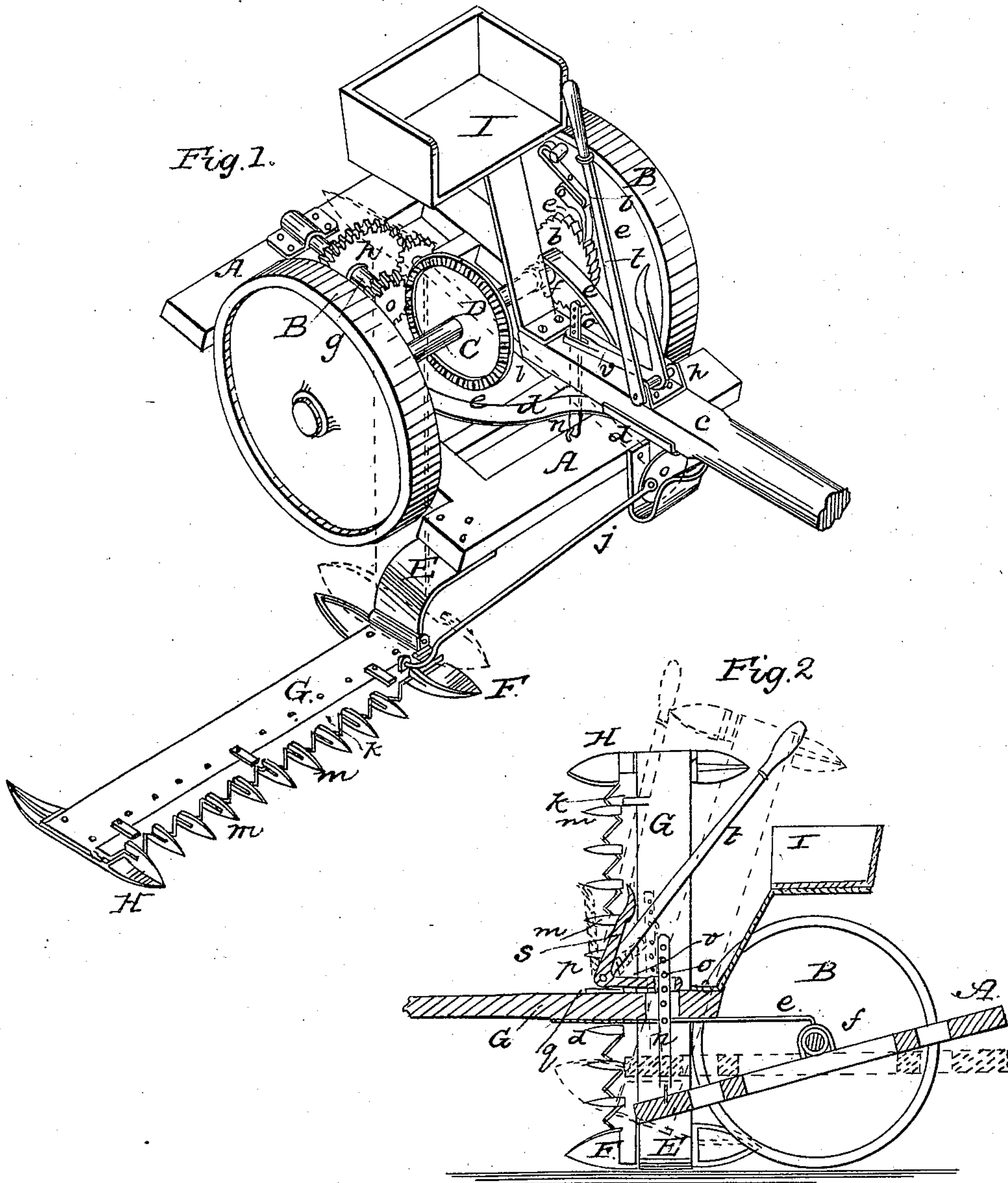


S. S. BARTLETT.

Harvester.

No. 40,585.

Patented Nov. 10, 1863.



Witnesses
 Kemp L. Fuller
 John C. Jacobs

Inventor
 Stephen S. Bartlett
 By his Attorney
 Thos. H. Dodge

UNITED STATES PATENT OFFICE.

STEPHEN S. BARTLETT, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO
HIMSELF AND THOMAS H. DODGE.

IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. 40,585, dated November 10, 1863.

To all whom it may concern:

Be it known that I, STEPHEN S. BARTLETT, of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Mowing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents in black lines a perspective view of my improved mower; and Fig. 2 represents a longitudinal section of the same, the parts being shown in two different positions, one in black lines and the other in red lines.

In the drawings, A represents the main frame, supported by two independent driving-wheels B B, the latter having pawls *a* attached to their inner sides to catch into ratchet-wheels *b*, fast on the main shaft *c*, when the machine is drawn forward by the tongue C, fastened to front arm of a metal piece, *d*, the rear of which is divided into forks *e e*, which clasp the main axle *c*, as fully indicated in the drawings. The main frame A is suspended to the main axle or shaft *c* by means of staples *f*, which pass through the rear forked ends, *e e*, and around the eyes of said ends, which receive the main shaft, as fully shown in Fig. 2, thence down through the main frame. By this arrangement the tongue-piece *d* is not only held in place, but the strain in backing and drawing forward the machine is in a great measure thrown upon the staples *f*, thereby relieving the main axle of much friction and which is very important in that class of machines in which the main driving-gear is fast on a main revolving axle. For instance, in my machine, if the tongue were hinged to the main axle, as it is, and the tilting main frame were also hinged to the main axle direct, instead of to the metal socket-pieces of the tongue-frame, then the draft of the main frame and cutting apparatus would come directly upon the main axle, thus subjecting it to very great friction and wear, all of which will be obviated by my present plan or the equivalent thereof. The main wheels are loose on the axle *c*.

D is the main bevel-gear, fast on the axle *c*. The gear D drives a small bevel-gear on the front end of shaft *g*, which has a cog-wheel,

h, fast thereon, and which in turn drives a small cog-wheel on the rear end of the crank-shaft *i*, which gives motion to the pitman *j* and cutters *k*. Shaft *g* is supported in bearings fastened to the top of the main frame, while the crank-shaft bearings or boxes are fastened to the bottom or under side of the frame. To the front inner corner there is attached a curved metal arm, E, to the lower end of which is hinged the shoe F, which supports the heel of the finger-beam G, to which are fastened the slotted guards or fingers *m*. The other end of the finger-beam is supported by shoe H. Owing to the hinging of the finger-beam, it can be folded up at the side of the machine, as indicated in the drawings.

I is the driver's seat, fastened to the rear of the tongue. It will be seen that the finger-beam can rise at either or both ends, and that, too, without affecting the motions of the driver's seat or rear of the tongue.

To the front of the frame is hinged a link-piece, *n*, which passes up through a slot in the tongue, whereby the extent to which the front of the frame can fall can be easily regulated by a pin, *o*, placed in one of the holes in the link-piece *n*, above the tongue.

To enable the driver to elevate the front of the frame and heel of the finger-beam when the machine is in operation, and also to elevate the finger-beam after it is folded up at the side of the machine, so that the machine can be conveniently transported from one field to another, a lifting-piece is attached to the top of the tongue.

In the stand-piece *p* turns a shaft, *q*, having a foot-lever, *s*, and a hand-lever, *t*, fastened to it, the foot-lever being connected to the link-piece *n* by means of an arm, *v*.

The driver can use his hand or his foot to raise the frame, or both.

In Fig. 2 the folded finger-beam is represented in red lines as elevated for transportation from one field to another.

The pawls *a* are held down by springs *a'*, which springs have hooked ends *b'*, whereby when the pawls are elevated to a certain height the hooks catch into notches *c'* in the pawls and hold the latter out of action. This is quite a simple and yet effective mode of keeping the pawls entirely out of action.

Having described my improved mower, what

I claim as my invention, and desire to secure by Letters Patent, is—

The combination, in a mowing-machine, of a tilting frame, to which the finger-beam is attached and a hinged tongue in such a manner as that the frame and tongue shall both have a common axis of motion, while in drawing the frame and cutting apparatus forward the draft thereof shall come directly upon the

the metal tongue socket-pieces, or their equivalent, and not upon the main axle, whereby much friction is avoided and the machine rendered of more easy draft, substantially as described.

STEPHEN S. BARTLETT.

Witnesses:

DAVID V. GERALD,
M. D. DRAKE.