

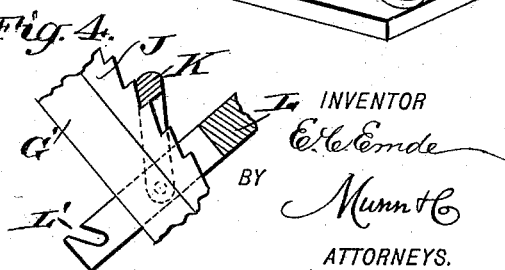
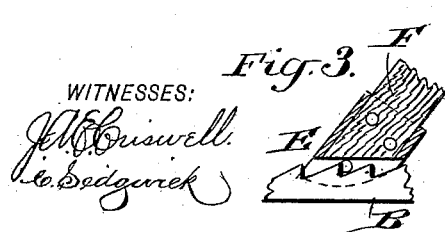
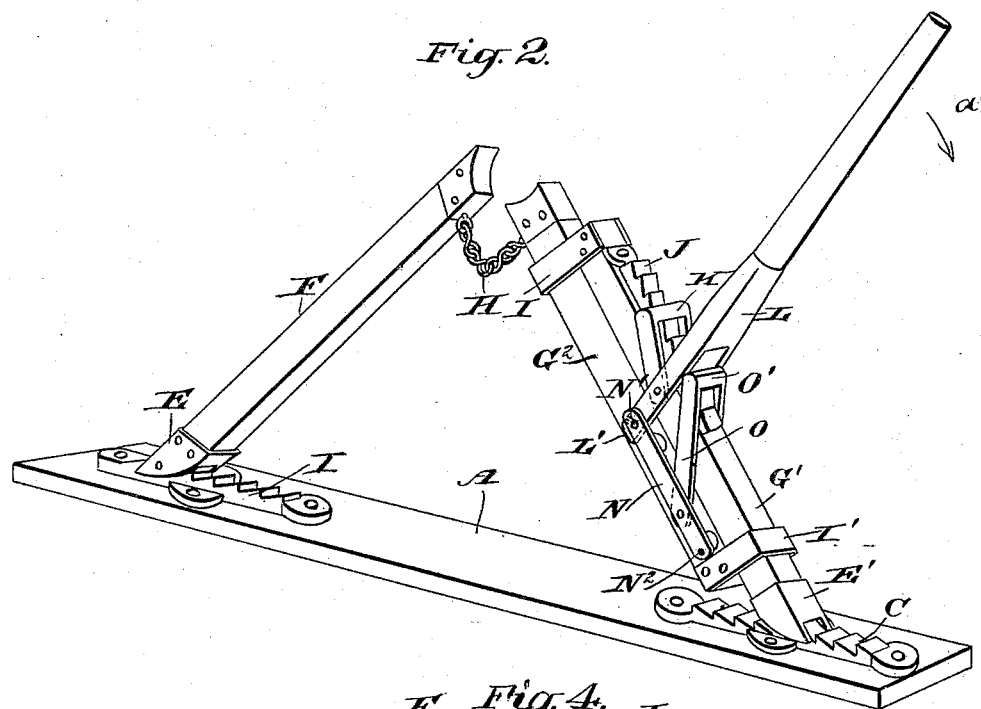
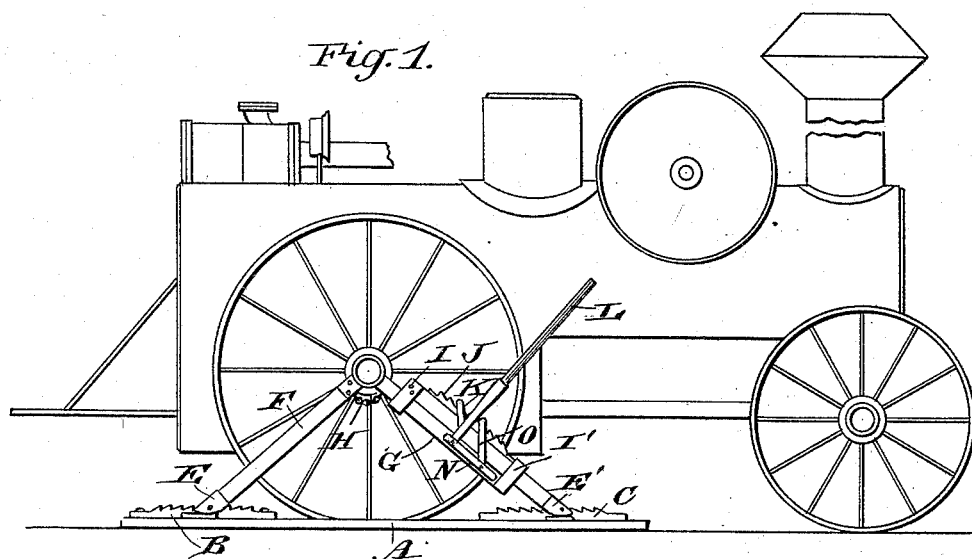
(No Model.)

E. C. EMDE.

STEADYING DEVICE FOR PORTABLE ENGINES.

No. 489,795.

Patented Jan. 10, 1893.



UNITED STATES PATENT OFFICE.

EDWARD C. EMDE, OF TACOMA, WASHINGTON.

