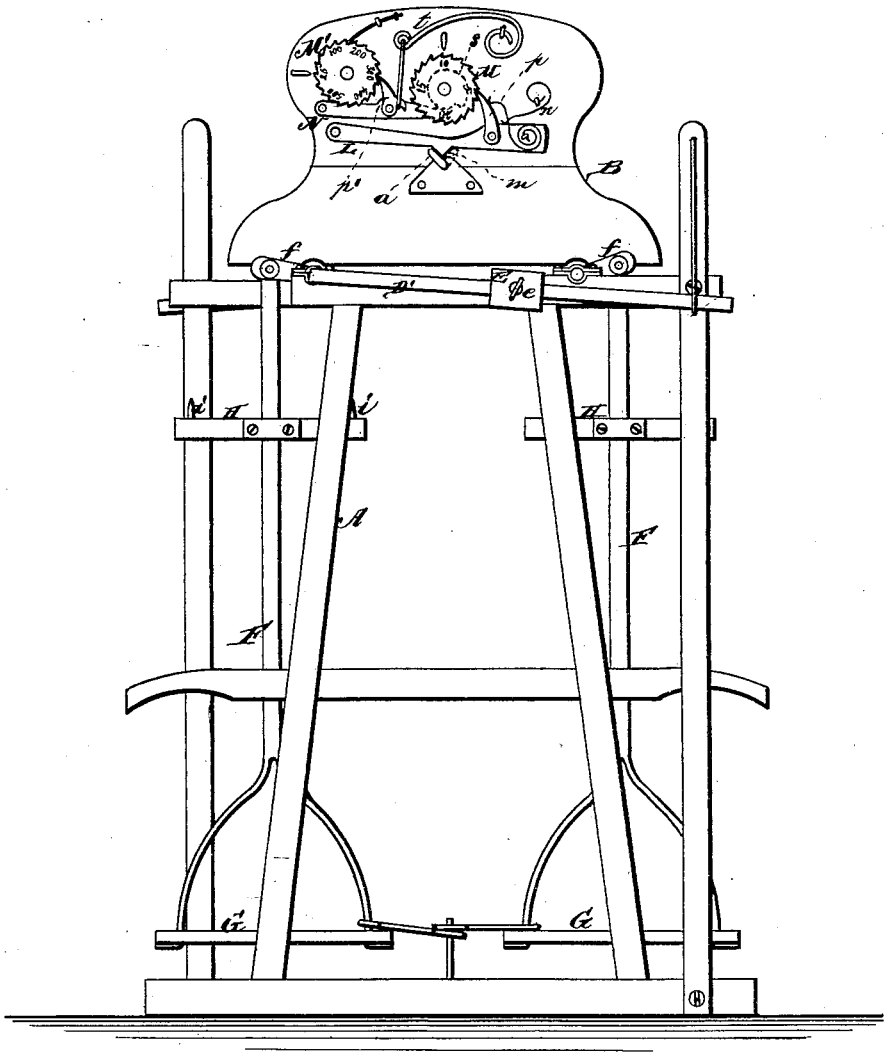
2 Sheets—Sheet 1.

S. F. SCHWEITZER & G. KINSEY.

Sack Scale.

No. 202,057. Patented April 2, 1878.

Fig. 1.



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2 Sheets—Sheet 2.

S. F. SCHWEITZER & G. KINSEY.

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Fig. 2.

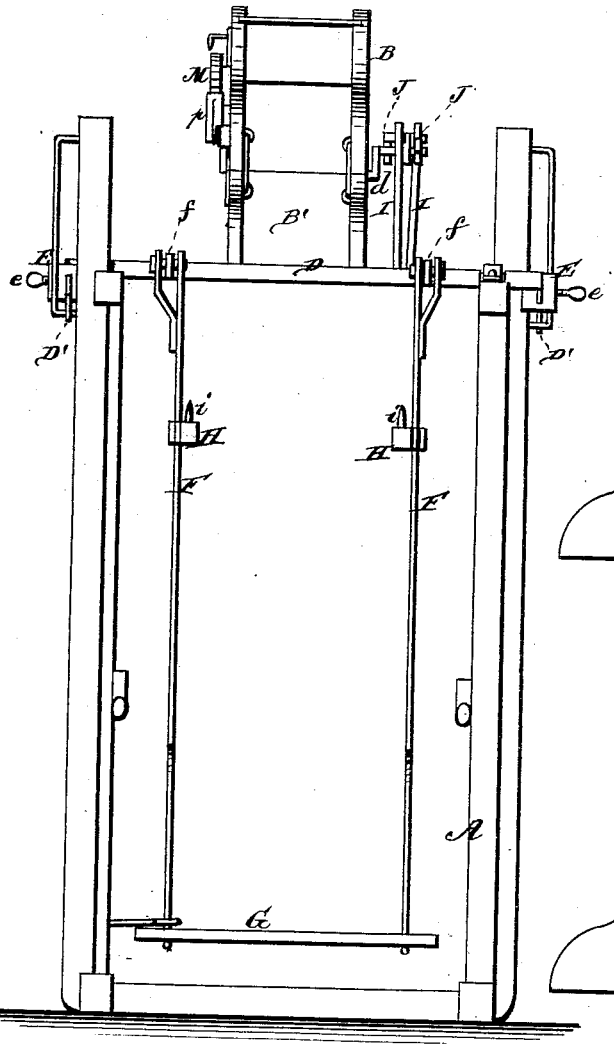


Fig. 3.

