

(No Model.)

W. E. PUGSLEY.
EXTENSIBLE AXLE.

No. 475,248.

Patented May 17, 1892.

Fig. 1.

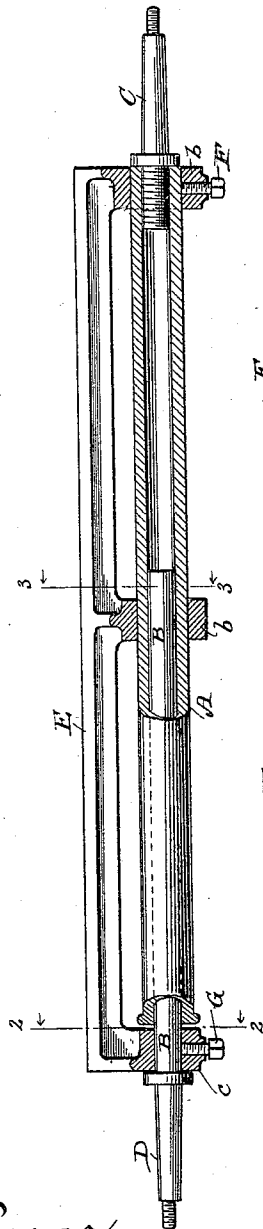


Fig. 3.

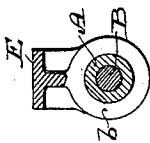


Fig. 4.

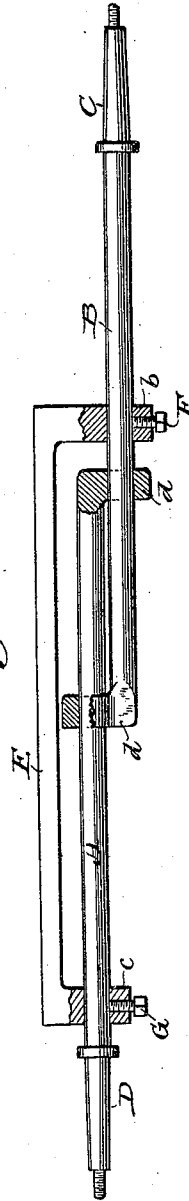
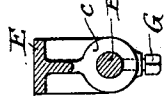


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM E. PUGSLEY, OF LINCOLN, NEBRASKA, ASSIGNOR TO THE LINCOLN ROAD GRADER MANUFACTURING COMPANY, OF SAME PLACE.

EXTENSIBLE AXLE.

SPECIFICATION forming part of Letters Patent No. 475,248, dated May 17, 1892.

Application filed November 14, 1891. Serial No. 411,865. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. PUGSLEY, a citizen of the United States, and a resident of Lincoln, in the county of Lancaster, and in the State of Nebraska, have invented certain new and useful Improvements in Extensible Axles; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object to provide a simple, durable, and economical extensible axle; and it consists in certain peculiarities of construction and combination of parts to be hereinafter described with reference to the accompanying drawings, and subsequently claimed.

In the drawings, Figure 1 represents an elevation, partly in section, of one form of an extensible axle constructed according to my invention; Figs. 2 and 3, sections respectively taken on lines 22 and 33 of the preceding figure; and Fig. 4, an elevation, partly in section, of another form of said axle.

Referring by letter to the drawings, A B represent two sections that when joined together constitute my improved extensible axle. In that form of the axle shown by Figs. 1 to 3, inclusive, the section A is in the form of a tube, having a spindle C, screw-threaded or otherwise rigidly secured in its outer end, while the section B is in the form of a solid bar having its outer end in the form of a spindle D, both of said spindles being provided with the usual collars. The tube-section A is supported in guides *b* on a vehicle-frame or stationary bar E, and is shown as being locked in its adjusted position by a set-screw F, that turns in one of said guides. The solid section B is supported in the tubular section A and in a guide *c* on the vehicle frame or bar E, and a set-screw G turns in this latter guide to lock said section B in its adjusted position. Either of the axle-sections may be adjusted independent of the other or both may be simultaneously adjusted, and in either case it will be seen that one slides upon the other when the adjustment is effected.

In Fig. 4 I show both of the axle-sections in the form of solid bars, each of which has a right angular inner end *d* loosely engaging the other, and said bars not only support each other but are also respectively supported

in the guides *b c* on the vehicle frame or bar and locked in their adjusted position by means of the set-screws F G, as is the case with said axle-sections in the previously-described form of my invention.

By the construction and relative arrangement of parts above described I loosely connect the axle-sections without employing a central longitudinal coupling, and wholly support each of these axle-sections by the other and the guides on the vehicle frame or bar E, above described, while at the same time I provide for a very considerable extension of an axle that is normally of ordinary length.

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

1. The combination, with stationary guides, of an extensible axle comprising two sections supported by the guides and adjustable one upon the other independent of a central longitudinal coupling, substantially as set forth.

2. The combination, with stationary guides, of an extensible axle comprising two sections supported by the guides, but adjustable one upon the other independently of a central longitudinal coupling, and suitable means for locking each axle-section in its adjusted position, substantially as set forth.

3. The combination, with stationary guides, of an extensible axle comprising two loosely-engaged sections supported by the guides, and set-screws arranged in said guides in opposition to the adjacent axle-sections, substantially as set forth.

4. The combination, with stationary guides, of an extensible axle comprising two loosely-engaging sections capable of independent lateral adjustment and wholly supported each by the other and said guides, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Lincoln, in the county of Lancaster and State of Nebraska, in the presence of two witnesses.

WILLIAM E. PUGSLEY.

Witnesses:

GEORGE W. BERGE,
GILBERT M. BARNES.