# G. H. Spalding
## Harvester.

No. 72238 Patented Dec. 17, 1867.

Fig. 1.

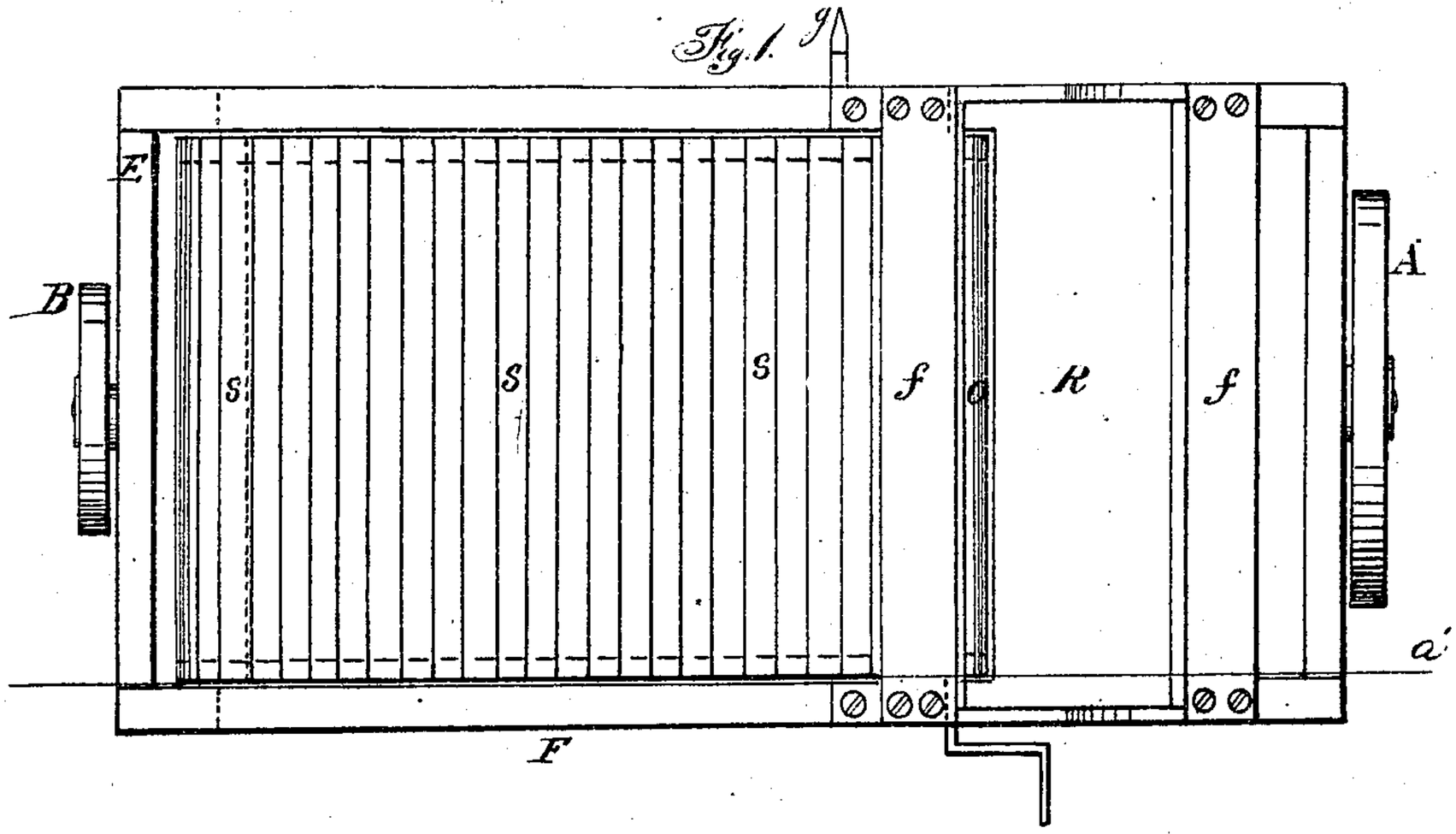



Fig. 3.

