# WILLIAM HENRY STINSON.

## Improvement in Grain-Registering Devices.

No. 114,723. Patented May 9, 1871.

*Fig. 1.*

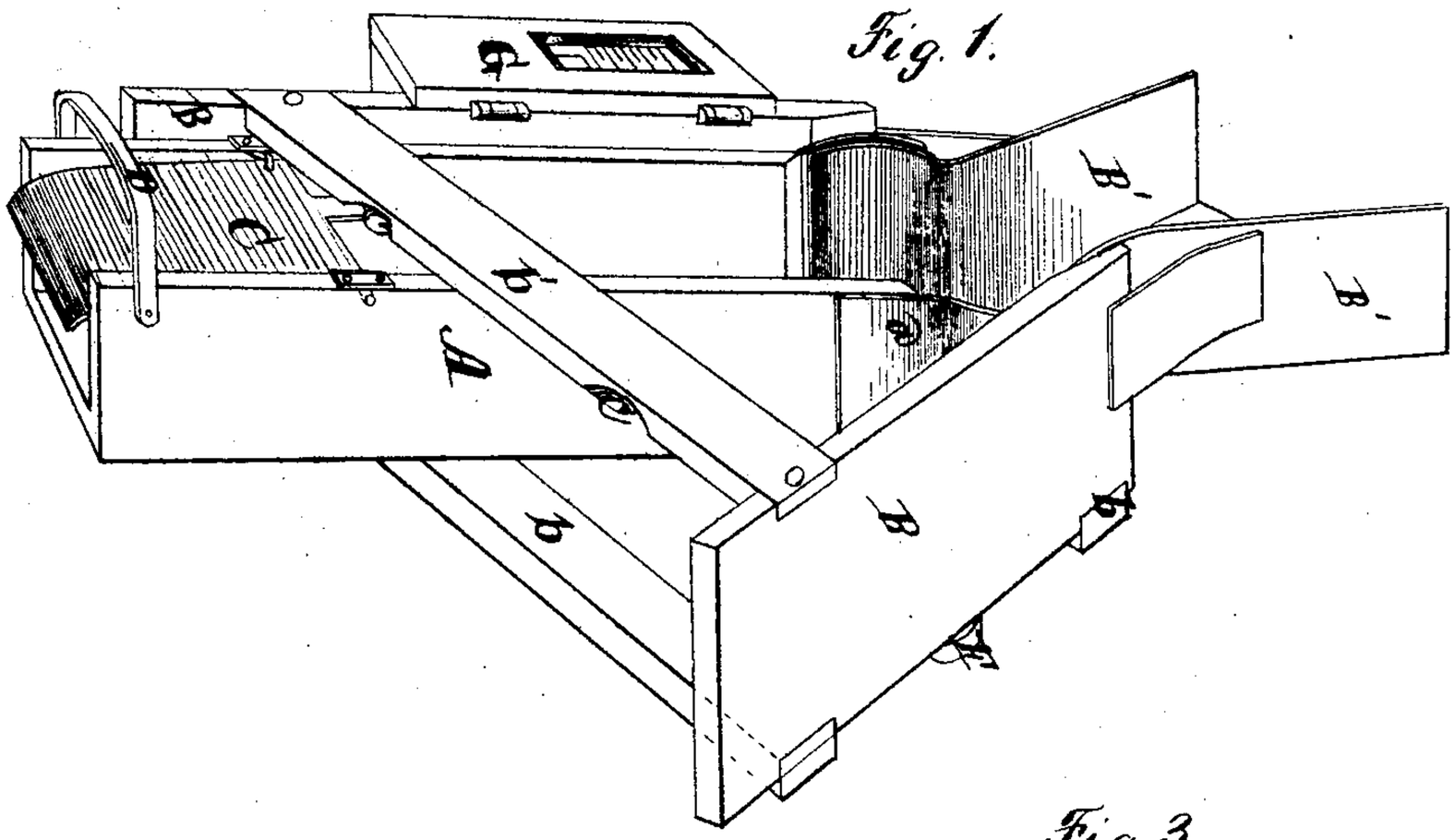



*Fig. 3.*

