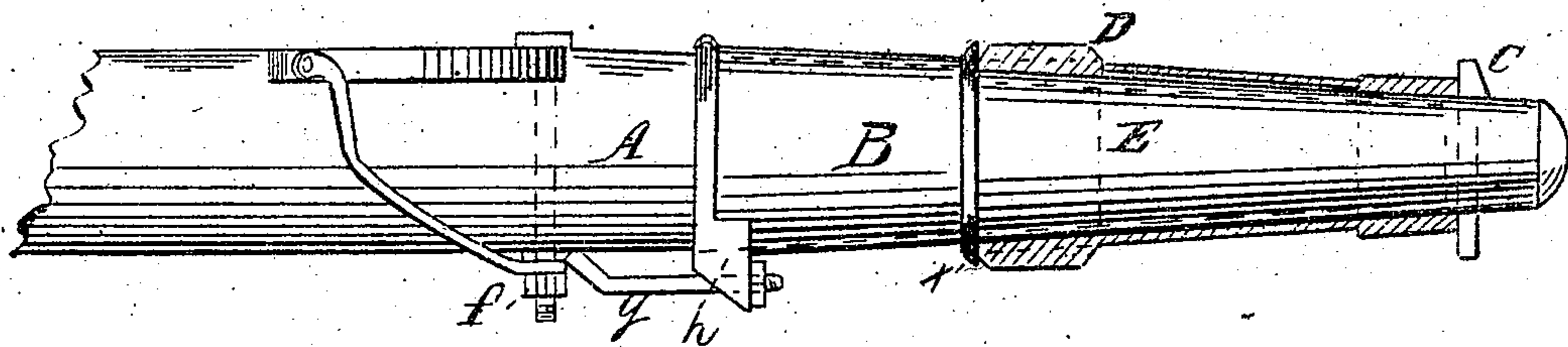


*J. Neathers,
Axle Shear.*

No. 77,785.

Patented May 12, 1868.



Witnesses

A. H. Watson
V. D. Stockbridge

Inventor

James Neathers
per Alexander Mason
attys

United States Patent Office.

JAMES WEATHERS, OF GREENSBURG, INDIANA.

Letters Patent No. 77,785, dated May 12, 1868.

IMPROVEMENT IN THE MODE OF ATTACHING HUBS TO AXLES,

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JAMES WEATHERS, of Greensburg, in the county of Decatur, and in the State of Indiana, have invented certain new and useful Improvements in Thimble-Skein; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and the letters of reference marked thereon.

In the annexed drawings, making a part of this specification, A represents an ordinary wagon or carriage-axle, made in the usual way, and of any suitable material; and B represents a thimble-skein made of suitable material, and so as to fit closely over the tapering end or arm of the axle A.

The thimble B is made of one piece of metal, and is provided with the usual collar *x* for the box D to rest against, and with a depending flange or lip, *h*, which is provided with a suitable hole for the rod *g* to pass through.

The rod *g* is secured at one end to the under side of the axle A by means of the bolt *f*, which secures the hounds to said axle.

Said rod *g* extends along parallel with the axle, and passes through the hole in the flange *h*, and is then screwed up by means of a small nut for that purpose. The thimble B is thus firmly and securely held in place by means of the rod *g*, with its nut and the flange *h*, and without the trouble and disadvantages of the usual rod, which passes through under the thimble and out at the end of the arm of the axle. I am thus enabled to make a square hole or slot through the outer end of the thimble B, in which to insert an ordinary linchpin, C, for the purpose of holding the wheel or box D thereof in place.

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

The thimble B and skein E, cast of one piece, the former provided with a flange, *h*, and secured to the axle A by means of the bolt *f* and rod *g*, all combined, arranged, and used substantially as specified.

In testimony that I claim the foregoing, I have hereunto set my hand, this 26th day of February, 1868.

JAMES WEATHERS.

Witnesses:

J. K. EWING,
ALEX. A. FOLEY.