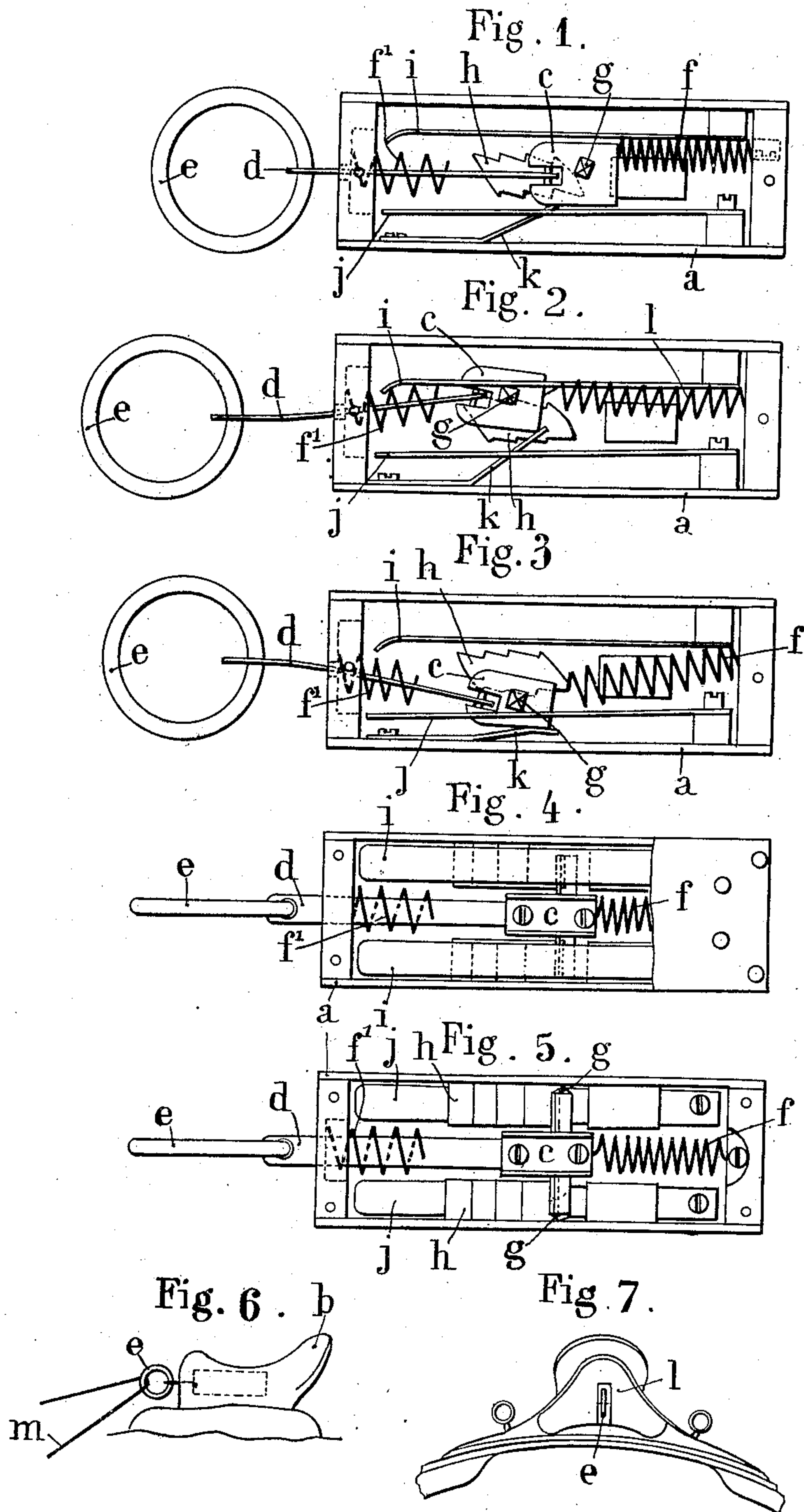


No. 896,621.

PATENTED AUG. 18, 1908.

J. CAUBERT.
HARNESS FOR HORSES.
APPLICATION FILED JAN. 2, 1907.



WITNESSES

W. P. Burk
W. J. Smith

INVENTOR

Jean Caubert
[Signature]

UNITED STATES PATENT OFFICE.

JEAN CAUBERT, OF COMMERCY, FRANCE.

HARNESS FOR HORSES.

No. 896,621.

Specification of Letters Patent.

Patented Aug. 18, 1908.

Application filed January 2, 1907. Serial No. 350,385.

To all whom it may concern:

Be it known that I, JEAN CAUBERT, captain in the Sixth Regiment of Hussars, of Commercy, Meuse, Republic of France, have
5 invented Improvements Relating to Harness for Horses, of which the following is a full, clear, and exact description.

The present invention relates to an improved arrangement for fastening the bearing reins of carriage horses to the saddle. This arrangement provides a resilient point of attachment for the bearing rein and permits this point of attachment to yield and to be progressively displaced by the pulling of
15 the horse until a limit is reached at which this point of attachment is brought back to its initial position. This improved arrangement comprises a retaining device which maintains the point of attachment at the
20 place to which the pull of the animal has brought it, and which, when the limit is reached and the point of attachment automatically drawn back, prevents this point of attachment from being drawn forward by the
25 animal until it has returned to its initial position.

The present invention avoids any annoyance to the horse, gives the jaw more freedom, and thereby renders the management
30 of the horse easier while at the same time improving its pose.

The accompanying drawing shows how my said invention may be conveniently and advantageously carried into practice.

