

No. 837,886.

PATENTED DEC. 4, 1906.

W. H. ROBINSON.  
SPRING DRAFT ATTACHMENT FOR VEHICLES.

APPLICATION FILED MAR. 29, 1906.

2 SHEETS—SHEET 1.

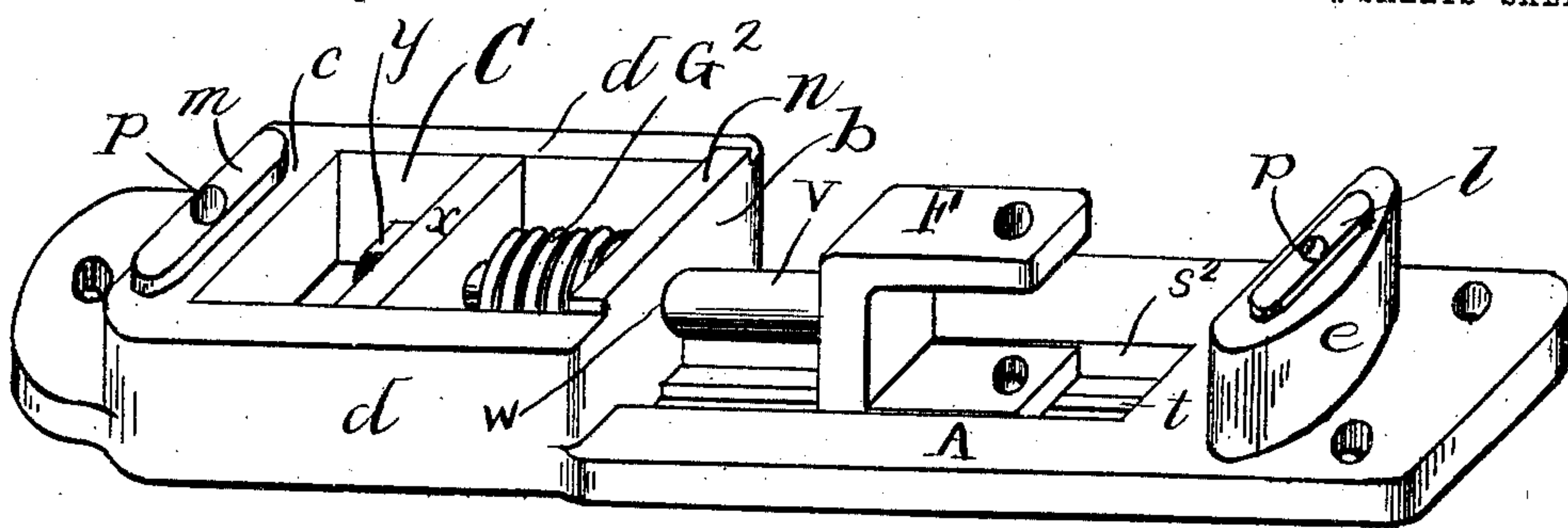


Fig. 1.

