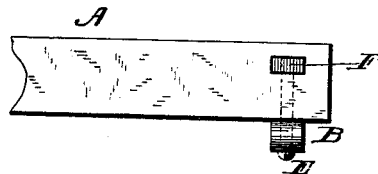


P. K. DEDERICK.  
Horse-Power.

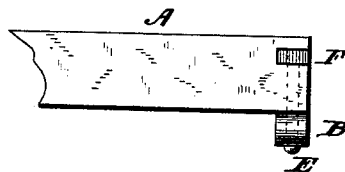
No. 215,213.

Patented May 13, 1879.

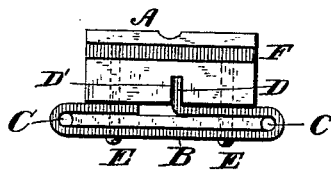
*Fig. 1.*



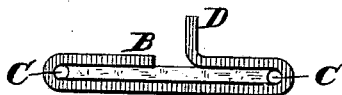
*Fig. 2.*



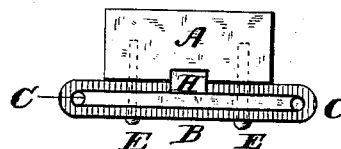
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



Attest,  
W. H. H. Knight.  
W. Blackstock.

Inventor,  
P. K. Dederick,  
by L. H. Hine  
His Attorney.

# UNITED STATES PATENT OFFICE.

PETER K. DEDERICK, OF ALBANY, NEW YORK.

## IMPROVEMENT IN HORSE-POWERS.

Specification forming part of Letters Patent No. **215,213**, dated May 13, 1879; application filed April 1, 1879.

*To all whom it may concern:*

Be it known that I, PETER K. DEDERICK, of Albany, county of Albany, State of New York, have invented certain Improvements in Horse-Powers, of which the following is a specification.

My invention relates to that class of powers known as "tread or railway powers;" and consists in the form and construction of the link and manner of attaching the same to the lag.

Figures 1 and 2 represent side views of lags, showing different ways in which the improved link may be attached. Fig. 3 is an end view of the lag as represented in Fig. 2. Fig. 4 is a view of the link detached; and Fig. 5 is a view of a modified form of link, and mode of securing the same.

Similar letters of reference in the several figures denote the same parts.

A represents the lag or plank; B, the link; C, the holes for the rods that connect other links so as to form an endless chain. D represents a projection on the link. E E are bolts. F is a dead-nut.

The lag A is of the ordinary form, except having a slot or mortise lengthwise of the lag under the link, as shown from the end view, Fig. 3.

The links are formed by bending a piece of wrought-iron so as to fit over a wood center, as shown. One end of the wrought-iron is bent up, as at D, thus making a projection or lug which fits the slot or mortise in the lag, as seen at D', Fig. 3, and the link is then secured to the lag by the bolts E E, screwed in the dead-nut F, or in any other suitable manner.

It is well known that these railway or tread powers are always used with one end elevated, and in ordinary powers the weight of the horses occasions a good deal of strain on the

bolts holding the link to the lags, especially so when the traces of the horses are secured so as to make them draw, in addition to their weight, and the bolts crush the wood and bend, so that the lag becomes loose, and the power works bad.

Now, with my improved link, the lug D projecting into the lag forms a broad and strong bearing, that prevents the wood from crushing or bending the bolts—in fact, relieves the bolts entirely, except to hold the link up to the lag. This always keeps the chain perfectly firm and true, and, in consequence, it works with more power.

Both ends of the links might be turned up so as to form one strong lug, or to form two separate lugs, if desired, and such construction would give additional strength; or a similar lug might be formed on the link or secured to it without bending the end, which would operate in the same manner and be of greater strength; but I have found that turning up a single end is sufficient for ordinary powers.

The lug might be separate, and secured to the lag or link by being mortised into it, as shown in Fig. 5, H being the lug, and the ends of the iron link be brought to bear against it with the same effect; but this would require more exactness in construction.

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

1. The combination of the lag A, link B, and lug D, or equivalent, for the purpose set forth.

2. The link B, formed with one or more lugs, D, for the purpose set forth.

P. K. DEDERICK.

Witnesses:

R. J. VAN SCHOONHOVEN,  
W. A. SKINKLE.