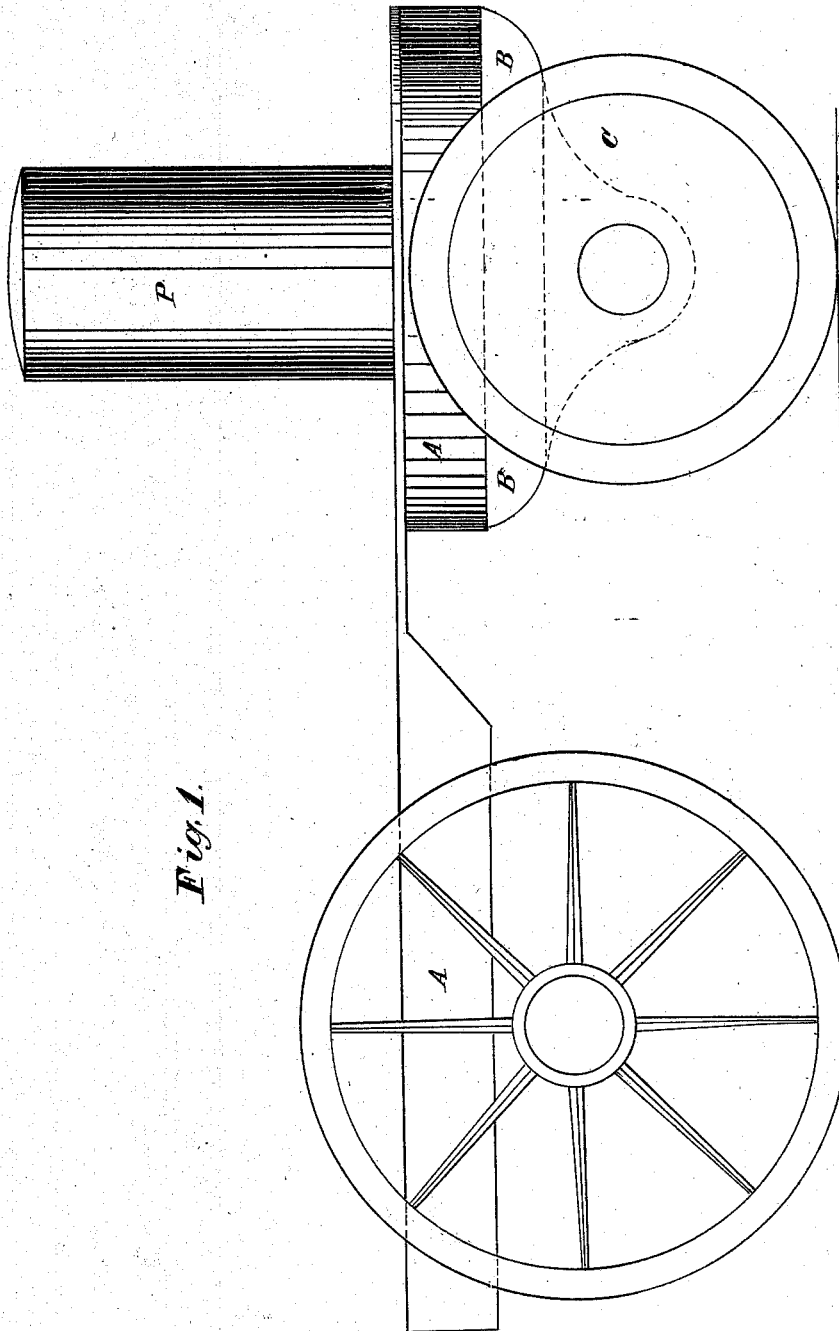


JAMES H. CLAPHAN.

Improvement in Traction Engines.

No. 115,280.

Patented May 30, 1871.