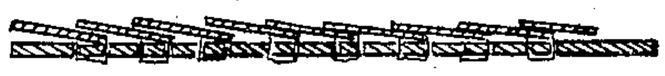
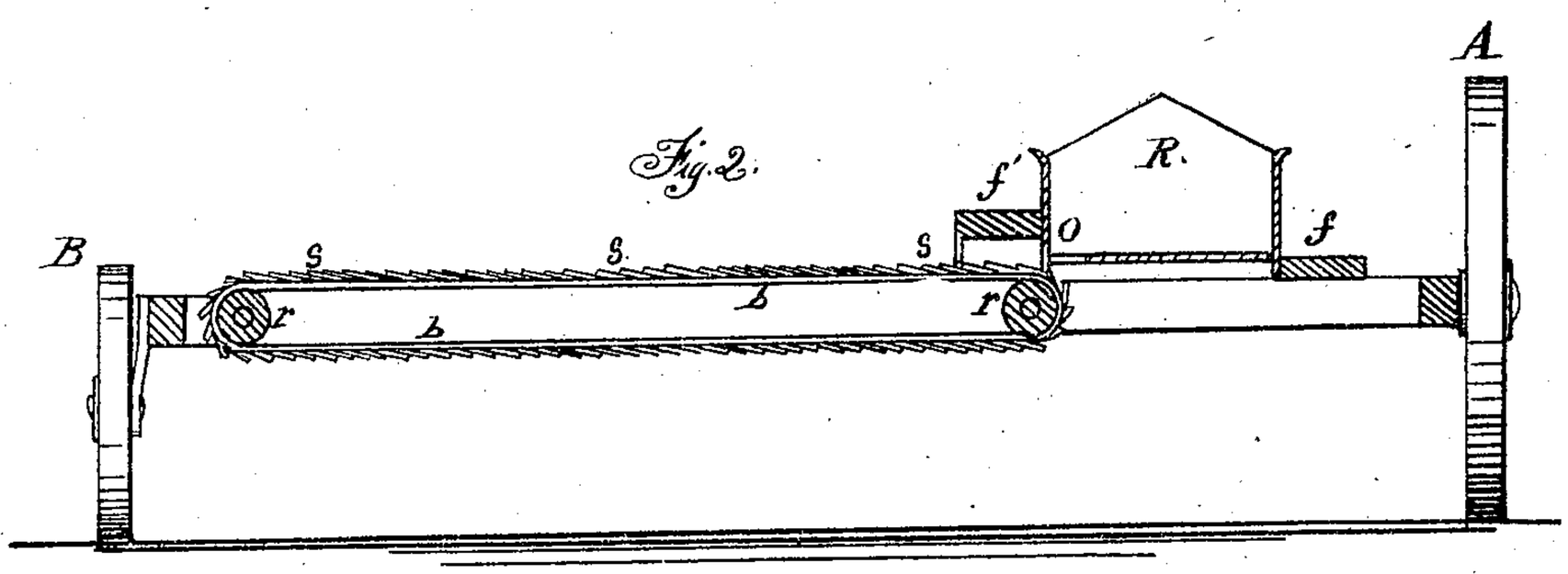


Fig. 2.




Witnesses
Fred Fische
J. A. Fraser

Inventor
G. H. Spaulding
Per Munn & Co
Attorneys

# UNITED STATES PATENT OFFICE.

GEORGE H. SPAULDING, OF ROCKFORD, ILLINOIS.

## IMPROVEMENT IN HARVESTERS.

*Specification forming part of Letters Patent No.* 72,238, *dated December* 17, 1867.

*To all whom it may concern:*

Be it known that I, G. H. SPAULDING, of Rockford, in the county of Winnebago and State of Illinois, have invented a new and Improved Hand-Harvester; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan of the machine. Fig. 2 is a transverse section through the line *a a'*, Fig. 1. Fig. 3 is a detail view of the manner in which the metallic strips are arranged.

Similar letters of reference indicate corresponding parts.

