(No Model.)

Q. V. P. DAY.

DRAFT DEVICE FOR WHIFFLETREES.

No. 482,622. Patented Sept. 13, 1892.

Fig. 1.

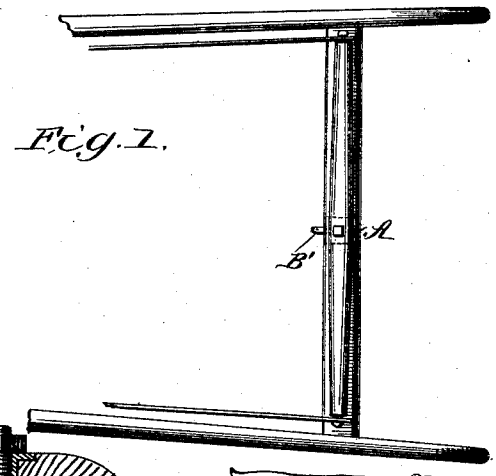


Fig. 2.

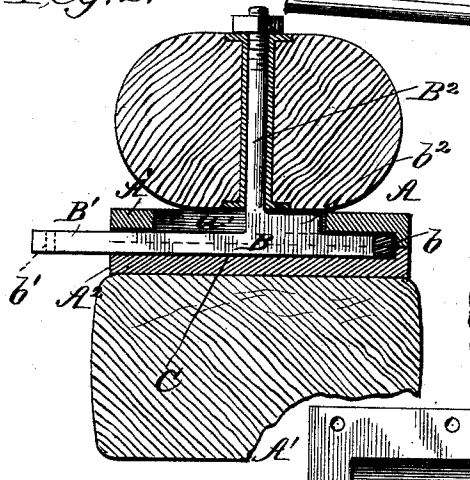


Fig. 3.

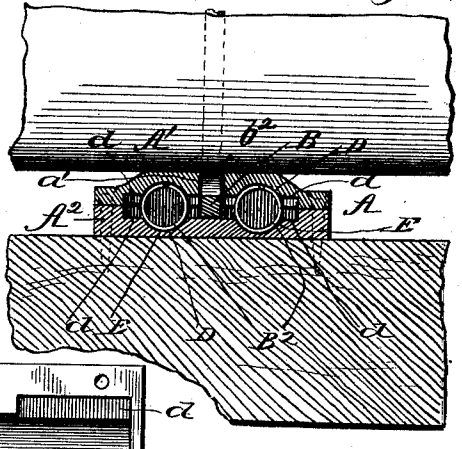


Fig. 4.

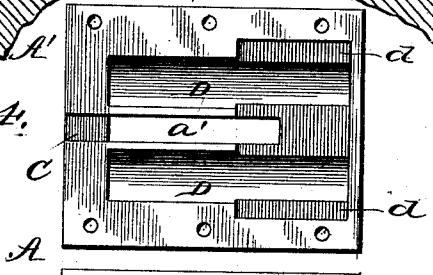
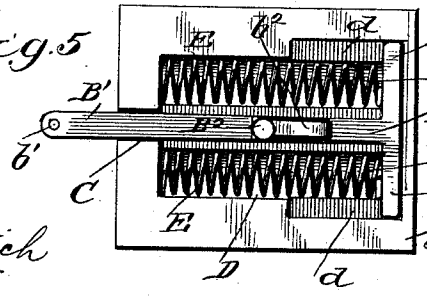


Fig. 5.



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DRAFT DEVICE FOR WHIFFLETREES.

SPECIFICATION forming part of Letters Patent No. 482,622, dated September 13, 1892.

Application filed October 9, 1891. Serial No. 408,251. (No model.)

To all whom it may concern:

Be it known that I, QUINTIS V. P. DAY, of Dinuba, in the county of Tulare and State of California, have invented a new and useful Improvement in Draft Devices, of which the following is a specification.

