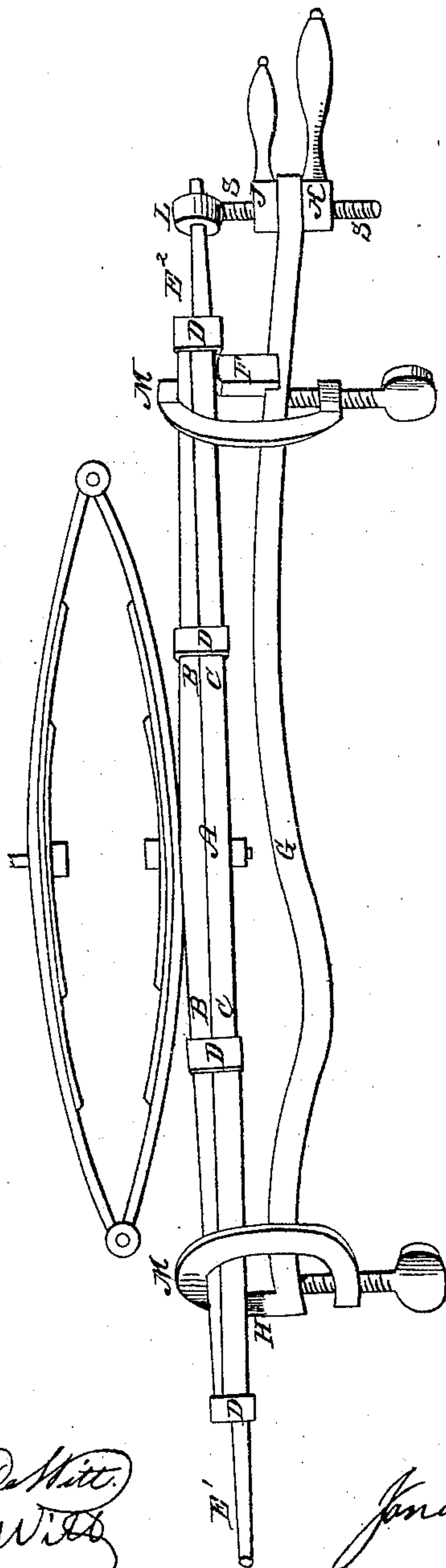


J. CHILDS.
CARRIAGE AXLE ADJUSTER.

No. 62,607.

Patented Mar. 5, 1867.



Witnesses.

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JONATHAN CHILDS, OF WEST TROY, NEW YORK.

Letters Patent No. 62,607, dated March 5, 1867.

IMPROVEMENT IN CARRIAGE-AXLE ADJUSTER.

The Schedule referred to in these Letters Patent and making part of the same.

Be it known that I, JONATHAN CHILDS, of West Troy, State of New York, have invented a new and useful instrument for the repair of any axle of a carriage that may be sprung or bent so as to affect injuriously the movements of any wheel revolving on the axle, either as to its tracking properly, or its proper alignment with the other wheels of the carriage. I call it a Carriage-Axle Adjuster, and I declare this specification, with the drawing forming part thereof, to be a full and accurate description of my invention.

Whenever an axle-tree becomes bent, in order to straighten it by the usual method, it is necessary to detach it from the carriage and then separate the iron from its wooden portion, in order to submit it to the necessary treatment to bring it to its proper shape without injury and defacement of its wood and paint. This is a tedious and expensive operation, which it is the object of my invention to avoid. The drawing represents my adjuster applied to an axle-tree.

A represents the axle-tree; B its wooden, C its iron bar, connected together by the clips D D. E¹ E² are the journals. The adjuster consists of a square bar of iron or steel, G, of such length as may be found most convenient for practical use. One end, H, is turned up to form a small spur to keep the body of the bar from touching the axle, the other end is pierced with an orifice to pass the stem of the adjusting screw. This consists of a screw-stem, S, terminated by a loop, L, fitted to be passed over and upon either of the journals. The screw is operated by nut-levers J and K, one above, the other below the bar G. F is a fulcrum block spanning bar G by a groove in its lower surface, so as to slide along the bar, and its upper surface is slightly rounded. M N are two movable screw clamps of any convenient form for service with the instrument.

The mode of operating with this instrument is thus: In the drawing, the journal E² is represented as bent upwards, so as to prevent the proper tracking of the wheel, and it becomes necessary to bend it down from its shoulder at e. To do this the fulcrum block F is placed below the axle, as near e as is convenient, the bar G brought up to it from below, the loop L of the adjusting screw slipped over the end of the journal, and the bar G secured to the axle by the clamps M, one being near the spur H and the other over the block F. The screw-nut J is slacked, and K turned upwards, drawing the loop L, with the end of the journal, downwards, until it has its proper range with the body of the axle. If the journal were bent downwards then the operation of the screw-nuts should be reversed, K being slacked and J turned downwards, forcing the end of the journal upwards. If the axle be bent at a point between the journals, the block F is to be placed at the point of the bend nearest the centre of the axle, and the bar G be adjusted so as to bring loop L up to the shoulder e, and then the screws J and K operated as described, to bend the axle upward or downward, as the nature of the bend should require. If the axle should be bent in a horizontal direction it would only be necessary to place the bar G, with its apparatus, in a horizontal position, and operate it as described.

The advantages of this apparatus consist, first, in its being applicable to its work without the detaching of the axle-tree from the carriage, and consequently in avoiding the marring of its paint and injury to the wood; second, in not wearing the screws of the clips by unscrewing and screwing them up; third, the great saving of time and expense in doing the work.

What I claim as my invention, and desire to secure by Letters Patent, is—

A carriage axle-adjusting instrument formed of the bar G, in combination with the block F, the adjusting screw S, with its nut-levers J and K, and the clamps M and N, substantially in the manner set forth in this specification.

JONATHAN CHILDS.

Witnesses:

RICH'D VARICK DE WITT,
D. W. DE WITT.