## E. J. ABBOTT. WAGON REACH ADJUSTER. APPLICATION FILED APR. 5, 1905.

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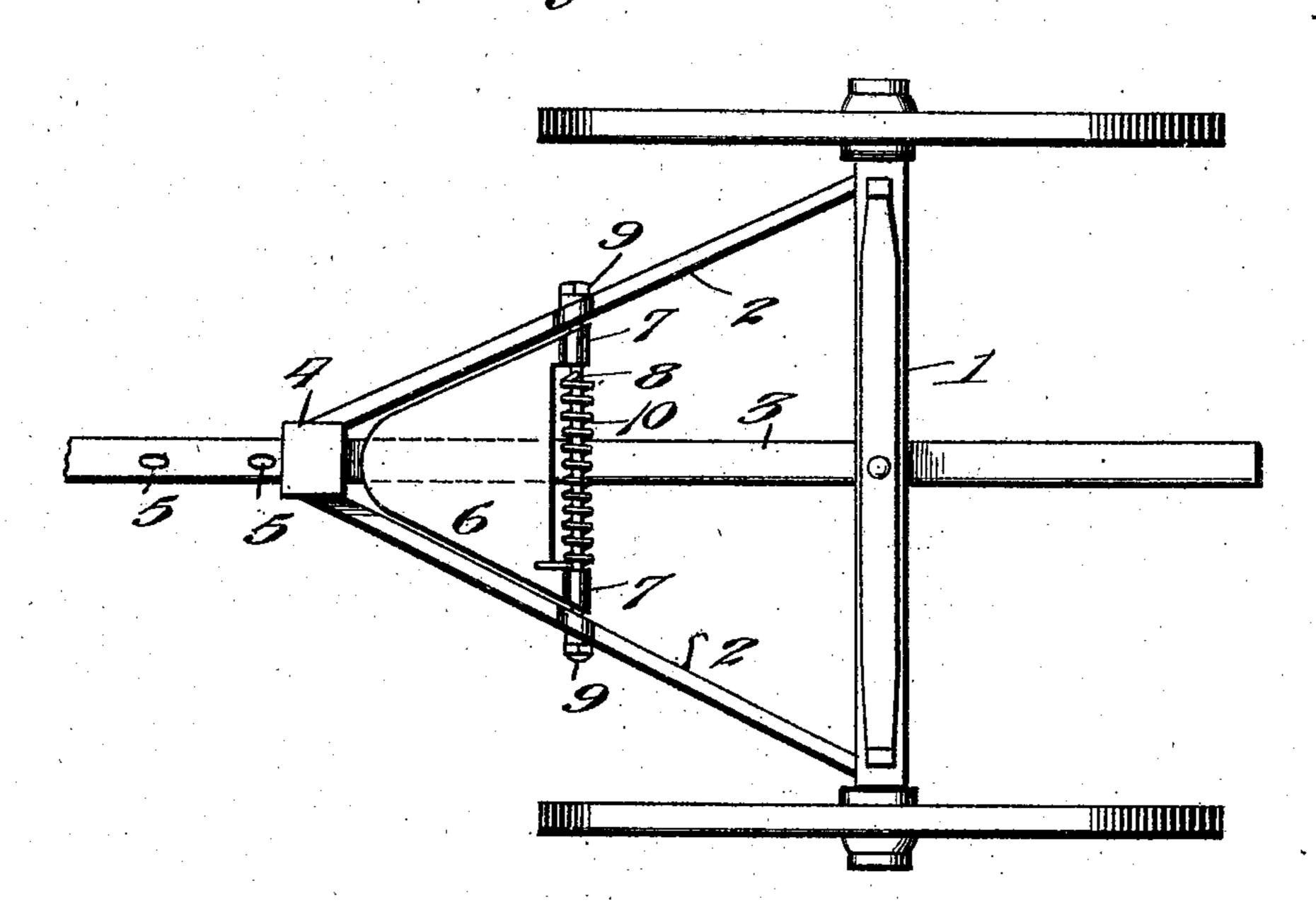
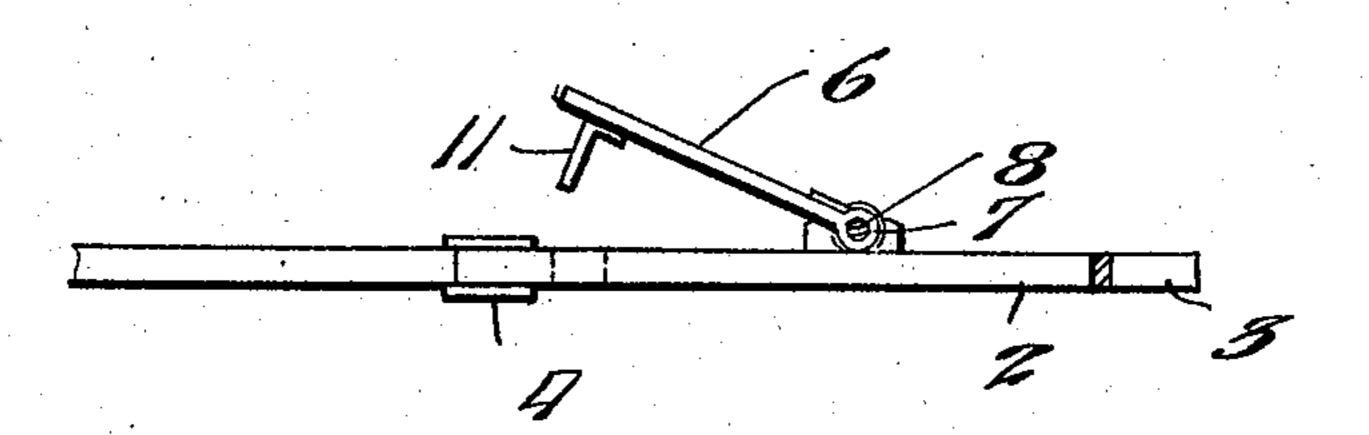