My invention is in the nature of a spring-draft, so as to relieve the vehicle, harness, animal, and driver of the jerk incident to the sudden starting of the horse or the striking of the vehicle against a stone or other obstruction in the road; and the invention consists in certain novel constructions and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a plan view of the invention as applied to buggy-shafts. Fig. 2 is a vertical longitudinal section, and Fig. 3 a cross-section, of the improvement. Fig. 4 is a view of the inner side of the top section; and Fig. 5, a similar view of the bottom section, all of which will be described.

The draft device includes a casing A and a spring-actuated draft-bar B, movable longitudinally therein. The casing A is preferably made in upper and lower sections A′ A^2, each having guide-grooves C for the draft-bar and recesses D for the springs E, such recesses D being formed with wings *d* for the arms or wings *b* of the draft-bar B. The draft-bar B is fitted in the casing, the sections A′ A^2 of which are united in any suitable manner, and the bar is made in T shape, with the arms or wings *b* at its rear end projecting into the wings *d* and bearing against the rear ends of the springs E, as shown, so that such springs will in operation resist the forward movement of the bar B and by the elasticity of the springs ease the jerks of the horse in starting suddenly and the jars resulting from the vehicle-wheels striking obstructions or abrupt depressions in the road. The draft-bar is shown as extended at its front end B′ beyond the casing and perforated at such point at *b′* for the connection of a draft-hook, clevis, or other suitable draft attachment, and the bar also has between its ends an upwardly-projected pin or bolt B^2, on which a whiffletree or doubletree may be pivotally secured, such part B^2 being projected up through a slot *a′*, formed in the section A′, and being braced by a rib-like construction b^2, formed on the bar B in rear of such pin B^2, as shown. Manifestly either one of the modes of attachment may be employed; but the top pin is preferred by me, although in manufacturing the device I prefer to make it with both the extension B′ and the pin B^2, so that it can be applied for use in either way preferred by the purchaser.

The device is applicable to buggies, wagons, street-cars, plows, or other object designed to be pulled by horses and can be made different sizes to suit the work for which they are intended.

In applying the invention to buggies the casing is suitably secured on the cross-bar of the shaft and the singletree pivotally secured on the pin B^2, or the single or double tree may be fastened by a clevis, pin, or hook to the front end B′ of the draft-bar.

The invention relieves and obviates all the jerk on the horse, vehicle, and rider, its advantages in such respect being readily seen. It also enables the horse to start a heavy load easier, as on the first pull the spring eases up and the animal, thinking the load is starting, will be encouraged to further efforts. The construction is simple and easily applied.

Having thus described my invention, what I claim as new is—

1. The improved draft device, substantially as herein described, consisting of the casing, the springs located therein, and the draft-bar arranged between said springs and having lateral arms or portions engaging the same, such draft-bar being provided with a stud projected above such casing and with a bracing rib or portion b^2, all substantially as and for the purposes set forth.

2. As an improved article of manufacture, a draft device consisting of the casing composed of upper and lower sections provided in their inner faces with coincident recesses D, having wings *d*, and provided centrally with grooves C, opening out of the front end of the casing, and the top section being provided with a slot *a′*, and the draft-bar movable longitudinally in the grooves C, extended at its front end beyond the casing, provided at its rear end with lateral arms extended into the wings *d* and engaging in rear of the springs, and provided at its upper side with a stud or pin projecting up through the slot *a′* and above the casing, the said stud being adapted

to receive a buggy-whiffletree and the front end of the draft-bar for engagement by the hook of a plow-singletree, all substantially as described, and for the purposes set forth.

3. The improved draft device, substantially as described, comprising the casing provided with recesses D, having lateral wings *d* at their rear ends, springs E, fitted in the recesses D, and the draft-bar arranged and movable longitudinally in the casing between the recesses D and provided with arms *b*, extended in opposite directions and across the recesses D and bearing in rear of the springs E, all substantially as and for the purposes set forth.

QUINTIS V. P. DAY.

Witnesses:
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