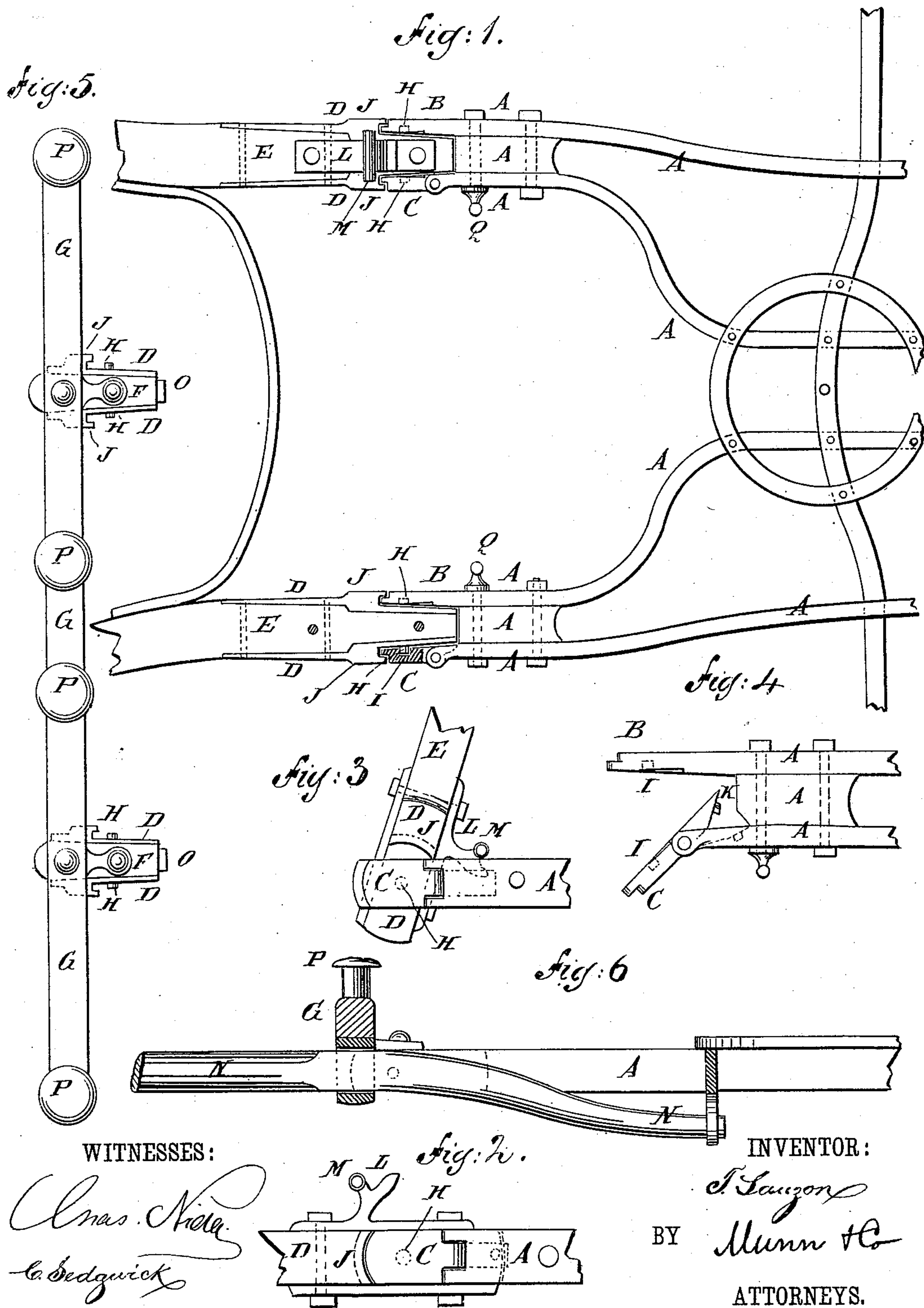


(No Model.)

T. LAUZON.
POLE OR SHAFTS FOR VEHICLES.

No. 326,301.

Patented Sept. 15, 1885.



UNITED STATES PATENT OFFICE.

THEOPHILE LAUZON, OF LONG ISLAND CITY, NEW YORK.

POLE OR SHAFTS FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 326,301, dated September 15, 1885.

Application filed February 9, 1885. (No model.)

To all whom it may concern:

Be it known that I, THEOPHILE LAUZON, of Long Island City, (Astoria,) in the county of Queens and State of New York, have invented a new and useful Improvement in Coupé-Stay Couplings for Draw-Bars and Shafts, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of my improved coupling shown as connecting a pair of shafts with the stays, part being broken away. Fig. 2 is a side elevation of a part of the same shown with the shaft in a horizontal position. Fig. 3 is the same view as Fig. 2, but showing the shaft turned past a vertical position. Fig. 4 is a plan view of the part of the coupling attached to a stay. Fig. 5 is a plan view of parts of the coupling attached to a draw-bar. Fig. 6 is a sectional end elevation of the same shown as applied to a stay, and showing a pole in place.