*Fig. 1.*

*Witnesses*  
*Thomas C. Connolly*  
*Thos. S. Mercer*

*Inventor*  
*James H. Claphan*

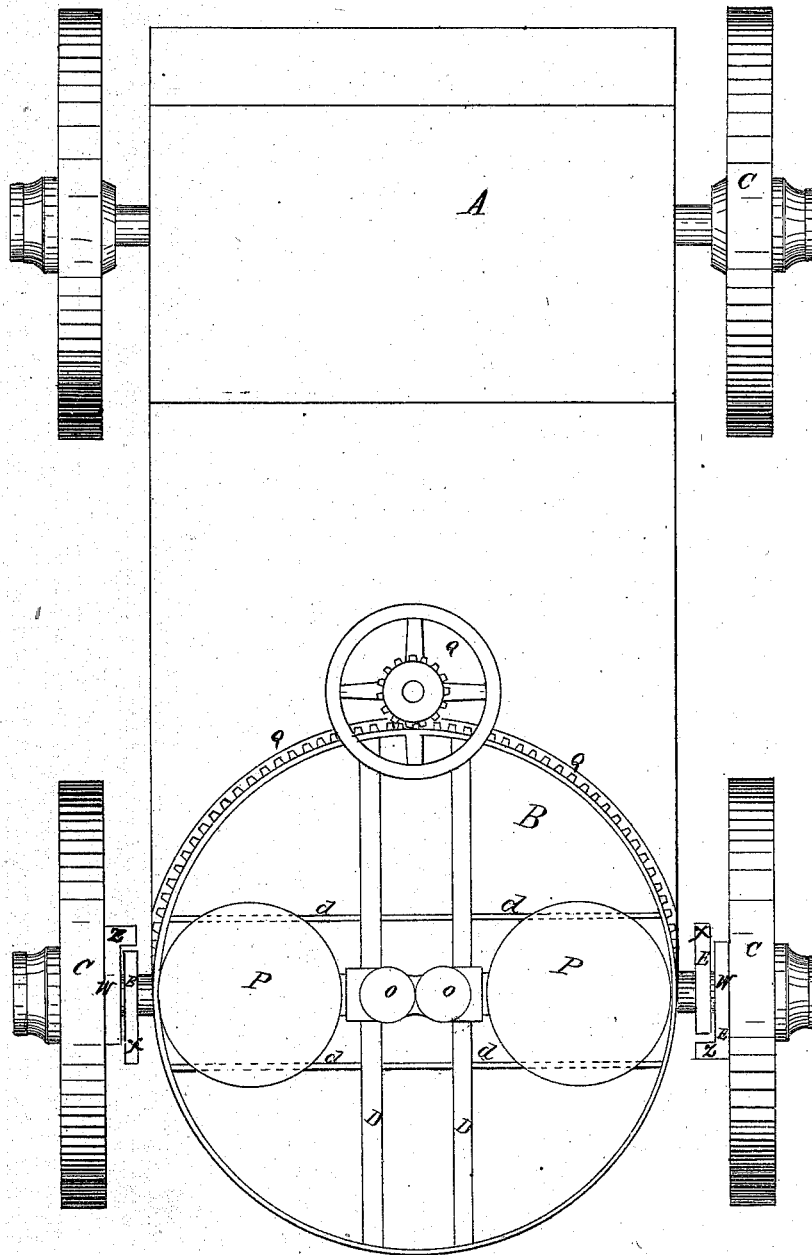
JAMES H. CLAPHAN.

Improvement in Traction Engines.

No. 115,280.

Patented May 30, 1871.

Fig. 2.



JAMES H. CLAPHAN.

Improvement in Traction Engines.

No. 115,280.

Patented May 30, 1871.

Fig. 3.

