(No Model.)

P. H. FLANSBURG.

TRACTION ENGINE.

No. 547,205. Patented Oct. 1, 1895.

Fig 1

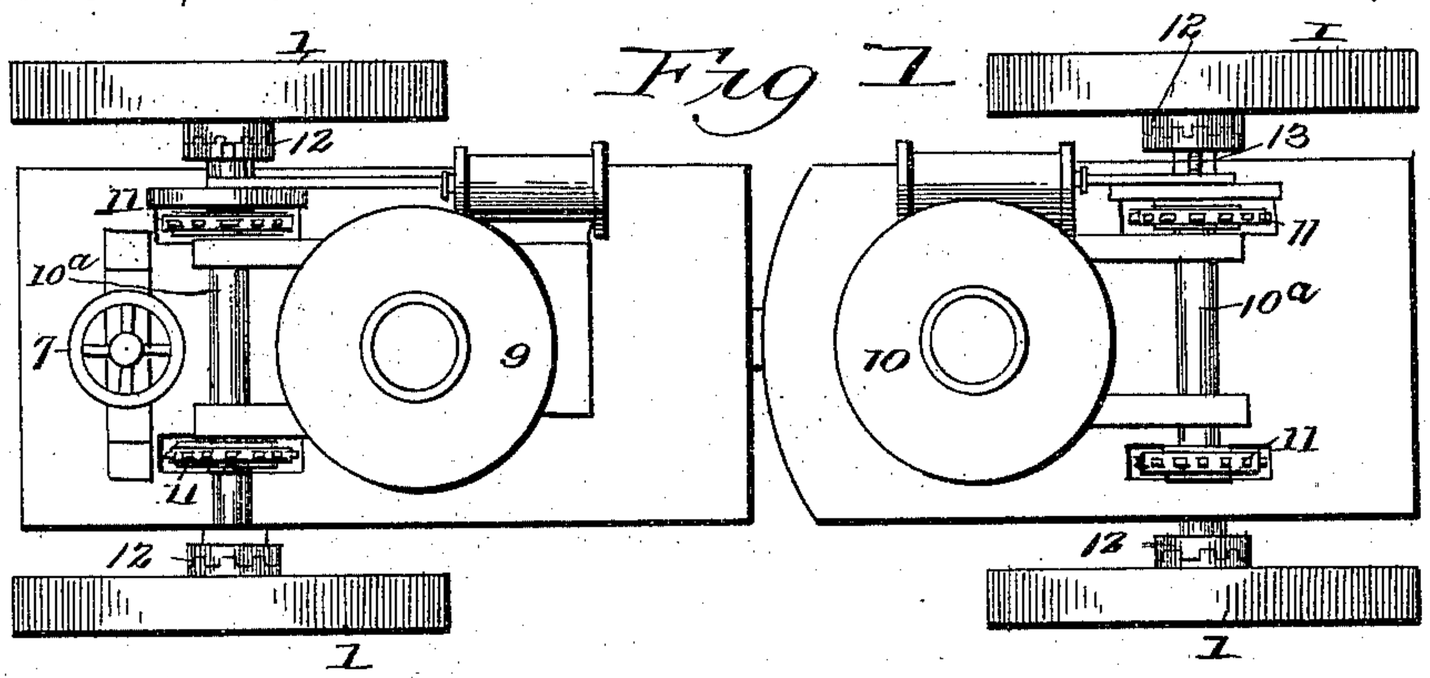


Fig. 2.