Fig Z.



II. J. Abbott.

Witnesses

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## UNITED STATES PATENT OFFICE.

## EMERY J. ABBOTT, OF ORLEANS, MINNESOTA.

## WAGON-REACH ADJUSTER.

No. 815,057.

Specification of Letters Patent.

Patented March 13, 1906.

Application filed April 5, 1905. Serial No. 254,058

To all whom it may concern:

Beit known that I, EMERY J. ABBOTT, a citizen of the United States, residing at Orleans, in the county of Kittson and State of Minne-5 sota, have invented new and useful Improvements in Wagon-Reach Adjusters, of which the following is a specification.

The invention relates to an improvement in adjustable reaches for use in wagon con-

10 struction.

The main object of the invention is the production of a reach-block having pivotal connection with the wagon - hounds and adapted for adjustable connection with the 15 usual reach-bar.

The invention in its preferred form will be described in detail in the following specification, reference being had to the accompany-

ing drawings, in which—

Figure 1 is a broken plan illustrating the application of my improved reach - block. Fig. 2 is a side elevation showing the reach-

block in inoperative position.

25 erence-letters indicate like parts throughout the several views, 1 represents the wagonaxle; 2, the hounds connected therewith, and 3 the reach - bar longitudinally movable through the hound-head 4 and formed with a 30 series of longitudinally-arranged openings 5.

The reach - block comprises an approximately triangular-shaped plate 6, formed at its rear or base end with ears 7 to receive a transverse pin or rod 8, secured at its termi-35 nals in the hounds, as at 9. An operatingspring 10 is coiled about the rod 8, having one terminal connected with the rod and the opposite terminal connected with the plate 6, the effective force of this spring being di-40 rected to maintain the plate 6 in lowered or horizontal position, as illustrated in Fig. 1. The forward end of the reach-block is provided with a depending reach-pin 11, adapted to engage either of the openings 5 of the 45 reach-bar. The pin 11 may be of any desired form and may be connected to the reach-block in any usual or preferred manner. By preference the side edges of the reachblock extend parallel with the hounds, the 50 forward end of the block being preferably rounded, as shown.

In operation the forward end of the reachblock is moved upward to disengage the pin 11 from the respective openings 5, the block |

swinging on the pivot-pin 8 against the ten- 55 sion of the spring 10. The reach-bar is now adjusted longitudinally, as desired, the spring 10 operating to force the reach-pin 11 into the desired opening in the reach-bar, thus locking the reach-bar in adjusted posi- 60 tion.

While I have shown and described the spring 10 as seated in a cut portion of the reach-block, it is evident that said spring may, if desired, be secured below the reach- 65 block, in which latter event the pivoting-ear on said block will depend therefrom and the pivot-pin be located below said block.

The invention provides a convenient and simple device for the adjustment and secur- 70 ing in adjusted position the reach-bar, it being evident that in the use of my device the reach-pin is maintained at all times in a position to engage the reach-bar, and accidental disengagement of the parts is effectively pre- 75 vented by the use of the spring.

Various changes may be effected in the Referring to the drawings, wherein like ref- | structure described without affecting the material features thereof, and I wish it understood that I regard all such changes as within 80 the spirit and scope of my invention.

Having thus described my invention, what

I claim is—

1. The combination with convergent wagon-hounds and a reach-bar movably con-85 nected therewith, of a reach-block pivotally supported between the hounds and adapted to engage the reach-bar.

2. The combination with convergent wagon-hounds and a reach-bar slidably con- 90 nected therewith, of a reach-block pivotally connected between the hounds and adapted to engage said bar, and a spring for maintaining said block in operative position.

3. The combination with convergent 95 wagon-hounds, of a reach-bar formed with a longitudinally-arranged series of openings, a reach-block pivotally supported between the hounds, and a pin depending from said block and adapted to engage either of the openings 100 in the bar.

In testimony whereof I affix my signature in presence of two witnesses.

EMERY J. ABBOTT.

Witnesses: C. W. CLOW, ALLAN J. HUNTER.