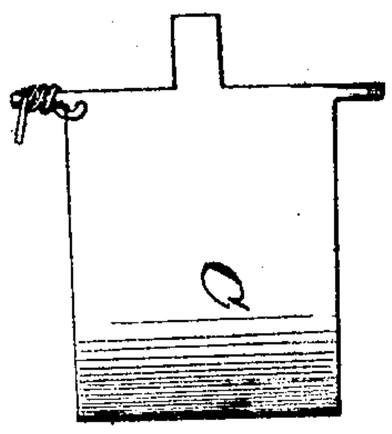
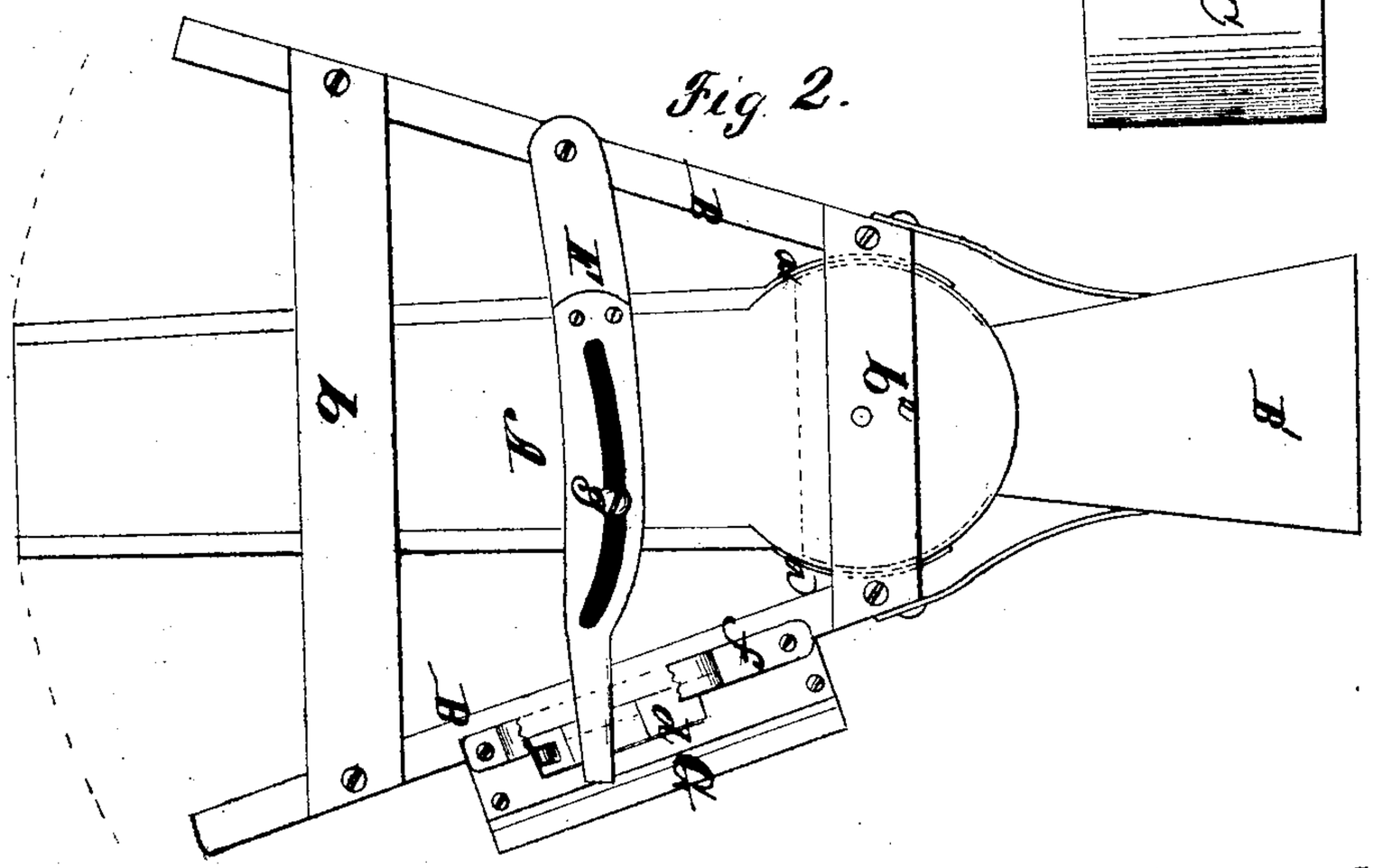



*Fig. 2.*




*Witnesses.*

A. Ruppert.

J. H. Hayter.

*Inventor.*

W. H. Stinson

per Edson Bros

Att'ys.