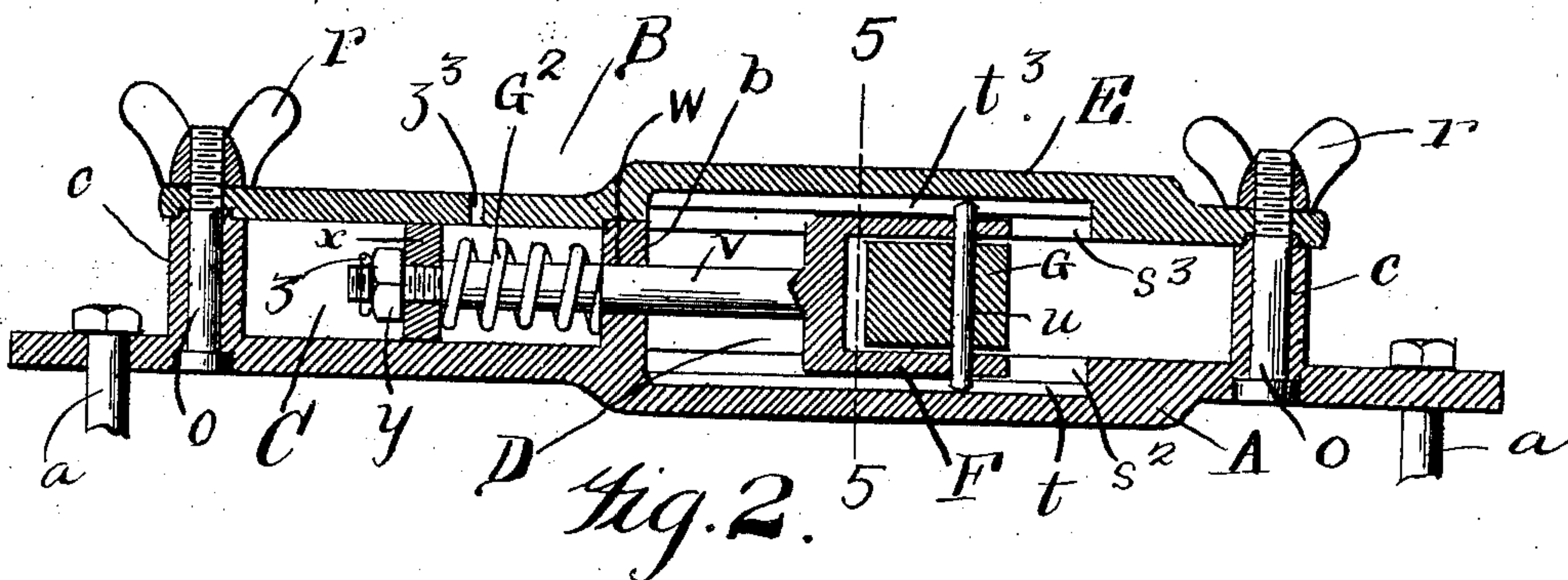


Fig. 2.

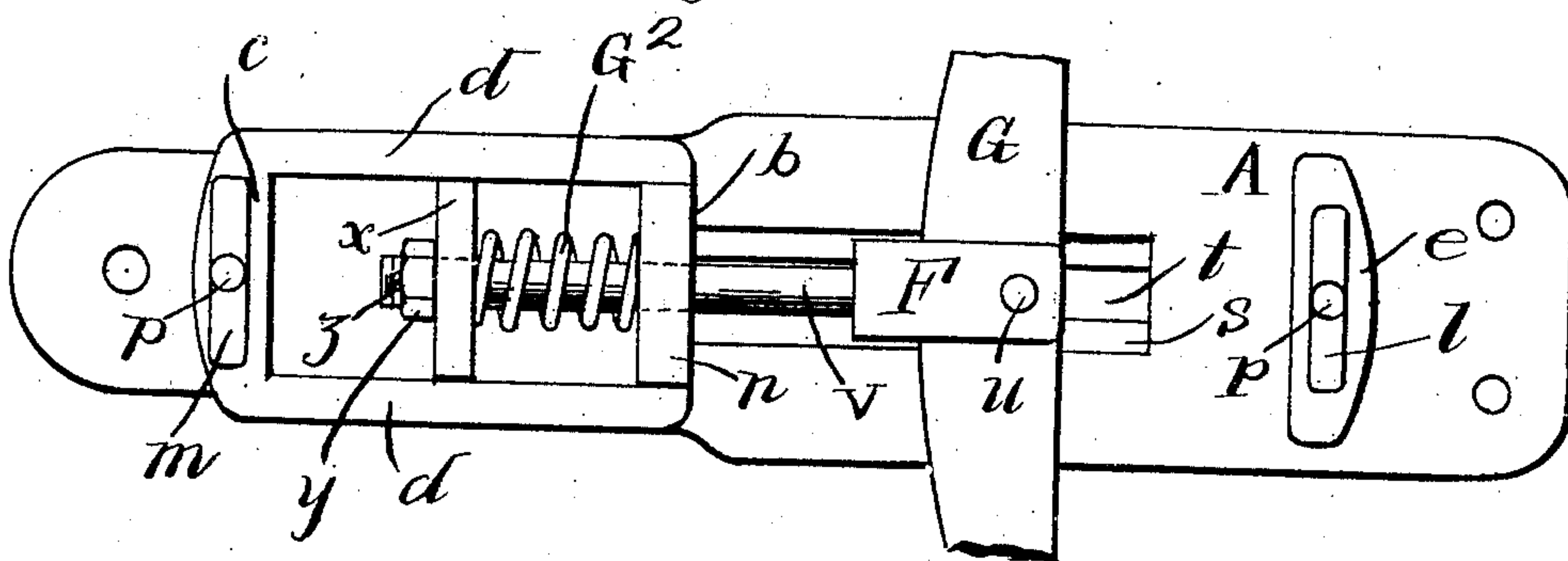


Fig. 3.

