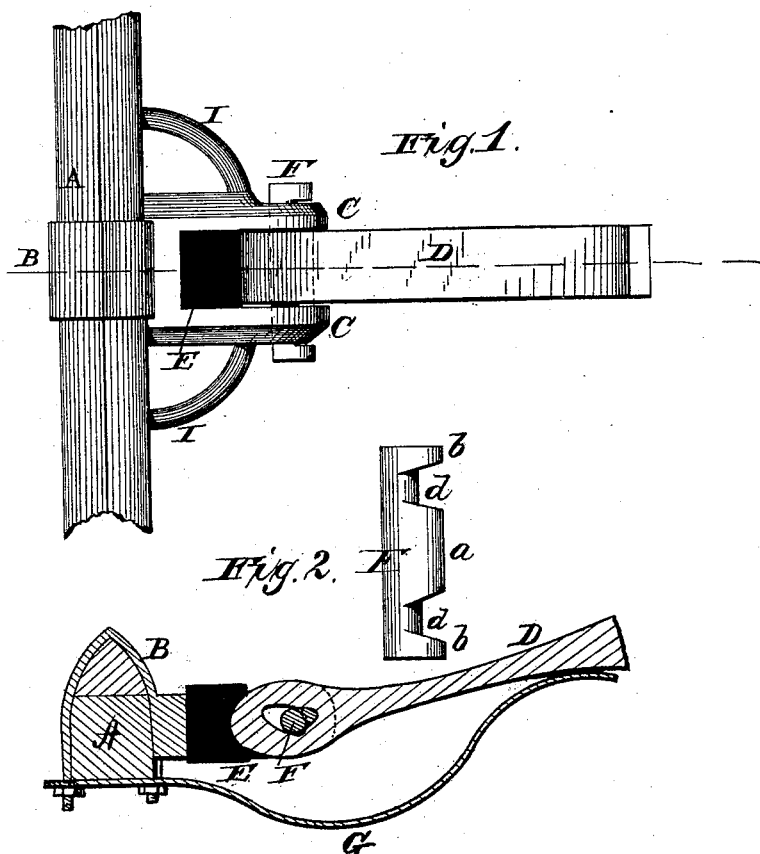


W. J. MORGAN.  
Thill Coupling and Support.

No. 221,341.

Patented Nov. 4, 1879.



WITNESSES

Frank C. O'Rand  
H. Aubrey Toulmin.

INVENTOR

Wm. J. Morgan  
Alexander Watson.  
ATTORNEYS

# UNITED STATES PATENT OFFICE.

WILLIAM J. MORGAN, OF HILLSBOROUGH, OHIO, ASSIGNOR TO MOSES CALVERT AND OVERTON S. PRICE, OF SAME PLACE, ONE-THIRD TO EACH.

## IMPROVEMENT IN THILL COUPLING AND SUPPORT.

Specification forming part of Letters Patent No. **221,341**, dated November 4, 1879; application filed August 8, 1879.

*To all whom it may concern:*

Be it known that I, WILLIAM J. MORGAN, of Hillsborough, in the county of Highland, and in the State of Ohio, have invented certain new and useful Improvements in Combined Thill-Coupling and Shaft-Supporter; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction of a thill-coupling, as will be hereinafter more fully set forth.

In the annexed drawings, Figure 1 is a plan view, and Fig. 2 a longitudinal section, of my thill-coupling.

A represents the axle, over which is placed the clip B, said clip being provided with the two arms C C. Between these arms is placed the rubber-block E, and the thill-iron D is pivoted between their forward ends by means of the key F. This key is round and has on one side a long feather, *a*, and near each end a small feather, *b*, leaving a space, *d*, between the center feather and each end feather, which spaces are the same width as the thickness of the arms C C. The eyes in the arms and thill-iron are made to correspond with the key.

The bottom plate, G, of the clip B constitutes a spring, which is extended forward and supports the iron D, as shown, so as to take nearly all the weight of the shafts or pole off of the horses' backs, allowing them to work free and easy and preventing the horses' backs from getting sore.

The arms or jaws C C of the clip are provided with side braces, I I, which are fastened in the axle, as shown. These braces are used, especially in heavy work, to prevent the side pieces or arms from spreading.

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

1. The spring G, forming the bottom part of the clip, in combination with the thill-iron D, for the purposes set forth.

2. The side braces, I I, in combination with the axle and the arms C C of the clip, for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 12th day of July, 1879.

WILLIAM J. MORGAN. [L. S.]

Witnesses:

WILLIAM DILL,  
W. T. STAMFORTH.