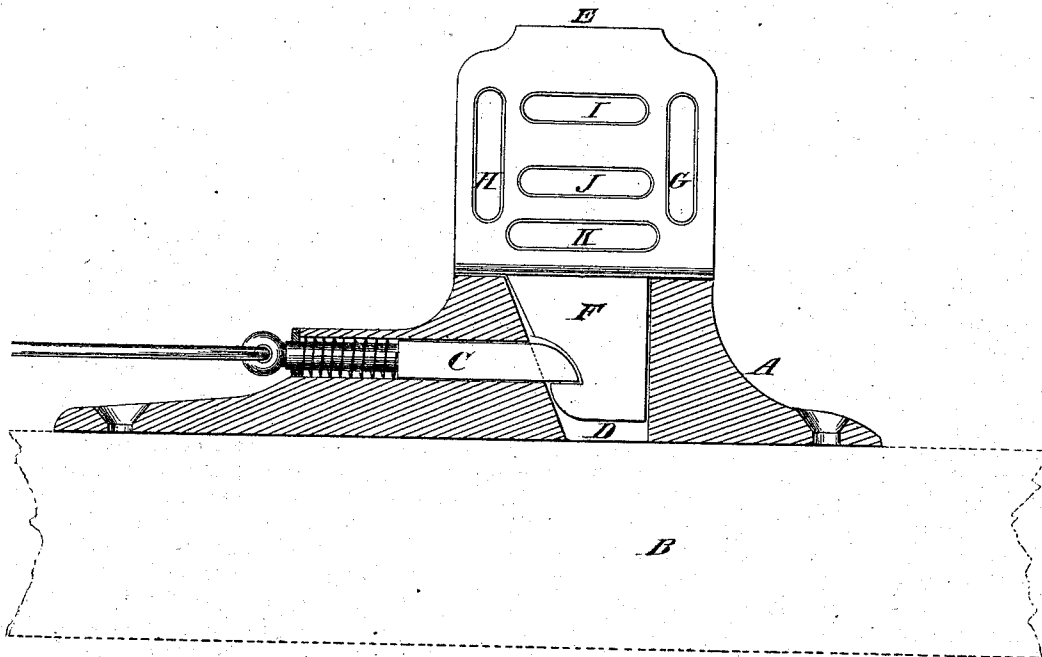


J. W. CHURCH.
Shaft-Tugs.

No. 157,493.

Patented Dec. 8, 1874.



WITNESSES:
Gustave Dietrich
A. F. Terry

INVENTOR:
J. W. Church
BY *Munn*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOSIAH W. CHURCH, OF GREENVILLE, KENTUCKY.

IMPROVEMENT IN SHAFT-TUGS.

Specification forming part of Letters Patent No. **157,493**, dated December 8, 1874; application filed September 26, 1874.

To all whom it may concern:

Be it known that I, JOSIAH W. CHURCH, of Greenville, Muhlenberg county, Kentucky, have invented a new and Improved Shaft-Tug, of which the following is a specification:

The invention is an improvement upon the device for which A. Shaeler obtained Letters Patent No. 93,357, dated February 1, 1870. The improvement consists in a slotted plate having a notched tongue or tenon, which is inclined or beveled on one side, formed in the same or a parallel plane with its body or main portion, and in a socket-plate having a vertical slot with an inclined side, and a spring slide or bolt, for engaging and locking said tenon, the construction and arrangement being such that the device is adapted for application to the upper side of vehicle-shafts and its two parts, for being locked together without withdrawing the spring-bolt, as hereinafter fully described.

A is the base-piece, attached to the shaft B, and containing the horizontally-sliding spring catch-bolt C, and having the socket D. E is the piece to be attached to A by a notched tongue, F, fitting in the socket, and locking with the spring slide-bolt C. This piece has a slot, G, for connecting the breast strap or tug; also, a slot, H, for connecting the holding-back strap; also, a slot, I, for attaching the back-strap, and also two slots, J and K,

for the connection of the belly-band, thus being a means of connecting all these straps to the shaft quickly and by one operation, and disconnecting them in the same manner.

It will be seen that the correspondingly beveled or inclined sides of the tongue F and wall of the socket D, also the beveled form of the catch C, adapt the two parts of the device to be connected by application of pressure sufficient to overcome the force of the spring.

The device is applied to the shafts on the upper side, so that the weight of the latter is supported by a direct tension on the plate E, and the space between the shafts is not obstructed, as would be the case if the device were applied to the shafts on the inner side.

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

The slotted plate E, having the notched and beveled tongue F, in combination with the base-plate A, having the socket D with an inclined wall, and the beveled spring locking-bolt C, all as shown and described, whereby said parts are adapted to be connected, and the device, as a whole, for application to the vehicle-shafts, as set forth.

JOSIAH W. CHURCH.

Witnesses:

EUGENE EAVES,
FINIS M. ALLISON.