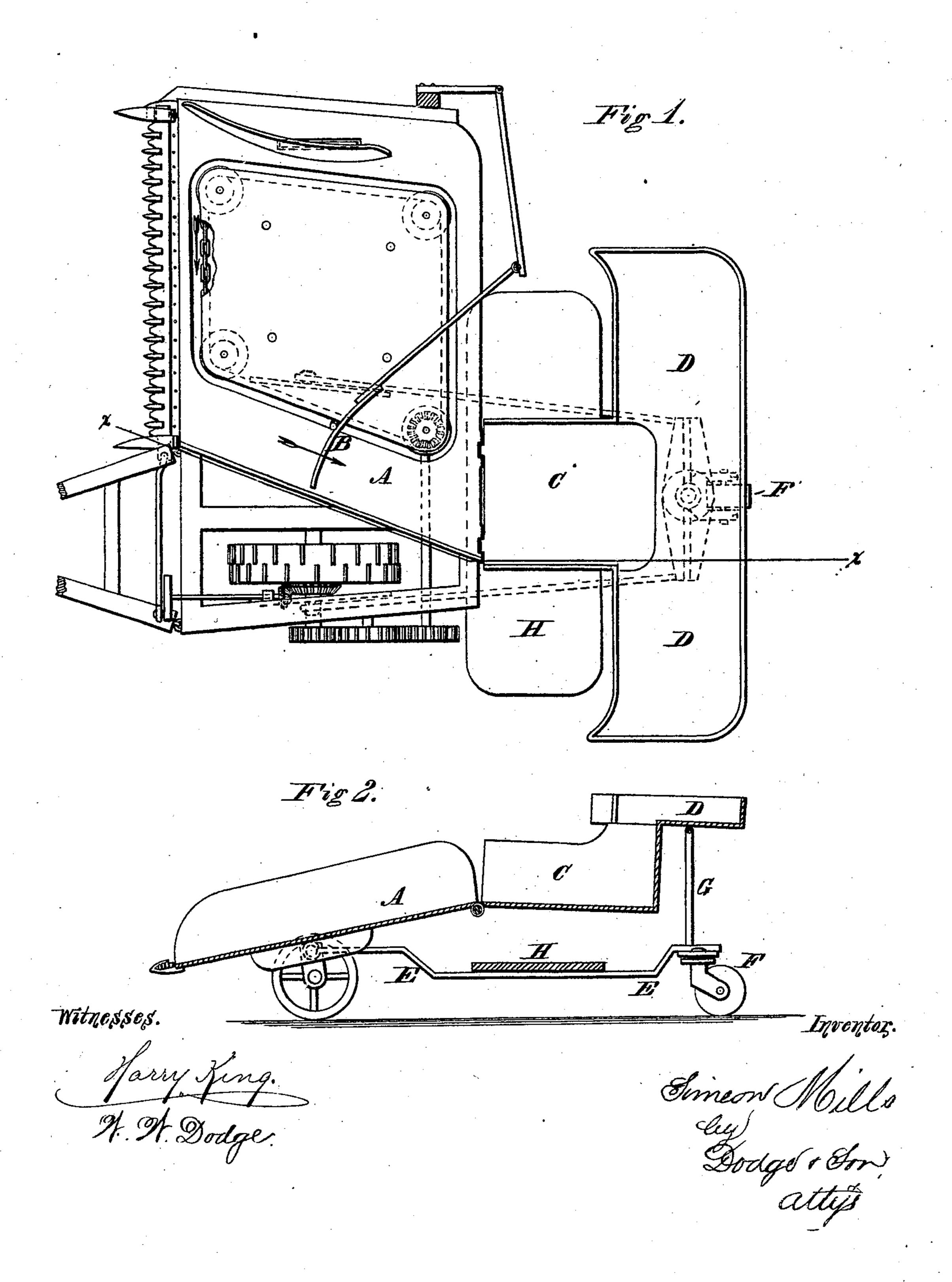
## S. MILLS

## Binder-Attachment for Harvesters.

No. 133,473.