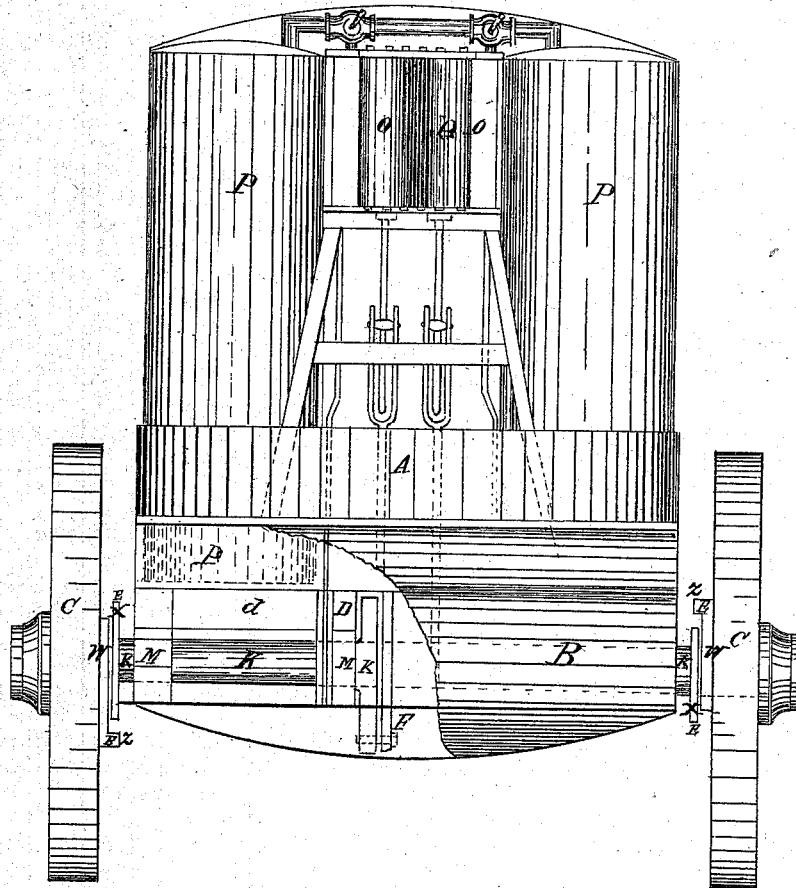
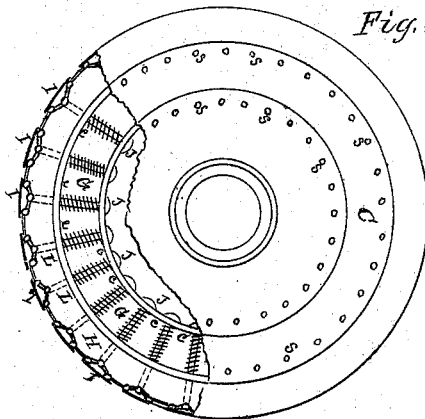


Fig. 4.



# UNITED STATES PATENT OFFICE.

JAMES HENRY CLAPHAM, OF NEW YORK, N. Y.

## IMPROVEMENT IN TRACTION-ENGINES.

Specification forming part of Letters Patent No. 115,286, dated May 30, 1871.

I, JAMES HENRY CLAPHAM, of New York, in the county and State of New York, have invented Improvements in Traction-Engines, of which the following is a specification:

The first part of my invention relates to the circular frame resting upon the axles of the driving and steering wheels or upon intermediate frame supporting the machinery used for forming the propelling power. The second part of my invention relates to the fore part of the after-body of the carriage, which rests upon and is extended in cylindrical or circular form or frame-work around the aforesaid circular frame of the fore-body, which rests upon the axles of the driving-wheels or upon an intermediate frame. This arrangement affords a support for the fore-body of the vehicle; it also allows the said fore-body to turn independently, the object being to enable the carriage to be steered in any direction by the regulation of the speed given to either of the driving-wheels. The third part of my invention relates to the inner hub attached to the driving-axles and its projecting arm, which, when in motion, becomes connected with a projection from the driving-wheels, the object of which is to prevent the engine being caught on a center when the power is being applied to the aforesaid driving-wheels.

Figure 1 is a side elevation of a machine embodying my invention. Fig. 2 is a plan of the same. Fig. 3 is an elevation, showing that end of the machine which is at the right hand

of Fig. 1. Fig. 4 is a vertical transverse section, showing driving-wheels.

A A is the after-body of the carriage, the forepart of which rests upon and extends around the fore-body B B, being so constructed as to act as a swivel and allow the said fore-body B B to be turned independently in any direction. K K are the axles of the driving and steering wheels, the inner parts working in the boxes M M and connected with the cranks R R and connecting-rod F F. W W are inner hubs which rotate with the axles K K, and communicate the power to the driving-wheels C C by their arm X X becoming connected with the projection Z Z on the said driving-wheels C C.

I claim as my invention—

1. The circular frame of the fore-body B B resting upon the axles K K of the driving-wheels C C, substantially as and for the purpose set forth.
2. The fore part of the after-body A A, substantially as and for the purpose set forth.
3. The inner hub W W, on the driving-axles K K, and its projecting arm X X, in combination with the projection Z Z on the driving-wheels C C, substantially as and for the purpose set forth.

JAS. HY. CLAPHAM.

Witnesses:

C. M. BANKS,  
RICHARD MORRIS.