STEADYING DEVICE FOR PORTABLE ENGINES.

SPECIFICATION forming part of Letters Patent No. 489,795, dated January 10, 1893.

Application filed September 22, 1892. Serial No. 446,565. (No model.)

To all whom it may concern:

Be it known that I, EDWARD CHARLES EMDE, of Tacoma, in the county of Pierce and State of Washington, have invented a new and Improved Steadying Device for Portable Engines, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved device for steadying portable engines, to prevent undue shaking of the machinery, the device being simple and durable in construction, easily applied and readily adjusted.

The invention consists of a base, and two legs held adjustably on the base and adapted to engage the axle or wheel of the engine, one of the said legs being made in sections, fitted to slide one on the other.

The invention also consists of certain parts and details, and combinations of the same, as will be hereinafter described and then pointed out in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improvement as applied; Fig. 2 is an enlarged perspective view of the improvement; Fig. 3 is an enlarged side elevation of part of the base and one of the legs, the latter being shown in section; and Fig. 4 is an enlarged sectional side elevation of the device for shifting the sections of the sectional legs.

The improved device is provided with a base A, on the top of which are secured the longitudinally-extending toothed bars B and C, adapted to be engaged by shoes E and E', respectively, secured on the lower ends of the legs F and G, and adapted to extend in an inclined position from the base to engage with their upper ends the axle or hub of the rear wheels of the portable engine, as shown in Fig. 1, the upper ends of the legs F and G being connected with each other by a chain H. The leg F is made of a single piece, while the leg G is made in sections G' and G², fitted to slide one on the other, so that the leg can be lengthened or shortened to firmly engage the wheel or axle, so as to securely hold the same

in position to prevent undue shaking. On the upper end of the section G' is secured a loop I, through which passes loosely the other section G², and the latter is provided at its lower end with a similar loop I', through which passes loosely the section G'. On the back of the leg section G' and near the upper end of the same is secured a toothed bar J, adapted to be engaged by a link K, pivotally-connected with a hand lever L, formed at its lower end with a fork, the prongs of which are slotted as at L', to engage pins N' projecting from arms N, pivoted at N² in the sides of the leg section G² at or near the lower end thereof. As shown in Fig. 2, the forked lower end of the handle L straddles the leg sections G' and G², and the under side of the said handle is adapted to engage the middle or cross bar O' of a link O, pivoted on the arms N and adapted to engage a tooth on the bar J so that the said link securely holds the arms N in position when shifting the leg section G² upward on the other section G'.

The device is used as follows: The base A is arranged at or near the rear wheel of the portable engine as shown in Fig. 1, the base being set on the ground so that the two bars B and C are on opposite sides of the center of the wheel. The legs F and G are then set with their shoes E and E', onto the toothed bars B and C, respectively, so that the upper ends of the leg F and the leg section G² engage the hub of the wheel or the axle from underneath and from opposite sides, as shown in Fig. 1. The operator then places the link K onto the nearest tooth of the bar J, as illustrated in Fig. 2, and at the same time hooks the link O' on a corresponding tooth of the said bar below the handle L, so that the said link forms the purchasing joint for the handle L, which is now pressed downward in the direction of the arrow a' and causes by its connection with the arms N, an upward sliding of the leg section G², to press the upper end of the latter firmly in contact with the hub of the wheel or the axle. It is understood that on the downward movement of the handle L, the link K also forms a fulcrum for the said lever to permit of shifting the section G² upward in firm contact with the hub or axle of the wheel.

It is understood that this device is applied preferably on the hub or axle of each rear wheel of the portable engine, and it securely and firmly steadies the entire machine to prevent undue shaking and to hold the engine in its position to prevent slack of the driving belt, &c.

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

1. A steadying device for portable engines, comprising a base, and two legs held adjustably on the base and adapted to engage the axle or hub of the wheel of the engine, one of the said legs being made in sections fitted to slide one on the other, substantially as shown and described.

2. A steadying device for portable engines, comprising a base and two legs held adjustably on the base and adapted to engage the axle or hub of the wheel of the engine, one of the said legs being made in sections fitted to slide one on the other, and a shifting mechanism, substantially as described, for sliding the sections of the sectional legs, as set forth.

3. A steadying device for engines, provided with a leg made in two sections fitted to slide one on the other, a toothed bar held on one of the sections, a link engaging the said toothed bar, a handle pivoted with the said link, and arms connected with the said handle and

pivoted on the other leg section, substantially as shown and described.

4. A steadying device for engines, provided with a leg made in two sections fitted to slide one on the other, a toothed bar held on one of the sections, a link engaging the said toothed bar, a handle pivoted with the said link, arms connected with the said handle and pivoted on the other leg section, and a second link pivoted on the said arms and adapted to engage the said toothed bar, substantially as shown and described.

5. A steadying device for portable engines, comprising a base, toothed bars secured on the said base, and legs provided with shoes engaging the said toothed bars, one of the said legs being made in sections fitted to slide one on the other, substantially as shown and described.

6. A steadying device for portable engines, comprising a base, toothed bars secured on the said base, legs provided with shoes engaging the said toothed bars, one of the said legs being made in sections fitted to slide one on the other, and a shifting device, substantially as described, for shifting the sections of the sectional leg, as set forth.

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Witnesses:

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