Witnesses  
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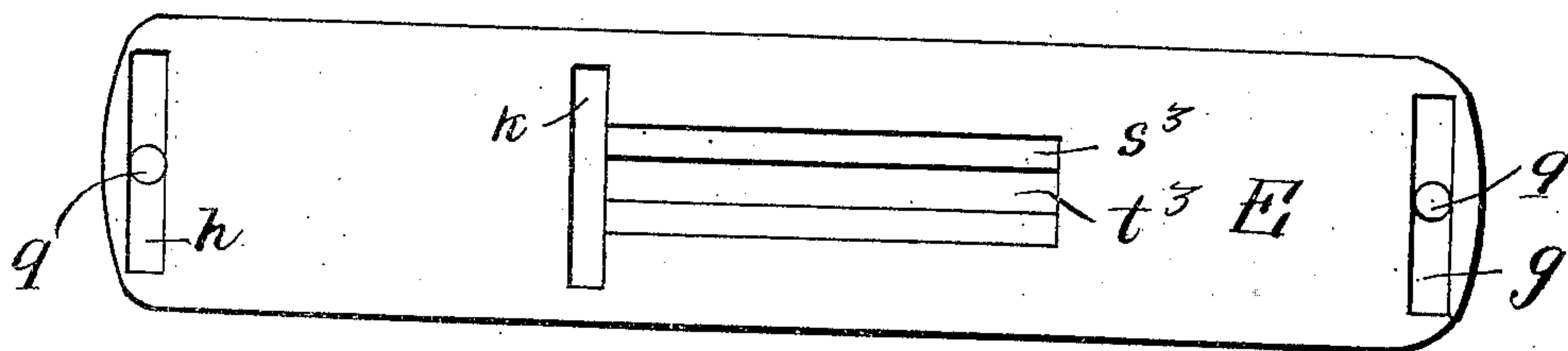


Fig. 4.

