consists in the novel construction and arrangement of the parts thereof, which will be more fully hereinafter described, and particularly pointed out in the claims.

The object of our invention is to provide a running-gear for vehicles which is simple and effective in its construction and operation, strong and durable, positive in its desired result, readily applied in connection with any form of vehicle, and comparatively inexpensive in manufacture. We attain this object by the construction illustrated in the accompanying drawings, wherein like letters of reference indicate similar parts in the several views, and in which—

Figure 1 is a perspective view of a portion of running-gear, showing our improved construction. Fig. 2 is a longitudinal vertical section on the line *yy* of Fig. 1. Fig. 3 is a detail perspective view of our improved form of turning-blocks or fifth-wheel. Fig. 4 is a horizontal sectional view on the line *xx* of Fig. 1.

A indicates the bolster, B the reach-bar, and C the forward tongue-attaching beam, C' being the tongue. D indicates the axle-beam, to which a brace, G, is secured by suitable clips and to the reach-bar and forward portion of the tongue-beam C; also secured to the tongue beam or bar C, at the forward portion thereof, and to the reach-bar B are semicircular bars F, which rest upon the upper portion of the axle-beam D. Upon the said axle-beam D a block, H', is secured, which has an under recess, H<sup>2</sup>, which fits over the reach-bar B and in combination with a similar recess in the axle-beam forms the mortise for the inser-

tion of the said reach-bar B. The block H' is formed with a flanged cap, h<sup>2</sup>, which has a centrally-mounted stud, h'. The edges of the flanges of the said cap project over the lower portion of the said block H', a space being formed between the two parts, as fully shown in Fig. 3.

Secured to the under side of the bolster A is a block, H, which has a recess, h<sup>3</sup>, from which an aperture, h, projects partially through the block. Upon each side of the recess h<sup>3</sup> the material of the block projects therethrough in the form of inclosing-flanges. The block H, with its recesses and overhanging flanges and with its central aperture, h, is adapted to engage with and have movement upon the block H'. The overhanging flanges of the block H have movement upon the flanges of the block H', and the stud or pin h' of the latter block enters the aperture h in the block H. The block H is adapted to have a turning movement upon the block H'. It will therefore be understood that these two blocks act as a fifth-wheel between the bolster A and the axle-beam B. When the said parts turn one upon the other, as set forth, the outer under surface of the bolster A has bearing upon the semicircular braces F, which construction prevents the sagging of either end of the bolster A and renders the movement regular, which will be readily understood.

The rear portion of the reach-bar B between the two axle-beams is made in two sections, and at the joint formed nearest the forward axle-beam is provided with two metallic binding or anti-frictional plates, e<sup>3</sup>, and over the two sections top and bottom plates e<sup>4</sup> are mounted, which are integrally formed with laterally-extending circular plates E', having slotted guideways E, provided with raised binding-strips. A pin, e<sup>6</sup>, passes through the two sections of the reach, as shown, and is permanently secured in the rear section thereof, the two extended ends thereof playing in an elongated slot, e<sup>5</sup>, formed in the upper and lower plates e<sup>4</sup>. The inner or anti-frictional plates, e<sup>3</sup>, extend under and to the rear of the laterally-extended circular plates, E' and as the said reach-bar is moved an anti-frictional bearing is thereby formed upon the rear portion of the reach-bar for the said circular plates E'. Suitable braces, e', run from the



outer portion of each of the said circular plates E' to the forward portion of the plates e<sup>4</sup>, as fully shown. At each end of the said circular plates a stud or pin is mounted, which guards  
 5 against the disengagement of the said circular plates from the reach-bar. At the point where the lower brace, G, passes under the joint of the two sections of the reach-bar a wire clip, f, is placed over the forward section of the  
 10 reach-bar, the ends thereof passing down through said brace.

As hereinbefore set forth, the two circle-plates E' are provided with extended slots E, having the raised bindings, as set forth. Roll-  
 15 ers e, mounted upon each end of the pin e<sup>3</sup>, which passes through the reach-bar, engage with the slots in the said plates E', which construction is intended to reduce the friction, as will be readily understood. In the center rear  
 20 portion of the slots E in the said plates E' a slight indentation, e<sup>9</sup>, is formed, which avoids any cramping movement at this point and allows the rollers on the ends of the pin e<sup>3</sup> to sink therein and give the sections of the reach-bar  
 25 a slight play.

The connection between the reach-bar and tongue consists of the plates C<sup>3</sup>, secured to each side of the tongue-bar C and project over the forward end thereof and slightly bent outward,  
 30 having an enlarged inner projection, c<sup>3</sup>, which passes into corresponding apertures, c<sup>4</sup>, in the plate C<sup>4</sup>, secured to each side of the tongue, the said forward portions of the plate C<sup>3</sup> overlapping the forward plates, C<sup>4</sup>. A bolt or  
 35 pivot, C<sup>5</sup>, passes through the apertures in the said parts, as fully shown in Fig. 4, and thereby securely unites them. By this construction wear is taken up by the inner projections, c<sup>3</sup>, of the plates C<sup>3</sup>, and said wear is thereby eased  
 40 on the bolt C<sup>5</sup>, as will be readily understood. It will be understood that the whiffletree C<sup>2</sup> will be secured to the forward portion of the tongue-beam C by means of a spring-plate, c, carrying a bolt in its forward end, which con-  
 45 struction is well known in the art.

We claim—

1. The combination of the axle, the rigidly-secured reach-beam B and tongue-beam C, projecting at opposite sides of the axle, the bolster, the blocks H and H', arranged and oper-  
 50 ating as described, and the semicircular bars F, secured at their front and rear ends to the opposite sides of the tongue-beam and reach, respectively, to form guides or supports for the outer ends of the bolster, substantially as set  
 55 forth.

2. The combination, with the axle-beam D, of the sectional reach-bar, the plates e<sup>3</sup>, the laterally-extended slotted circular plates E', having forward extensions, e<sup>4</sup>, with the slots e<sup>5</sup>  
 60 therein, the inner stud passing through one of the sections of the reach-bar and engaging with the slots e<sup>5</sup>, and the pin or stud e<sup>8</sup>, carrying rollers on its upper and lower end engaging with the slotted portion of the said circle-  
 65 plates E' and with the indentations e<sup>9</sup> in the slots of said circle-plates, substantially as described.

3. The combination, with the axle-beam D, of the tongue-beam C, the bolster A, the blocks  
 70 H and H', and the braces G and F, arranged and connected to said parts, as set forth.

4. The combination, substantially as described, of the tongue C', provided with side plates having circular openings, the tongue-  
 75 beam C, having side plates provided on their inner faces with circular bosses to fit the openings in the side plates of the tongue, and the securing-bolt passing through the axial center of the said circular bosses.  
 80

In testimony whereof we affix our signatures in presence of two witnesses.

MILTON KEECH.  
 JOSEPH LABERDEE.

Witnesses:

CHS. B. JOHNSON,  
 C. N. REYNOLDS.