

(No Model.)

W. P. ROSE.

SCREENING AND LOADING ATTACHMENT FOR THRASHING MACHINES

No. 420,966.

Patented Feb. 11, 1890.

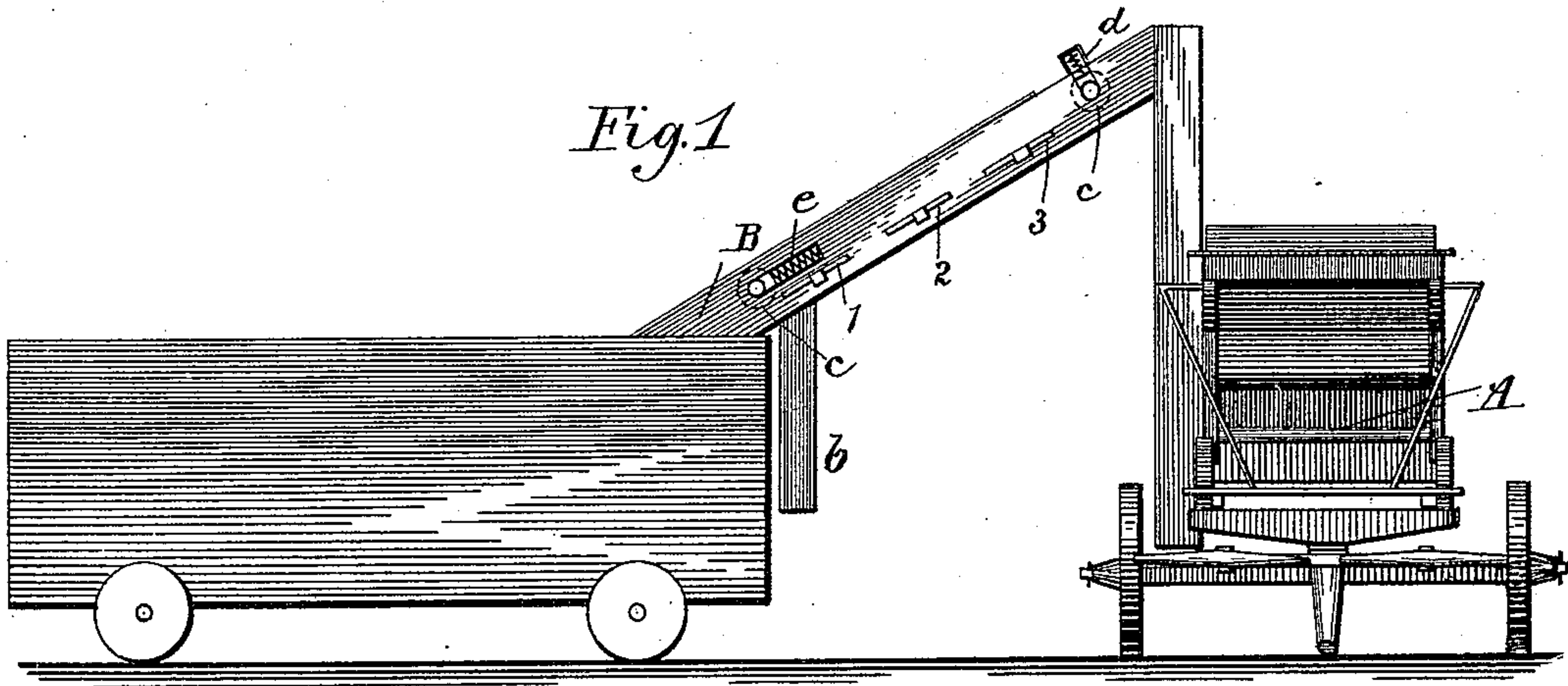


Fig. 2.