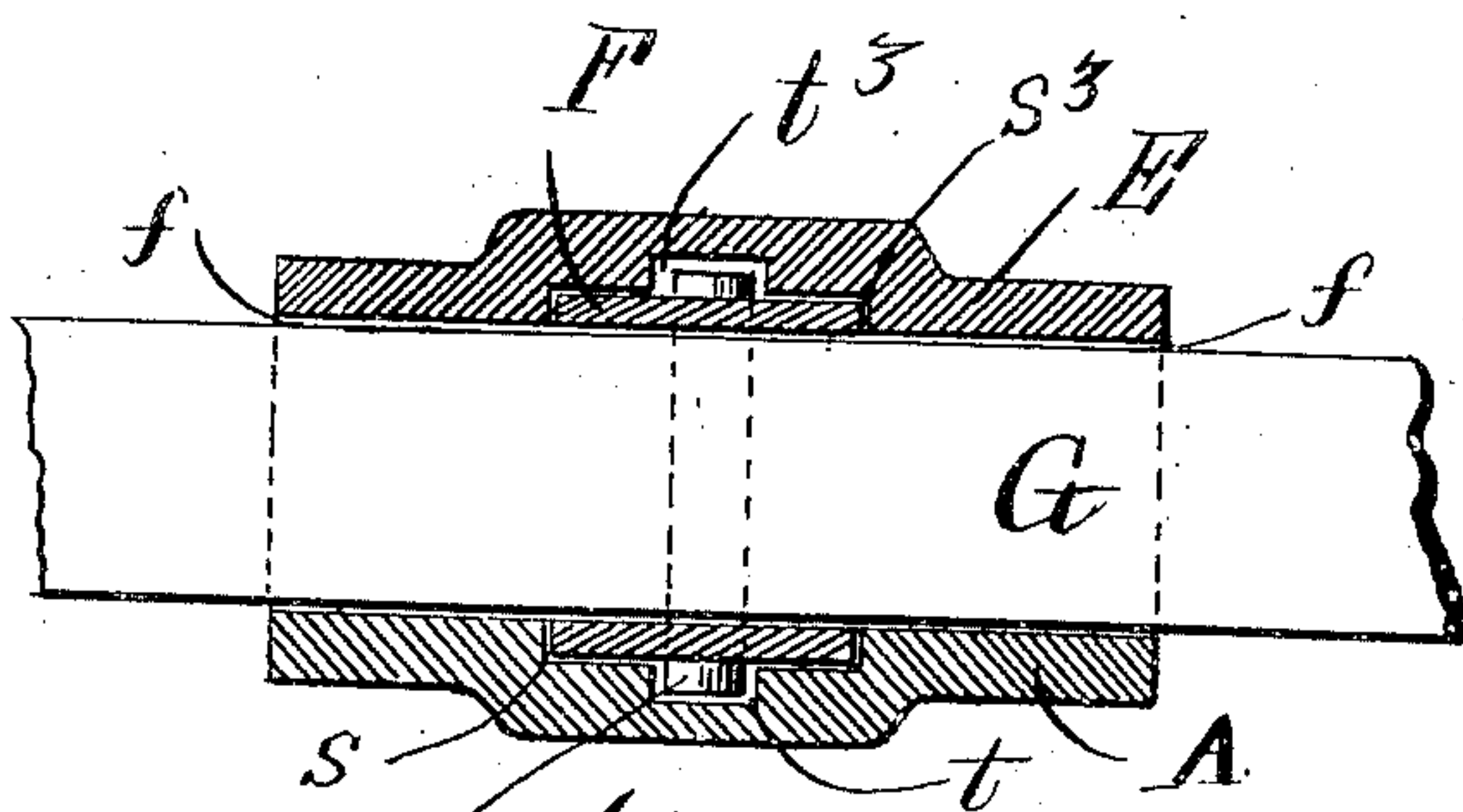


Fig. 5.

Witnesses

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# UNITED STATES PATENT OFFICE.

WILLIAM H. ROBINSON, OF THE DALLES, OREGON.

## SPRING DRAFT ATTACHMENT FOR VEHICLES.

No. 837,886.

Specification of Letters Patent.

Patented Dec. 4, 1906.

Application filed March 29, 1906. Serial No. 308,786.

*To all whom it may concern:*

Be it known that I, WILLIAM H. ROBINSON, a citizen of the United States, residing at The Dalles, in the county of Wasco and State of Oregon, have invented certain new and useful Improvements in Spring Draft Attachments for Vehicles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as it appertains to make and use the same.

This invention relates to spring draft attachments for vehicles; and in general its objects are to provide means whereby the horses may get well under way before the dead-weight of the vehicles is applied to their shoulders, whereby the jar upon the shoulders of the animals due to the wheels of the vehicle striking an obstruction is greatly eased and whereby if one of the draft-animals starts before the other a sufficient amount of time will elapse before it feels the weight of the vehicle to permit the other draft-animal to start forward and assume its share of the load.

Specifically, the object of the invention is to provide an improved construction for attaining these results, and in particular to provide for an efficient housing of the moving parts, so as to prevent accumulation of dirt and catching of the tails of the horses and parts of the harness, for the proper guiding of the moving parts, and, finally, for unusual strength of construction.

Figure 1 is a perspective view of the device with the top removed. Fig. 2 is a longitudinal section. Fig. 3 is a plan view with the top removed. Fig. 4 is a bottom plan view of the removable top; and Fig. 5 is a transverse section on the line 5 5, Fig. 2.

Referring now to the drawings, A indicates a base-plate adapted to be secured by bolts *a* or otherwise to the pole of the vehicle or to other part, as desired. Mounted on this plate is a casing B, comprising a rear inclosed rectangular chamber D and a front partially open chamber C. Chamber D is provided with front and rear walls *b* and *c* and side walls *d*, all preferably formed integral with the base-plate A. The front wall *b* of chamber C serves also as the rear wall of front chamber D, the front wall *e* thereof being also prefer-

ably formed integral with the base, and the sides *f* being left open.

E is the removable top, common to both of the chambers C and D, and said top is provided on its under surface at its ends and middle, respectively, with transverse mortises *g h k*, which receive tenons *l m n*, projecting upward from the walls *e c b*. Bolts *o* extend upward from the bottom of the base-plate A through apertures *p* in walls *e* and *c* and registering apertures *q* in the top and are engaged at their upper ends by wing-nuts *r*. It will be understood that while the constructions just described afford convenient means for securing the removable top in position, yet other means may be employed, if desired.

The portion of the base-plate A forming the bottom of the chamber C is formed on its inner surface only—that is, not extending through the bottom—with a slideway *s*, depressed below the surface of the plate and having straight parallel sides *s*<sup>2</sup>. Formed centrally and longitudinally of the slideway *s* and sunk below the surface of the latter, though not penetrating through the base-plate, is a channel *t*. Similar in all respects to slideway *s* and channel *t* are slideway *s*<sup>3</sup> and channel *t*<sup>3</sup>, these latter, however, being formed in the lower surface of that portion of the top E forming the cover of chamber C.

F is a clevis located in chamber C and arranged to slide longitudinally in the slideways *s* and *s*<sup>3</sup>, and *u* is the clevis-pin, which passes through the doubletree G, extending through the open sides *f*. Extending rearward from the clevis is a stem *v*, passing through an aperture *w* in the front wall *b* of chamber D and encircled within said chamber by a coil-spring G. Said spring is retained upon the stem *v* by a follower *x*, which is rectangular in shape and fits the inside of the chamber, so as to be reliably guided therein, and is itself held in place by the nut *y* and the cotter-pin *z*.