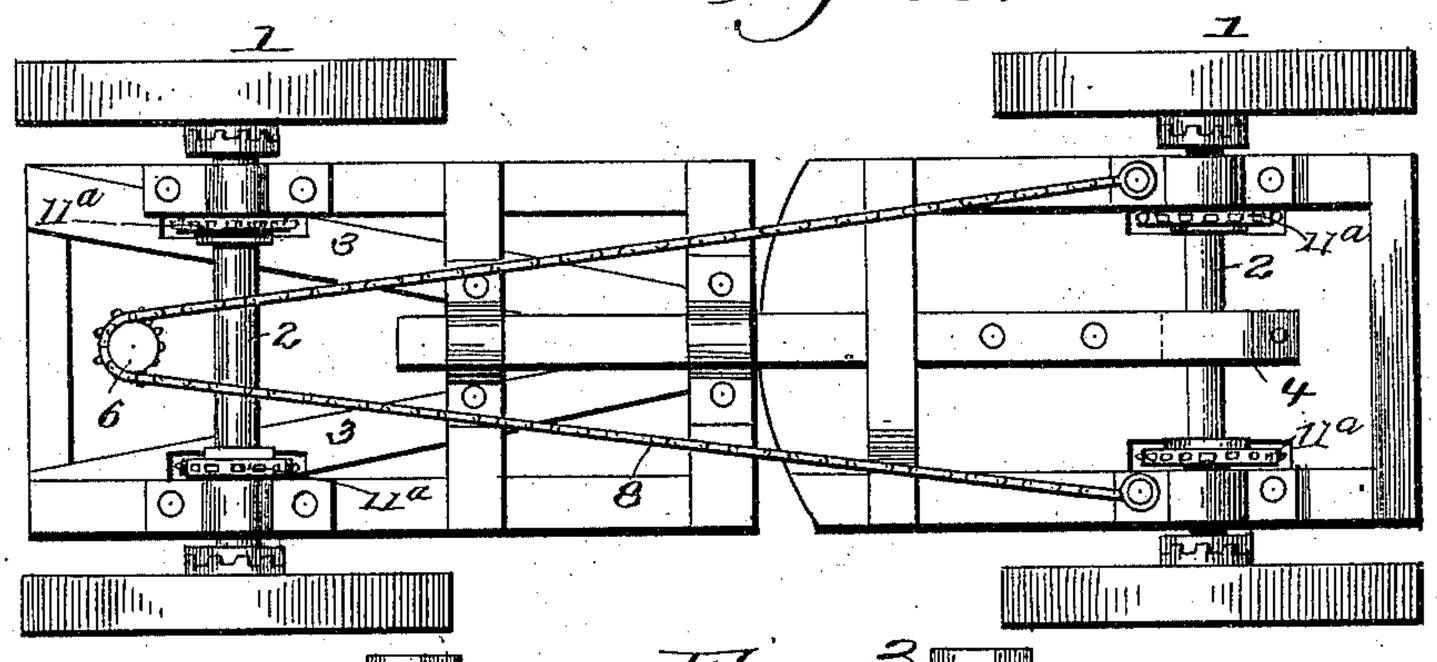
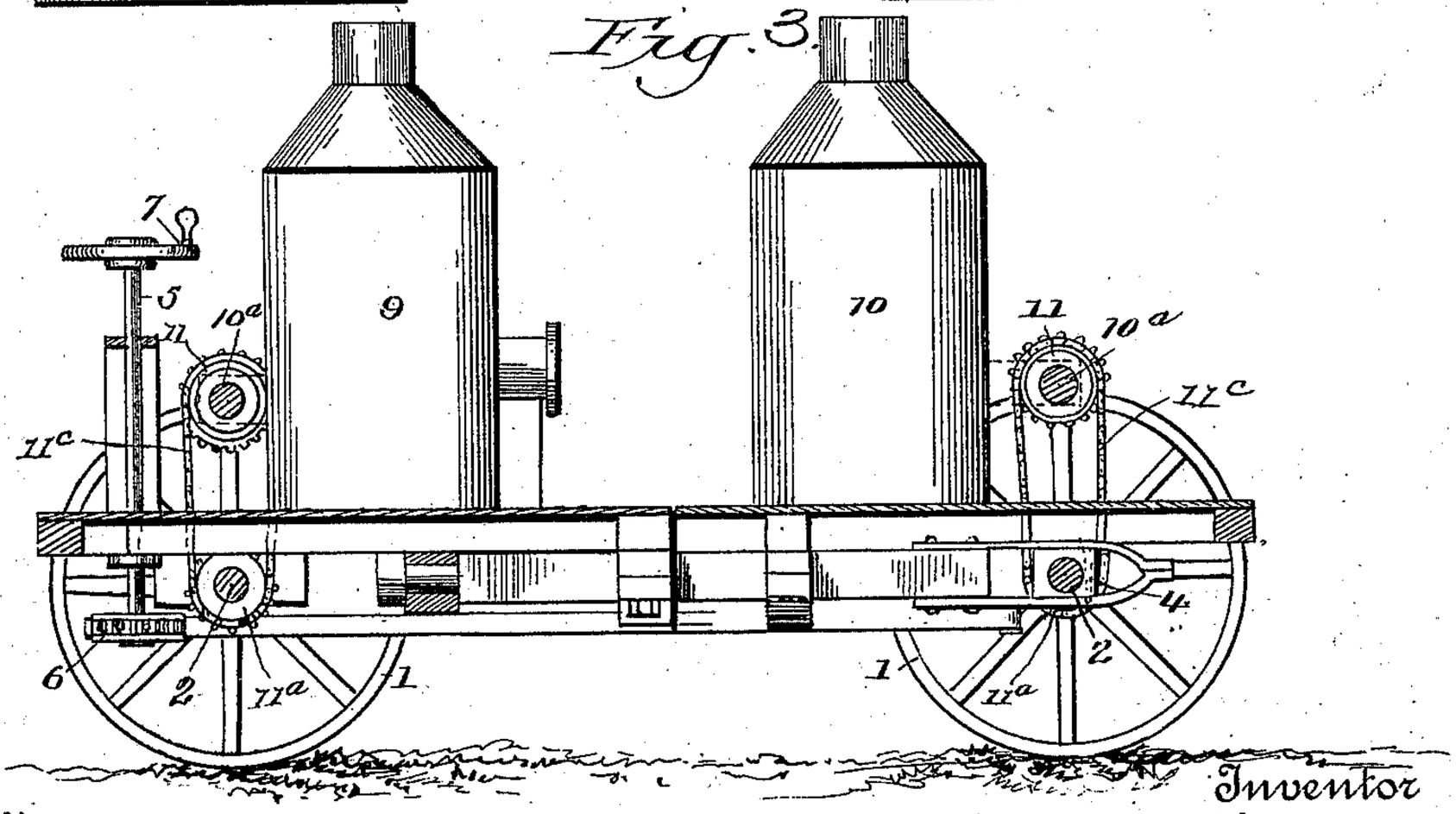


Fig. 3.



