(No Model.)

J. H. SMITH.

SEEDER.

No. 422,987. Patented Mar. 11, 1890.

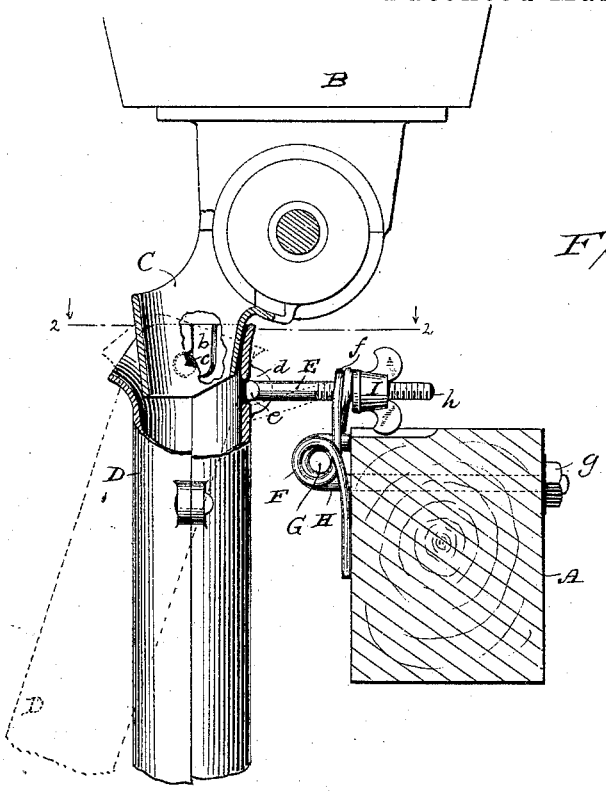

Fig. 1.

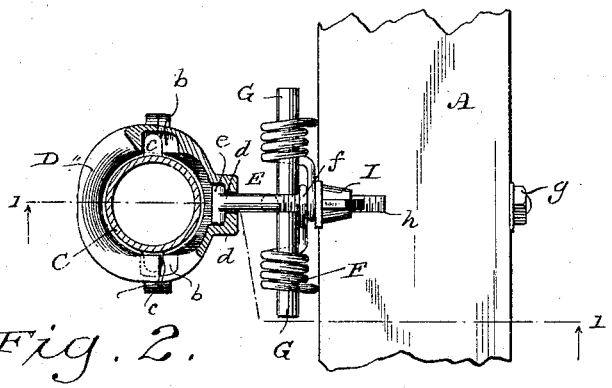

Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

JAMES H. SMITH, OF FOND DU LAC, WISCONSIN.

SEEDER.

SPECIFICATION forming part of Letters Patent No. 422,987, dated March 11, 1890.

Application filed June 28, 1889. Serial No. 315,952. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. SMITH, of Fond du Lac, in the county of Fond du Lac, and in the State of Wisconsin, have invented certain new and useful Improvements in Seeders; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to seeders; and it consists in certain peculiarities of construction and combination of parts, to be hereinafter described with reference to the accompanying drawings, and subsequently claimed.

In the drawings, Figure 1 represents a side elevation, partly in section, on line 1 1, Fig. 2, and illustrates a delivery-tube having a yielding connection with the feed-case and frame of a seeder. Fig. 2 represents a plan view of the parts shown in Fig. 1, the feed-case being in horizontal section on line 2 2 of the latter figure.

Referring by letter to the drawings, A represents a portion of the machine-frame, B the feed-box, and C a feed-case connected to said feed-box in the usual manner.

The feed-case is provided with outwardly-extended lugs *b*, designed to engage the horizontal portions of ⌟-shaped slots or recesses *c* in the upper end of a delivery-tube D, the latter being also provided with recessed lugs *d*, extended in a forward direction and designed to receive the head *e* of a ⊢-shaped bolt E, that passes through an eye *f* in a spring F, this spring being made from a single wire coiled around a pin G, and having its ends arranged to bear against the frame A of the machine. The pin G is held in place by a hook-bolt H, passed through the adjacent portion of the machine-frame and engaged by a clamping-nut *g*, and the tension of the spring F is regulated by means of a wing-nut I, arranged on the screw-threaded forward end *h* of the bolt E, as is best illustrated in Fig. 1.

By the above construction the delivery-tube D will yield to any obstruction in its path, as is shown by dotted lines in Fig. 1, the parts being relatively arranged to permit a free backward movement of said delivery-tube to an angle of forty-five degrees.

The spring F causes the delivery-tube to automatically return to its normal position after passing an obstruction, the tension of this spring being readily adjusted, as above described.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a seeder, the combination of a feed-case provided with lateral lugs, a delivery-tube having recesses for engagement with the lugs, and a spring connecting the delivery-tube and machine-frame, substantially as set forth.

2. In a seeder, the combination of a feed-case provided with outwardly-extended lugs, a delivery-tube having ⌟-shaped recesses for engagement with said lugs, and a spring connected to said delivery-tube and machine-frame, substantially as set forth.

3. In a seeder, the combination of a feed-case, a delivery-tube pivotally connected thereto and provided with forwardly-extended and recessed lugs, a ⊢-shaped bolt having its head seated in said lugs, a spring connected to the machine-frame and provided with an eye for engagement with the bolt, and a nut arranged on said bolt in opposition to the spring, substantially as set forth.

4. In a seeder, the combination of a feed-case, a delivery-tube pivotally connected thereto, a pin connected to the machine-frame, a spring arranged on the pin, a bolt connecting the delivery-tube and spring, and a nut arranged on the bolt in opposition to the spring, substantially as set forth.

5. In a seeder, the combination of the frame A, the feed-case C, a delivery-tube D, pivoted to said feed-case, a bolt E, connected to the delivery-tube, a pin G, connected to said frame, a spring F, arranged on the pin and provided with an eye for engagement with the bolt, and an adjusting-nut I, arranged on said bolt in opposition to the spring, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Fond du Lac, in the county of Fond du Lac and State of Wisconsin, in the presence of two witnesses.

JAS. H. SMITH.

Witnesses:
L. H. GILLET,
CLITZ E. PERRY.