(No Model.)

J. H. & F. S. PEW.

SPREADER FOR REINS.

No. 478,712. Patented July 12, 1892.

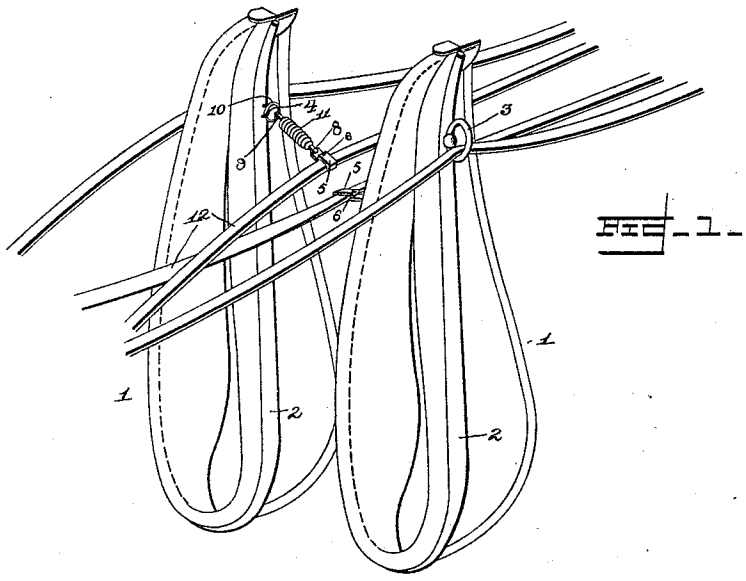

Fig. 1.

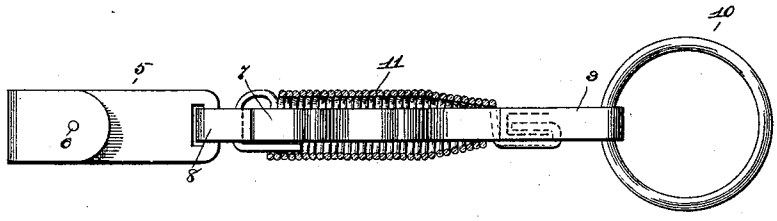

Fig. 2.

Witnesses:

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Inventors

J. H. Pew and

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By their Attorneys,

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UNITED STATES PATENT OFFICE.

JAMES H. PEW AND FREDERICK S. PEW, OF ANDOVER, SOUTH DAKOTA.

SPREADER FOR REINS.

SPECIFICATION forming part of Letters Patent No. 478,712, dated July 12, 1892.

Application filed January 2, 1892. Serial No. 416,851. (No model.)

To all whom it may concern:

Be it known that we, JAMES H. PEW and FREDERICK S. PEW, citizens of the United States, residing at Andover, in the county of Day and State of South Dakota, have invented a new and useful Spreader for Reins, of which the following is a specification.

Our invention relates to improvements in spreaders for reins employed in double harnesses; and the objects in view are to provide a cheap and simple device adapted to be connected with the eye of the inner section of a hame and to automatically tend to spread and take up slack in the reins, thus obviating any liability of their engaging with the pole or yoke, while at the same time adapted to yield sufficiently to permit the reins to give a direct pull upon the bits when occasion requires and permit the animals to have proper and free movement of their heads.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of a portion of a double harness provided with spreaders constructed in accordance with our invention. Fig. 2 is a detail in longitudinal section of the spreader.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates a pair of opposite collars, upon which are mounted the usual hame-sections 2, the inner sections of each pair being provided with staples or eyes 4. Heretofore it has been customary to connect with these staples or eyes leather loops, and in the outer or free ends of the loops connect rings through which the inner branches of the reins pass. To such staples or eyes are our spreaders connected; and our invention resides in the construction of these spreaders, the before-mentioned objects existing therein.

Upon each of a pair of leather-straps 7 a coiled spring 11 is mounted, the ends or terminals of the coil being engaged with the loops 8 and 9, formed at the ends of the strap. The strap is somewhat longer than the spring and permits of an expansion of the latter only to a limited degree, after which the strain is borne by the strap and removed from the spring. Ordinarily, however, the spring remains contracted and the strap consequently slackened within the same. The inner end or loop 9 of the strap is connected to a ring 10, and the same is loosely connected or engaged to the staple or eye 4. The outer end of each strap, however, or rather its loop 8, passes through a slot formed in the inner end of a sheet-metal clip 5. The outer end of each clip is bent upon itself to embrace the inner branch of one of a pair of reins and is securely connected thereto by means of a rivet 6, passed through the clip in the center of the rein.

12 designates the reins, or rather the inner branches thereof, and each passes through and is embraced by a metal clip 5, which, as before stated, is suspended at the free end of one of the spreaders thus constructed.

From the foregoing description it will be seen that in operation the springs contracting will serve to support the inner branches of the reins in close relation with the collars, and when draft is applied to the reins the springs will yield, and thus expand the devices in order to permit of a more direct pull to the bits, whereby the strength exerted is more directly applied than heretofore, where non-yielding spreaders are employed. By means of the yielding spreaders those portions of the inner branches of the reins in front of the collars are maintained taut or supported sufficiently to prevent the same from sagging and being accidentally engaged by the end of the pole or tongue or ends of the neck-yoke during the movements of the animals' heads, and yet at the same time the animals' heads are free to move.

Having described our invention, what we claim is—

1. The herein-described spreader, consisting of a limiting-strap, a coiled spring connected at its ends with the strap, a rein-receiving clip at the outer end of the strap, and means for connecting the inner end of the strap to the hame or other suitable portion of the harness, substantially as specified.

2. The herein-described spreader, consisting of a coiled spring, a flexible strap longer

than the spring located therein and terminating at its opposite ends in loops to which the terminals of the spring are connected, a ring loosely connected to the inner loop, and a metal clip perforated to engage with the outer loop and adapted for connection with the inner branch of the rein, substantially as specified.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

JAMES H. PEW.
FRED. S. PEW.

Witnesses:
JENNIE M. PEW,
ALICE SUTHERLAND.