The nature of my invention consists, first, in the arrangement of a hand-binding harvester, which can be operated by the binders standing inside the driving-wheel and facing a receptacle into which the grain passes from the rolling-apron or platform; second, in the employment and peculiar adjustment of metallic strips for the apron-slats or battens, secured to two or more belts, thus avoiding the use of textile fabrics for aprons, which mildew, rot, and become useless; third, the receptacle for the gavel or sheaf located on the same plane as the apron and so constructed as to admit the grain in at its bottom directly from the horizontal rolling platform, thus avoiding the use of an elevating-roller and its attendant complications; fourth, in the arrangement of the apron-strips whereby they lap over each other and rise when in the act of bearing the grain under the opening in the receptacle or box.

A is the driving-wheel; B, the grain-wheel, supporting the outer end of the cutter-bar C with the first guard-finger shown at *g*. R is the box or receptacle for the grain, and is placed in the platform between the driving-wheel A and the first guard-finger *g*.

On each side of this box R are two foot-boards, *f f'*, on which the binders stand when binding.

C E F is the finger-bar and platform-frame of the harvester, having the rollers *r r*, with their belts *b b* passing around them, and upon which latter are secured the metallic strips or battens *s s s*.

The outer foot-board *f'* is raised enough to admit the grain passing under it into the box R, through the opening *o* in the lower part of the latter.

The action of the strips *s s s* in this operation is more positive than the mere bearing or transporting of the grain, for these strips, being flat and secured pliantly at their forward edges, that is, the edges which are nearest the box R, when the said strips are on top of the platform, pass along by the revolving of the rollers, which are connected with the driving-wheel for this object, and bear the grain upon their upper surfaces, as is usual with battens ordinarily attached, but these strips or battens being secured at their forward edges rise more or less in a vertical position as they pass over the rollers at each end of the platform; and this elevation of them as they pass under the opening *o* in the box R thrusts the grain into the said box, thus keeping it crowded compactly to the side opposite the opening *o*, and by this action raises the grain in the box to make room for that which follows as each successive strip delivers its portion into the box. Thus the box is filled from the bottom instead of the top, as in other harvesters; and the binders work upon the grain in the box, without the hinderance of removing the bundle elsewhere to lock the band.

The manner in which this machine operates and is attended is thus: The machine being drawn forward, the driving-wheel communicates motion to the rollers *r r*, which carry the apron along with the grain that has fallen upon it, the apron being behind the cutter-bar C, the sickle of which being also in motion.

The grain is carried under the foot-board *f'*, and the strips S by rising pass very close to the bottom-board or metallic sheet of the box R, and thus the grain is thrust upon this bottom-board; and the succeeding grain, being delivered in a like manner, crowds or pushes against that preceding it, thus filling the box.

The binders standing at the side of the box R, and having their feet on the foot-boards *f f'*, stoop down, bind the bundles, and throw them off on the ground.

If there is more grain in the box than sufficient to make a bundle, the requisite quantity only need be taken from the top, without scattering and wasting the grain in transferring

it to a binding-platform as in other machines, for the band is locked while the bundle is in the box, and when completed it is then thrown out.

The advantages of this improvement consist in its simplicity, ease of repair, and cheapness of construction; further, the grain is bound in the box, and not wasted by moving it about. It also obviates the employment of side stage-binding tables and elevating-aprons, and consequently is cheaper and easier of draft.

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

1. The receiving-box R, located between the driving-wheel and the first guard-finger, substantially as and for the purpose herein shown.

2. The location of the foot-boards *f f'* on each side of the receptacle R, which permits the binder to face the receptacle, substantially as set forth.

3. The raised foot-board *f'*, which admits the grain beneath it, substantially as and for the object specified.

4. The delivery of the grain into the receptacle at its bottom or base, substantially as and for the purpose set forth.

5. The employment of metallic strips *s s s* and belts *b b*, as apron or carrier, substantially as and for the purpose herein shown.

6. The securing of the said metallic strips *s s s* at their forward edges, substantially as herein shown, so that in passing over the roller they will assume a vertical position and thrust the grain into the receptacle, all as set forth.

7. The employment of a receptacle, R, for the grain, which admits of the binding of the bundles upon the loose grain in it without removing the bundle till completed, substantially as and for the purpose hereinbefore mentioned.

GEO. H. SPAULDING.

Witnesses:

J. G. MANLOVE,

JAMES CHALMERS.