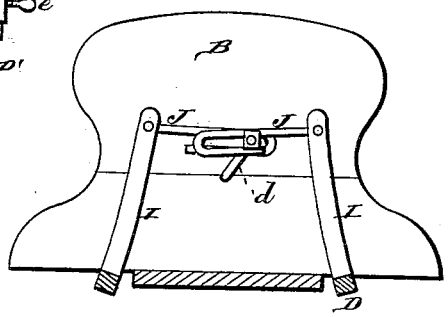


Fig. 4.

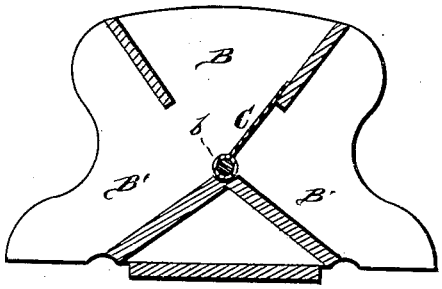
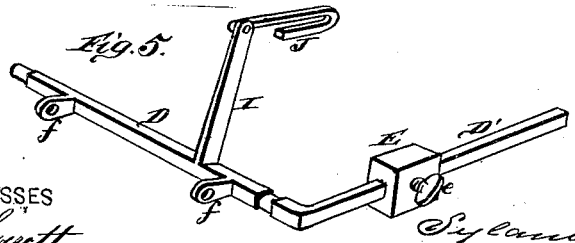


Fig. 5.



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UNITED STATES PATENT OFFICE.

SYLVANUS F. SCHWEITZER AND GOTTLIEB KINSEY, OF LOCK SEVENTEEN, OHIO.

IMPROVEMENT IN SACK-SCALES.

Specification forming part of Letters Patent No. **202,057**, dated April 2, 1878; application filed March 9, 1878.

To all whom it may concern:

Be it known that we, SYLVANUS F. SCHWEITZER and GOTTLIEB KINSEY, of Lock Seventeen, in the county of Tuscarawas and State of Ohio, have invented a new and valuable Improvement in Scale and Bag-Holders; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a side view of our scale and bag-holder. Fig. 2 is an end view, and Figs. 3 and 4 are sectional details thereof. Fig. 5 is a perspective view of the shaft D and its attachments.

The nature of our invention consists in the construction and arrangement of a self-sacking scale and bag-holder, as will be hereinafter more fully set forth.

The annexed drawings, to which reference is made, fully illustrate our invention.

A represents a frame-work, of any suitable construction, on top of which is a hopper, B, provided with an outlet, B′, at each end, and a central shifting-valve, C, to cause the grain to pass first through one outlet and then through the other. The valve C is attached to a rod or shaft, *b*, at its lower end, which rod passes through the sides of the hopper, and has a crank, *d*, at one end, and a short arm, *a*, at the other end.

Under each end of the hopper B is a shaft, D, placed in bearings on the frame. This shaft or rocking bar should have knife-edge bearings the same as ordinary scale-levers, and from one end thereof projects at right angles a scale-beam, D′, having an adjustable poise or weight, E, thereon, fastened by a set-screw, *e*.

From each shaft D project two short arms, *f f*, to which are pivoted two hangers, F F, having their lower ends forked or divided, and secured in the corners of a platform, G, upon which the bag is placed, the mouth of the bag being held open by means of pins *i i* on cross-bars H H, secured on the hangers F F.

From each shaft D projects an arm, I, upward, and to the upper end of the arm is pivoted a slotted link, J, which is passed over the crank *d* on the end of the valve-shaft *b*.

The weights E E being placed at the proper points upon the scale-beams D′ D′, the grain is made to pass from the thrashing-machine, through one of the outlets B′, into one of the bags. As this bag is getting filled the platform G descends, and as it overbalances the weight E, the arm or link J pulls the valve C over, closing that outlet and opening the other. While the second bag is being filled the first filled bag is lifted off and an empty one put on, and so on again.

The short arm *a* on the end of the valve-rod *b* works against a V-shaped projection, *m*, on the under side of a lever, L, pivoted at one end to the side of the hopper, and the other end pressed down by means of a spring, *n*. To this lever is attached a spring-pawl, *p*, which engages with a toothed index-wheel, M. This wheel is turned the distance of one tooth for every change in the valve C, and thus indicates the number of bags filled.

The index-wheel M is, on its inner side, provided with a cam, *s*, which operates against another pivoted arm or lever, N. This lever is also provided with a spring-pawl, *p′*, to act upon a second toothed index-wheel, M′. The cam *s* presses down the lever N until the end of the cam passes off the same, when a spring, *t*, at once throws the lever up, and the pawl *p′* turns said index-wheel M′ a certain distance to indicate still higher number of bags filled. This can be multiplied indefinitely.

We are fully aware that automatic sack-weighing mechanisms with tally or register are in use, and we do not claim such, broadly, as our invention.

What we claim as new, and desire to secure by Letters Patent, is—

1. The combination of the shafts D with beams D′ and weights E, hangers F, with platforms G and bag-holders H *i*, the arms I, with slotted links J, and the shifting-valve C, with shaft *b* and crank *d*, all substantially as and for the purposes set forth.

2. The combination of the shifting valve C with rod *b*, having arm *a*, the lever L, with V-shaped projection *m*, spring *n*, and spring-pawl *p*, the toothed index-wheel M, with cam *s*, the lever N, with pawl *p'* and spring *t*, and the second toothed index-wheel M', all constructed substantially as and for the purposes set forth.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

SYLVANUS F. SCHWEITZER.
GOTTLIEB KINSEY.

Witnesses:
BENJAMIN WHELAND,
DAVID GRAM.