AM. PH TO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS)

# United States Patent Office.

WILLIAM HENRY STINSON, OF NEWBERN, IOWA.

Letters Patent No. 114,723, dated May 9, 1871.

## IMPROVEMENT IN GRAIN-REGISTERING DEVICES.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, WILLIAM HENRY STINSON, of Newbern, in the county of Marion and State of Iowa, have invented a new and useful Improvement in Grain-Measurers; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing forming a part thereof, and in which—

Figure 1 represents a perspective view of my invention taken in a horizontal plane;

Figure 2 is a view in elevation of one side thereof; and

Figure 3, a detached view of the gate or valve located in the lower extremity of the grain-spout.

The object of this invention is to furnish an expeditious, accurate, and convenient mode of measuring grain, and at the same time keep a record of the quantity of bushels measured; and to this end,

The nature thereof consists in the employment, in combination with a grain-registering apparatus, such as will be described hereinafter, of a pivoted or hinged spout or trough swinging back and forth beneath a receptacle for the grain, of a funnel shape, and having a gate or valve in its lower extremity and handle for operating it, said spout when operated communicating motion to a curvilinear slotted bar, imparting motion to a protruding spring of the registering mechanism, as hereinafter more fully set forth.

Similar letters in the several figures indicate like parts.

In the drawing—

A represents a spout, constructed of convenient form, and pivoted at its upper end to a transverse bar, $b^2$, supported by the inclined uprights B B, which are connected together at their lower extremities, or thereabout, by the transverse bars $b$ $b^1$.

The said spout is supplied at its upper end with curvilinear metal pieces $a$ $a$, between which fit the correspondingly shaped sides or ends of the mouth-piece or receptacle B′, of a funnel shape, and designed to receive the grain to be passed down into the spout A.

C designates a valve or gate, made of any suitable metal, and pivoted by means of lugs or projections formed on it at its upper end on each side, in apertures cut in the sides of the trough A, in such a manner as to cause it, the gate, when shut, to close the lower end of said spout or trough.

D is a metalic handle or bail attached to the spout A, as seen in fig. 1, for operating the same.

Cut in the inner side of the bar $b^1$ of the supports B, near or at its lower edge, are two recesses or cavities, $c$ $c$, beveled as seen in fig. 1, the object of which will be seen from the following:

When the trough A, carrying the grain to be released therefrom and precipitated into a vessel made for that purpose, and the gate or valve C is operated, it will describe the arc of a circle, causing the upper end of the handle of the said valve, at the conclusion of the motion imparted to the spout, or thereabout, to enter the cavities $c$ $c$, situated on each side of the center of the bar $b$, opening the said valve, and allowing the contents of spout A to be freed therefrom and suitably disposed of.

It will be observed that the valve remains closed until it enters the cavities $c$ $c$.

F designates a bar pivoted at one end to the edge of one of the uprights B B, and supplied with a curvilinear slot of such a size as to allow the spout A to swing from one side of the frame B B to the other side. The opposite end of this bar is made to slide up and down on a spring, $d$, connected with the registering apparatus contained in the casing G.

The sliding up and down of the end of the bar F within the guide $f$, on the spring $d$, has the effect of causing the registering or graduated wheel of the recording apparatus to revolve, thereby indicating the quantity of grain measured, the said motion being obtained when the spout is swung back and forth, through a projection, $g$, secured to the rear side of spout A, and playing in the semicircular slot of bar F.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

The hinged or pivoted spout A, supplied with the valve or gate C, bail or handle D, semicircular metallic pieces $a$ $a$, and projection $g$, in combination with the frame B B $b$ $b^1$ $b^2$, mouth-piece B′, grain-register G, guide $f$, cavities $c$ $c$, and pivoted sliding bar F, supplied with a semicircular slot, all constructed and arranged to operate substantially as herein described, for the purpose set forth.

In testimony that I claim the foregoing as my invention I have hereunto signed my name this day of October, 1870, in the presence of two subscribing witnesses.

WM. HENRY STINSON.

Witnesses:
S. W. BAKER,
JOHN WELLIS.