35 In this drawing: Figure 1 is a longitudinal vertical section of my improved arrangement, and Figs. 2 and 3 are similar views illustrating the operation thereof. Fig. 4 is a plan of the same the cover being broken
40 away, and Fig. 5 is a plan, the cover and the upper springs being removed. Fig. 6 is a side view of a saddle showing the application of my improvements thereto, and Fig. 7 is a corresponding front view.

45 My improved apparatus comprises a box *a* placed within the saddle *b* the pommel of which is hollowed out for this purpose. In this box is arranged a slider *c* to which is fixed one end of a flexible blade *d* the other end of
50 this blade carrying a ring *e*. The slider is under the control of a spring *f* which is assisted by a spring *f'* surrounding the blade *d*. The said slider carries two pins *g* respectively contacting with the teeth of two racks *h* at-
55 tached to the side walls of the box. These racks have the teeth on their upper sides

facing forward and those on their undersides facing backward. Blade or leaf springs *i* and *j* are arranged to support the pins in contact with the teeth of the racks. A spring *k*
60 fixed in the bottom of the box tends to raise the slider. A plate *l* is arranged at the front of the box, as shown in Fig. 7.

The operation is as follows: When the ring *e* (Fig. 1) is pulled, the slider *c* is moved and
65 the pins *g* pass over the first teeth of the racks *h*, these first teeth being more easily passed over than are the following teeth by reason of their inclination and the tension of the spring. The slider cannot now move
70 backwardly, the pins being supported in engagement with the notches of the racks by the spring *i*. As fresh pulls are exerted on the ring *e*, the slider *c* passes over other teeth (Fig. 2), which are longer than the first and
75 are formed with inclined faces. If the pull ceases the slider rests at the place to which it has been brought; but if the pull is continued, the pins on the slider arrive at the extremity of the racks, whereupon the slider is
80 caused by the pull of the blade *d* and the tension of the spring *f* to pass to a position wherein the pins are below the racks. The slider is then drawn back by the principal spring *f* assisted by the spring *f'* (Fig. 3)
85 which is compressed between the blade *d* and the front of the box. The slider then successively passes over the teeth of the lower racks, which are formed with inclined faces, without the pull which may be exercised on
90 the ring *e*, being able to draw it forward, in consequence of the arrangement of the teeth, until it has returned to the end of the rack; the spring *k* then raises it and restores it to the place it occupied at the commencement
95 of the operation. The bearing rein *m* from the snaffle or bridle is arranged in the ordinary manner and passes first through the panurge rings and then through the ring *e*. In the case of a horse endeavoring to "take
100 the bit" he exercises a pull on the rein *m* on the ring *e* and on the blade *d* connected to the slider and makes the latter pass over the rack teeth in succession with pauses if the pull is not constant and, if the horse pulls
105 suddenly or with force, draws the slider to the end of its course. In this case the slider is drawn back by the principal spring *f* and the spring *f'* and passes over the teeth of the lower rack until it again reaches its initial
110 position, but with pauses, in consequence of the opposite arrangement of the teeth which

oppose fresh pulls until the slider has been put back in place. If the horse then pulls again, the same operation is repeated and so on. This series of movements and pauses liberates the jaw in a manner similar to the action of the rider's or driver's hand which recovers the motion by a rest of the fingers when the pull is too strong and immediately gives back liberty to the muscles of the neck and shoulders to extend. Similarly, if the pull is very strong or very sudden, the slider immediately passes over all the upper rack and the instrument draws back the neck and shoulders by its return to the starting point. The bearing rein provided with this arrangement does not impose any restraint on the animal. The horse after having felt it for the first few times and finding that it yields to his pull, soon follows the movement and lets the apparatus draw him back gently, by the fact that each time he pulls too strongly he is arrested by the instrument, and comes to slightly support himself against the backwardly directed teeth.

The bearing rein from the snaffle or bridle can, if desired, pass through the ring, the bearing rein then being fixed to the bit by a thimble. The bearing rein, being able to slip in the ring, permits a sidewise movement which is equivalent to the lateral displacement of the bit operated by a rider mounted on the horse.

In consequence of the movability of the jaw acquired and mechanically kept up by means of the new arrangement, the ease of driving to the driver, who has in his hands the reins adapted to the bridle bit, is assured since the resistance are overcome and the horse is quite obedient to the direction of the driver. Not only is driving considerably facilitated but, while the systems of bearing rein, heretofore known, cause fatigue, and may cause a horse not softened in his neck

and shoulders or not kept up in lissomness, to take the bit in his teeth and in some cases bolt in order to escape restraint, with the improved arrangement it is no longer possible for the horse to take the bit in his teeth since as soon as he pulls, the instrument comes into operation and gently draws him back, if the pull is very strong, still carrying with it the freedom of the jaw. Moreover the application of this apparatus gives the animal an elegant and better attitude than that formerly obtained, since in leaning on the apparatus, the muscles of the neck and shoulders, when extending, stretch forward to find the bit and the driver places the horse's head at will by reason of the flexibility of the jaw.

It is evident that the length of the racks and the number of teeth can be varied in any case, the length of the racks being increased for horses with long necks and shoulders.

The arrangements hereinabove given are by way of example only, the forms, dimensions and detail arrangements can be varied in all cases without modifying the principle of my invention.

Claim.

A saddle having a box therein, said box having racks on its walls, a slider having pins connected thereto and adapted to engage with the racks, a spring for controlling the longitudinal movement of the slider, springs adapted to engage with the pins to keep the same in contact with the racks, a ring adapted to receive the rein and a connection from the ring to the slider.

The foregoing specification of my improvements relating to harness for horses signed by me this eighteenth day of December, 1906.

JEAN CAUBERT.

Witnesses:

HANSON C. COXE,
MAURICE H. PIGNET.