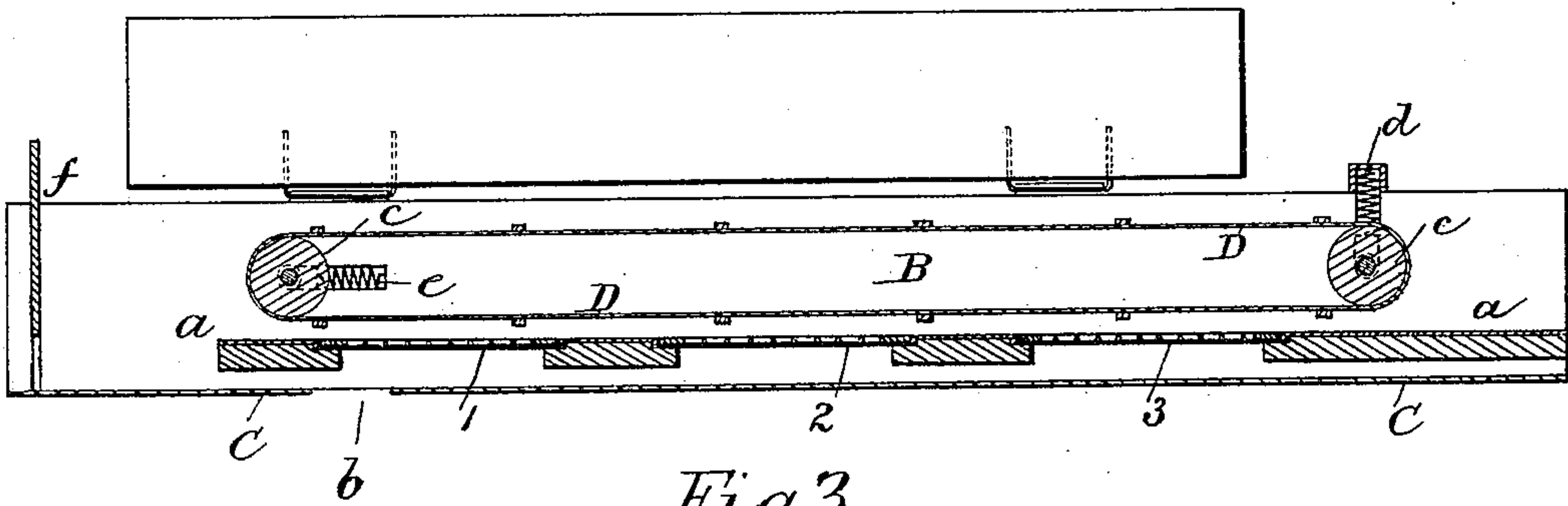


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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SCREENING AND LOADING ATTACHMENT FOR THRASHING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 420,966, dated February 11, 1890.

Application filed May 21, 1889. Serial No. 311,627. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM P. ROSE, a citizen of the United States, residing at Ayr, in the county of Cass and Territory of Dakota, have invented a new and useful Improvement in Screening and Loading Attachments for Thrashing-Machines, of which the following is a specification.

My invention relates to improvements in screening and loading attachments for thrashing-machines, as will be hereinafter described, and afterward pointed out in the claims. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 shows a side elevation of a thrashing-machine with the conductor attached, having an incline from the chute at the top of the elevator to the foul-seed discharge and the tank and wagon below. Fig. 2 represents a longitudinal sectional view of my invention, and Fig. 3 a roller and pulley detached.

My screen attachment is constructed and placed in the conductor which is now in ordinary use in connection with a thrashing-machine to carry the grain from the elevator proper to the wagon or tank for transportation, and my device is designed to accomplish the work of cleaning the grain of all foul seed and dirt on its passage to the vehicle, which has a body called a "tank," thus dispensing with the labor of bagging. These conductors are usually attached to a machine by a universal joint or hinge and have no other connection. By this means the lower end of the conductor can be moved from one point to another, discharging the grain into one tank and another, as desired.

In the drawings, A represents an elevation of a thrashing-machine with the top of the elevator to which the grain is carried and delivered into the conductor, its upper end being attached to the machine. This conductor having my improvement will be from twelve to sixteen feet long, or such length as shall be found most suitable, and about fourteen inches wide and of suitable depth. In this conductor is a second floor *a a* a few inches above the first floor. In this floor are located three removable sieves or screens 1 2 3. These sieves are about three feet long, of wire-netting or perforated zinc, the meshes fine and coarse, as the size of the grain may require, being plump or swiveled, and changeable at

pleasure, according to circumstances. These screens are to be inserted through openings on the front side of the conductor. This is one of the chief excellencies of my improvement, there being a variety of these screens to be used, according to the variety of grain and size of the berry in different seasons, as well as in different fields or in the same field. These sieves or screens being properly adjusted, the grain passing down through the conductor over the screens, the foul seed and dirt will fall through to the lower floor C C and slide down to the chute *b* and be discharged into sacks or boxes, and the clean grain will pass and be discharged at the end of the conductor into the tank. At the end of the conductor is a sliding vertical gate *f* to regulate the flow.

In order to keep the screens clear and cause the grain to flow or pass evenly down the conductor and over the screens, the endless apron D D is provided, passing over pulley *c* at the top of conductor B and another pulley *c* at the lower end, having cross-slats arranged to rub over the screens, pressing upon the grain sufficiently to keep it from lodging and clogging the sieves, the pulley at the top of conductor B to have a slotted bearing vertically, so that it may rise and fall at right angles to the conductor and yield to any accumulation of grain at the upper end of the apron by means of spiral springs *d d*. For the purpose of securing the proper tension to the apron longitudinally, and at the same time allow it to yield, the lower pulley *c* has a slotted bearing and is provided with spiral springs *e e*, inserted in the conductor in a line with the apron.

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

The combination of the conductor having the solid lower floor and the upper floor *a a*, provided with a series of detachable screens or sieves 1 2 3, the pulleys, one elastically mounted in a vertically-yielding bearing and the other in an elastic horizontally-yielding bearing, and the endless apron provided with slats or lags, substantially as described, and for the purposes set forth.

WILLIAM P. ROSE.

Witnesses:

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