The object of this invention is to provide couplings for connecting shafts and draw-bars with coupé-stays, constructed in such a manner that the said shafts and draw-bars can be readily attached to the said stays and detached therefrom, and which will hold the said shafts and draw-bars securely in place when attached to the said stays.

The invention relates to coupé-stay couplings for draw-bars and shafts constructed with stationary and hinged plates having pin-sockets and rabbeted ends, and attached to the stays and plates having pins and undercut shoulders, and attached to the shafts or draw-bar arms, whereby the said shafts or draw-bar can be readily connected and disconnected from the said stays. To the shafts are attached stop-brackets having cross-arms to engage with the stationary plates of the stays and the hinged plates having rearwardly-projecting ends, whereby the said hinged plates will be held from opening and the shafts supported in place when raised past a vertical position, as will be hereinafter fully described and claimed.

A represents coupé-stays shown as connected with the forward part of the running-gear.

B C are the outer side plates of the coupling,

one, B, of which is stationary and can be formed solid with the stay A. The other plate, C, is hinged at its rear end to the said stay A, or to a plate attached thereto.

D are the inner plates of the coupling, which are attached to the opposite sides of the rear end of a shaft, E, or to an arm, F, of a draw-bar, G.

Upon the outer sides of the plates D are formed pins H, which fit into sockets I in the inner sides of the plates B C, to hold the shafts on the draw-bar arms from longitudinal movement. The forward ends of the plates B C are rounded, and are rabbeted upon their outer sides to fit into the undercut curved shoulders J, formed upon the outer sides of the plates D, so as to hold the hinged plates C in place during the ordinary play of the coupling. With this construction, when the shafts E or draw-bar arms F are turned into a vertical position, the undercut or grooved shoulders J will pass off the rabbeted ends of the plates B C and allow the hinged plates C to be swung outward and the shafts or pole to be detached.

The rear ends of the hinged plates C project in the rear of the hinges of the said plates, and are beveled to fit into corresponding recesses in the stays A. If desired, lugs K can be formed upon the projecting rear ends of the hinged plates C to enter corresponding sockets in the stays A, and thus strengthen the said hinges against the strain. With this construction, when the shafts or draw-bar arms are in a working position, the plates D, adjacent to the hinged plates C, will rest against the rearwardly-projecting ends of the said hinged plates C, holding them in their recesses and preventing the said hinged plates from being opened; but when the shafts or draw-bar arms are in a vertical position the rearwardly-projecting ends of the hinged plates C will be uncovered, leaving the said hinged plates free to be opened.

To the upper sides of the rear ends of the shafts E are attached brackets L, the arms of which project into such a position that when the said shafts are raised past a vertical position the said arms will enter the space between the plates B C and hold the rearwardly-projecting ends of the hinged plates C securely in their recesses, so that the said hinged plates

cannot swing open. Upon the arms of the brackets L are formed cross-arms M in such positions as to rest upon the tops of the stays A when the shafts E have been swung up past a vertical position, and thus support the said shafts in place.

In the case of the draw-bar G the stop-brackets L M are not needed, as the said draw-bar is turned up only when it is to be detached, the pole N being withdrawn from its sockets when the coupé is run into the stable.

To the lower sides of the draw-bar arms F or of the plates D are attached, or upon them are formed, rearwardly-projecting lugs O, which underlap the stays A and hold the said draw-bar from swinging downward.

To the upper side of the draw-bar G are attached knobs P, to receive the tugs of the harness.

When the shafts E are used, the tugs are attached to knobs Q, secured to the inner sides of the stays A.

When the rear ends of the shafts E and arms F are tapered, the upper parts of the inner sides of the plates B C are beveled to correspond with the said taper, so that the said shafts or arms can be turned into vertical positions without pressing the hinged plate C outward.

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

1. Coupé-stay couplings for draw-bars and shafts constructed substantially as herein shown and described, and consisting of the stationary and hinged plates B C, having sockets I and rabbeted ends, and the plates D, having pins H and undercut shoulders J, as set forth.

2. The combination, with the stays of a coupé and the ends of the shafts or draw-bar arms, of the stationary and hinged plates B C, having pin-sockets I and rabbeted ends, and the plates D, having pins H and undercut shoulders J, substantially as herein shown and described, whereby the said stays and shafts or draw-bar can be readily connected and disconnected, as set forth.

3. The combination, with the shafts E, the stationary plates B, and the hinged plates C, having rearwardly-projecting ends, of the stop-brackets L, having cross-arms M, substantially as herein shown and described, whereby the hinged plates C will be held from opening and the shafts supported in place when raised past a vertical position, as set forth.

THEOPHILE LAUZON.

Witnesses:

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THADDEUS AYERS.