An oil-hole *z*<sup>3</sup> is conveniently provided through the top E and leading into chamber D, so as to provide means whereby the parts therein may be lubricated from time to time.

It will thus be seen that according to my invention there is provided a substantially rectangular casing divided into two cham-



bers, one of which is entirely closed and is designed to receive the compression-spring and the other of which is necessarily open at its sides to permit the doubletree to extend therethrough. It will likewise be seen that the constructions described, together with the means for clamping the removable top in place, afford a device of sufficient strength to resist any ordinary or extraordinary strains or shocks. Moreover, it will be readily appreciated that the provisions made for the accurate guiding of the clevis and follower-plate in their longitudinal reciprocations will make binding and sticking of the parts practically impossible.

What is claimed as new is—

1. In a device of the character described, the combination of a base-plate, a casing carried thereby and comprising front and rear chambers, said rear chamber having continuous front, rear and side walls rising from the base-plate and said front chamber having a front wall rising from the base-plate, its rear wall formed by the front wall of the rear chamber, and its sides open, a removable top for said casing common to both chambers, a clevis and whiffletree slidably mounted in the front chamber, and a compression-spring housed in the rear chamber and resiliently connecting the clevis and casing.

2. In a device of the character described, the combination of a base-plate, a casing carried thereby and comprising front and rear chambers and a removable top common to both chambers, said rear chamber having continuous rectangularly - arranged front, rear and side walls formed integral with the base-plate, and said front chamber having a front wall formed integral with the base-plate and arranged parallel to the front and rear walls of the rear chamber, its rear wall formed by the front wall of the rear chamber, and its sides open, a clevis mounted slidably in said front chamber and adapted to receive a whiffletree, a stem extending rearward from said clevis through the front wall of the rear chamber, a follower-plate carried by the rear end of said stem, and a spiral spring confined between said follower-plate and the front wall of said chamber.

3. In a device of the character described, the combination of a base-plate, a casing carried thereby and comprising a front chamber and a rear chamber, said rear chamber having upright rectangularly - arranged front, rear and side walls secured to the base-plate, and said front chamber having a front wall likewise secured to the base-plate, its rear wall formed by the front wall of the rear chamber and its sides open, the several front and rear walls being provided with upstand-

ing tenons, a removable top common to both chambers and provided with mortises for receiving said tenons, a whiffletree-clevis slidably mounted in the front chamber, and a compression-spring housed in the rear chamber and arranged resiliently to connect the clevis and casing.

4. In a device of the character described, the combination of a base-plate, a casing carried thereby and comprising front and rear chambers, said rear chamber having a rear wall formed integral with the base and provided with a vertical aperture extending therethrough and through the base, a parallel front wall also formed integral with the base, and parallel side walls integral with the base and connecting the front and rear walls, and said front chamber having a front wall formed integral with the base in parallelism with the front and rear walls of the rear chamber and being provided with a vertical aperture similar to the first-named aperture, the several front and rear walls being furnished with upstanding tenons, a removable cover common to both chambers and having mortises to receive said tenons and apertures arranged to register with the first-named apertures, bolts passing through the registering apertures, wing-nuts engaging the upper ends of said bolts, a sliding clevis located in the front chamber, and a compression-spring housed in the rear chamber.

5. In a device of the character described, the combination of a base-plate, a substantially rectangular casing carried thereby and comprising a rear chamber completely inclosed and a front chamber open at its sides only and said casing having a removable top common to both chambers, a sliding clevis mounted in the front chamber, and a compression-spring housed in the rear chamber and resiliently connecting the clevis and casing.

6. In a device of the character described, the combination of a base-plate, a casing carried by the base-plate and divided by a transverse apertured wall into two chambers, one of said chambers being provided with slideways in its top and bottom walls, a clevis mounted in said slideways and having a stem passing through the aperture in said transverse wall, a follower-plate carried by the end of said stem and fitting the interior of the other chamber, and a spiral spring confined between said follower-plate and the apertured wall.

7. In a device of the character described, the combination of a base-plate, a casing carried thereby and divided by a transverse apertured wall into two chambers, one of said chambers being provided in its top and

bottom walls with longitudinal slideways and centrally of said slideways with longitudinal channels, said slideways and channels being formed on the inner surfaces of the walls  
5 only, a clevis mounted in said slideways and having a pin whose ends are received in said channels, a stem extending from the clevis through the aperture in the transverse wall, a follower carried by the end of the stem, and

a spring confined between said follower and the apertured wall.

In testimony whereof I affix my signature in the presence of two subscribing witnesses.

WILLIAM H. ROBINSON.

Witnesses:

GEO. H. STEEN,  
B. E. JOHNSON.