

E. BARR.
SHOCK ABSORBER FOR FLOWS.
APPLICATION FILED DEC. 7, 1909.

977,364.

Patented Nov. 29, 1910

FIG. 1.

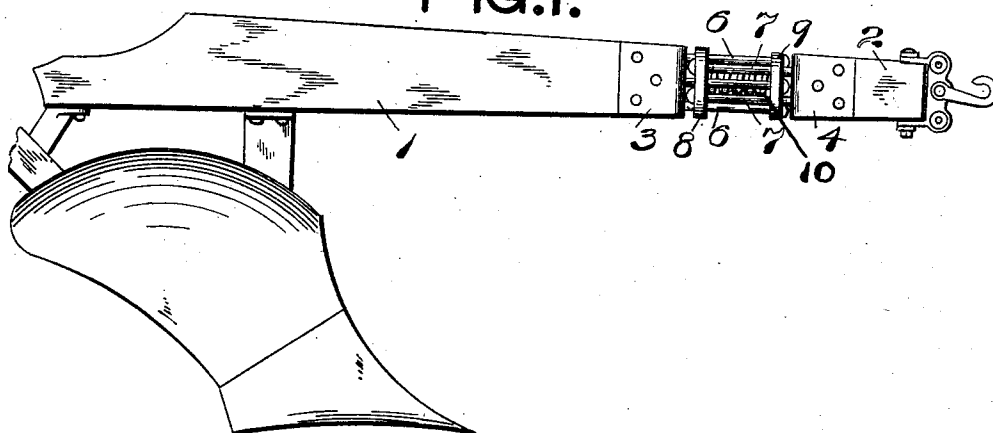


FIG. 2.

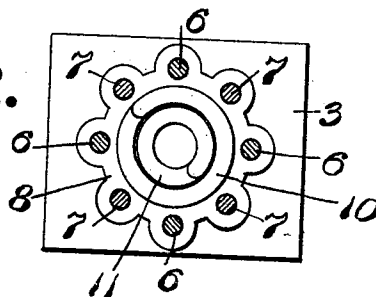
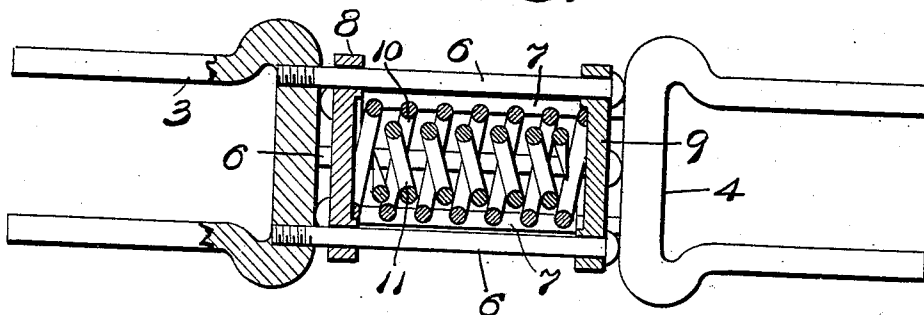


FIG. 3.



Witnesses

M. C. Harrison,
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Inventor

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By *Richard D. Harrison,*
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UNITED STATES PATENT OFFICE.

EMMETT BARR, OF GARRETT, INDIANA, ASSIGNOR OF ONE-HALF TO CLAUDE M. PARKER, OF GARRETT, INDIANA.

SHOCK-ABSORBER FOR PLOWS.

977,364.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, EMMETT BARR, citizen of the United States, residing at Garrett, in the county of Dekalb and State of Indiana, have invented certain new and useful Improvements in Shock-Absorbers for Plows; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in plows, and has for its object the provision of a yieldable mechanism included in the beam thereof to take up sudden shocks occasioned by the encountering of under-ground obstructions during plowing.

With the above object in view, the invention consists of including a slidable connection in the plow beam and associating therewith a yieldable member to place tension on the connection, as will be hereinafter more fully set forth in specification and pointed out in the appended claims.

In the accompanying drawings, forming a part of the specification, Figure 1, is a side elevation of a portion of a plow showing the invention applied thereto. Fig. 2, is a transverse section through the device, on a larger scale. Fig. 3, is a plan view of the same, partly in longitudinal section, in all of which views like detail parts are designated by like numerals of reference.

My improved shock absorber is disposed between the plow beam 1 and draft connecting block 2, the beam proper being shortened sufficient to include the absorber.

The structure of the absorber here shown, comprises a pair of straps 3 and 4, the former being rigidly secured to the forward end of the beam proper and the latter rigidly secured to the extension or block carrying the draft connection. Each of these straps has rigidly secured thereto four spaced and oppositely projecting slide connection bars 6 and 7, respectively, each of which is provided at its free end with an abutment or head, said slide bars having loosely fitted thereover the heads 8 and 9, the inner face portion of each being recessed. Arranged between these heads, with its ends engaging in the recessed portions, is

a spiral spring 10 normally maintaining said heads in their extreme separated positions against the heads of the slide bars, said spring inclosing a second spiral spring 11 of less length than the former spring and consequently normally inactive.

In practice, when the plow point comes in contact with an obstruction, the heads 9 and 10 carried by the opposite slide bars, act upon and compress the spring 10 as they move toward one another, which heads, in approaching one another, also bring into action the second spiral spring, which second spring gradually increases the resistance offered by the shock and at the same time tends to prevent a full contraction of the former spring and consequent injury thereof.

By means of my improved absorber in the plow beam, it will be readily apparent that the effects of sudden jarring will be overcome when obstructions are encountered, as well as in starting the plow. Again, the absorber being rigidly attached to and forming a part of the plow beam it is always in place and ready for service.

Having thus shown and described my invention, what I claim, is:

1. In a plow, the combination of a two-part beam with said parts yieldably connected, the connection of each part being substantially alike and each comprising a plurality of rigidly-fixed horizontally-disposed slide-bar extensions connected at their outer ends by a head, the bars of one extending through openings in the other to form a slidable connection, and a spiral spring disposed between said heads and inclosed by the inter-disposed slide-bars of the two parts, as shown and set forth.

2. In a plow, the combination of a two-part beam with said parts yieldably connected, the connection of each part being substantially alike and each comprising a plurality of rigidly-fixed horizontally-disposed slide-bar extensions connected at their outer ends by a head, the bars of one extending through openings in the other to form a slidable connection, a spiral spring disposed between said heads and inclosed by the inter-disposed slide-bars of the two parts, and a second spiral spring inclosed by the aforesaid spring, as shown and set forth.

3. In a plow, the combination of a two-part beam with said parts yieldably con-

nected, the connection of each part being substantially alike and each comprising a strap secured to the beam part, a plurality of horizontally-disposed slide-bar extensions
5 rigidly fixed to said strap and connected at their outer ends by a head, the bars of one extending through openings in the other to form a slidable connection, a spiral spring disposed between said heads and inclosed
10 by the inter-disposed slide bars of the two

straps, and a second spiral spring inclosed by the aforesaid spring, as shown and set forth.

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

EMMETT BARR.

Witnesses:

J. D. BRINKERHOFF,
CLAUDE M. PARKER.