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UNITED STATES PATENT OFFICE.

PETER H. FLANSBURG, OF LOS BANOS, CALIFORNIA.

TRACTION-ENGINE.

SPECIFICATION forming part of Letters Patent No. 547,205, dated October 1, 1895.

Application filed November 22, 1894. Serial No. 529,623. (No model.)

To all whom it may concern:

Be it known that I, PETER H. FLANSBURG, a citizen of the United States, and a resident of Los Banos, in the county of Merced and State of California, have invented certain new and useful Improvements in Road or Traction Engines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to road or traction engines, and has for one of its objects to construct a traction-engine with four independently-operating driving-wheels so arranged that either pair of driving-wheels may be actuated independent of the other pair of wheels.

A further object of the invention is to have two separate engines, the one being placed over the front pair of wheels and the other over the rear wheels, so that either one of the engines may be used or both unitedly, as an increase or decrease of power may be desired to operate the driving-wheels through the medium of connecting gears or chains.

A further object of the invention is to provide a coupling extending from the front shaft to the rear wheels or shafts, which is of swiveled form to adapt the front wheels to be turned to the right or left, so that the rock of the wheels may not be blocked on uneven surfaces or roads.

A further object of the invention is to provide a suitable gearing mechanism in connection with the device, and also to have the wheels run loose on the shafts in traveling over roads and held in place when employed for work by a clutch or snap-knuckle.

With these and other objects in view the invention consists of the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is a top plan view of a traction-engine embodying the invention. Fig. 2 is a bottom plan view showing the running-gear. Fig. 3 is a central longitudinal section of the same.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

Referring to the drawings, the numeral 1 represents the front and back pair of wheels, which are mounted upon shaft 2 and hold the same in position, and 3 designates two timbers running from the front of the rear shaft. It will be observed that the said timbers converge toward the front of the engines and diverge toward the rear of the same, and the converged portions of said timbers connect with the swivel 4, a coupling of a horizontal rotary movement as well as a rocking movement in a vertical plane. Rising centrally from the bed of the engine, which is of ordinary form, is a shaft 5, having a sprocket-wheel 6 on the lower end thereof and an upper hand-wheel 7. Surrounding the sprocket-wheel 6 is a sprocket-chain 8, whose front end connects with the front shaft and is adapted to be operated by turning the hand-wheel 7 to move the shaft at the front of the traction-engine either to the right or left in turning and guiding the same. The numerals 9 and 10 represent engines which are located, respectively, at the rear and front part of the device, and are supplied with driving-shafts 10^a, having suitable gears 11 on the ends thereof, which may be connected to similar gears 11^a on the front and rear shafts or axles of the vehicle or body of the device by means of suitable chain-belts 11^c. A clutch 12 is provided in connection with the wheels, adapted be operated by a lever 13, in order to cause the wheels either to stand firm with their axles or to turn loosely thereon for various purposes. For example, when the front engine 10 is in operation and the rear engine 9 is at rest the rear wheels 1 may be disconnected from their shaft and permitted to rotate loosely thereon without turning the drive-shaft 10^a of the rear engine. When the rear engine 9 is in operation, the rear wheels 1 are connected to their shaft and operate to propel the device forward.

It will be seen that the engines may be made to operate independently when only a comparatively small amount of power is required and unitedly when greater power is desired.

It will be obviously apparent that many minor changes in the proportion and form of the several parts might be made and substi-

tuted for those shown and described without in the least departing from the nature or spirit of the invention.

Having thus described the invention, what is claimed as new is—

1. In a device of the character set forth, the combination of a pair of independently operated engines supported upon suitable beds, independent axles and drive wheels for each of said engines, a swivel coupling between said axles, independent drive shafts for said engines, sprocket wheels upon said shafts and upon said axles, and sprocket chains connecting said drive shafts and said axles, substantially as and for the purpose described.

2. In a device of the character set forth, the combination of a pair of independently operated engines supported upon suitable beds, independent axles and drive wheels for each of said engines, a swivel coupling between said axles, independent drive shafts for said engines sprocket wheels upon said shafts and upon said axles, sprocket chains connecting said drive shafts and said axles, an upright shaft rising from the bed of the rear engine having a sprocket wheel at its lower end and a hand wheel at its upper end, and a sprocket chain meshing with said wheel connected at its forward end to the outer ends of the axle of the front engine, substantially as and for the purpose described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

PETER H. FLANSBURG.

Witnesses:
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A. E. SMITH.