Patented Nov. 26, 1872.



## UNITED STATES PATENT OFFICE.

SIMEON MILLS, OF MADISON, WISCONSIN.

## IMPROVEMENT IN BINDERS' ATTACHMENTS FOR HARVESTERS.

Specification forming part of Letters Patent No. 133,473, dated November 26, 1872.

To all whom it may concern:

Be it known that I, SIMEON MILLS, of Madison, in the county of Dane and State of Wisconsin, have invented certain Improvements in Binding-Tables and Carriages for Reapers, of which the following is a specification:

My invention consists in a grain-receiver and binding-table, hinged to the rear edge of the platform, and supported at its rear end by a binder's carriage, the forward end of which is hinged to the frame of the machine, as hereinafter described.

Figure 1 is a top-plan view of an ordinary self-raking "Wood" machine having my attachments applied, and Fig. 2 is a longitudinal vertical section of the same on the line x x.

While my improvements are applicable to any style of machine, either self-raking or not, in which the grain is gathered and passed over the rear edge of the platform, they are more especially adapted for use on the selfraking "Wood" machine, and I have therefore shown them applied thereto. This machine is in such general use, and is so well known, that I do not consider a description necessary in order to explain the working of my attachments.

A represents the main platform of the machine, and B the traveling rake, which gathers the grain into bundle or sheaf, and passes it backward over the inner rear corner of the platform. To the rear end of the platform I hinge the binding-table, consisting of a box-like receiver, C, and the table proper, D. The receiver is secured in such position that the grain is forced endwise into it by the rake. The table D is secured on the rear end of the receiver, and extended out over the two sides of the same, so that two operators can bind on its opposite ends at the same time. The receiver I provide with a tight concave bottom, to hold any grain that may thrash out; and the table I provide with a raised edge or rim, except where it joins the receiver, to prevent the loose grain from falling off, and guide it back into the receiver. To the frame of the machine, at any suitable point, I hinge a binder's car- | I claim is-

riage, E, which extends backward, and has its rear end supported on a caster-wheel, F, so as not to interfere with the turning of the machine. On the rear end of the carriage I erect a standard, G, which bears under the rear end of the binding-table, so as to support it and the receiver in their proper position, as shown in Fig. 2. On the middle of the carriage E I secure a wide binder's platform, H, which extends out beyond the sides of the receiver, so as to carry two binders on opposite sides of the same.

In operating the machine the two binders stand on the platform H, on opposite sides of the receiver C, and, as the rake delivers the grain into the receiver, they lift it out alternately, and bind it on their respective ends

of the table D.

It will be seen that, as the receiver is hinged to the edge of the platform, there is always a close joint between them, and that, consequently, the grain is always permitted to pass freely into the receiver, and the loss

of loose grain at the joint prevented.

The grain is always delivered into the receiver in a straight even shape; and the relative arrangement of the parts is such that the binders can remove it therefrom and bind it with ease and rapidity, and without danger of scattering or entangling it. As the binding-table is supported by the binder's carriage, it always remains at the same height in relation to the binders, and is affected very slightly by any tilting of the platform or movement of the machine. The use of the independent binder's carriage permits the binder's platform to be placed very low, so that the binders can lift the grain from the receiver without the fatigue of bending or stooping over excessively.

It is obvious that the form and arrangement of the parts may be varied as required in order to adapt them to different machines without departing from the limits of my in-

vention.

A flat table without the box-like receiver may be used if preferred.

Having thus described my invention, what

The combination of a binding-table, hinged to the rear edge of the platform, with an independent binder's carriage, hinged to the machine, and arranged to support the rear end of the table, substantially as shown and described.

To the above specification of my inven-

tion I have set my hand this 13th day of August, A. D. 1872.

SIMEON MILLS.

In presence of— F. E. DIETRICH, JAS. L. HILL.