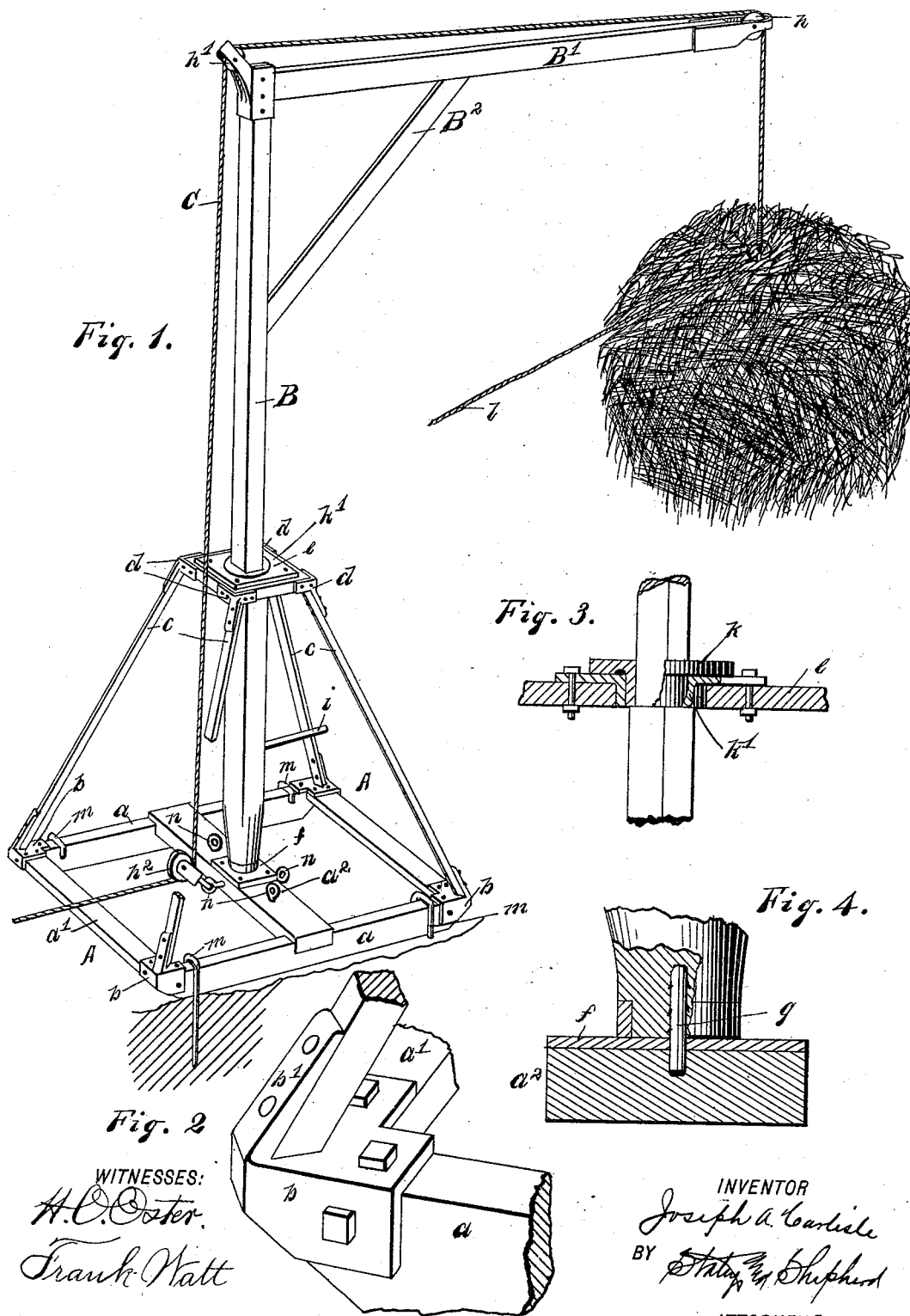


(No Model.)

J. A. CARLISLE.  
HAY STACKER.

No. 494,506.

Patented Mar. 28, 1893.



# UNITED STATES PATENT OFFICE.

JOSEPH A. CARLISLE, OF ORCHARD, OHIO, ASSIGNOR OF ONE-HALF TO  
EDWARD ZINN, OF SAME PLACE.

## HAY-STACKER.

SPECIFICATION forming part of Letters Patent No. 494,506, dated March 28, 1893.

Application filed September 5, 1892. Serial No. 445,046. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH A. CARLISLE, a citizen of the United States, residing at Orchard, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Hay-Pitchers, of which the following is a specification.

My invention relates to an improved device for pitching or elevating hay, it being especially designed for raising hay in the field to form a stack, though it may be used for loading or for other purposes.

My invention consists in the various constructions and combinations of parts herein-  
after described and pointed out in the claims.

In the accompanying drawings Figure 1 is a perspective view of a device embodying my invention. Fig. 2 is a detail view of the same in perspective. Figs. 3 and 4 are detail views, partly in section, of some of the parts referred to hereinafter.

Like parts are represented by similar letters of reference in the several views.

In the said drawings A A, represent the base of the device, which is formed in the nature of a sled with runners *a*, connected together at the respective ends by cross bars *a'* *a'*, and at or near the center by a supporting bar or beam *a*<sup>2</sup>.

Secured to the base A A, preferably at the corners thereof, are brace connections *b*, preferably formed of metal and adapted to embrace the top and sides of the runners *a*, and bars *a'* *a'* respectively, and further provided with an upwardly projecting lug or spur *b'*, to which is connected the lower end of a brace *c*, which rests at the bottom on the brace connection *b*. The braces *c*, are each connected by brace connections *d*, to a central supporting block *e*, vertically above the supporting beam or bar *a*<sup>2</sup>, on the main frame. Supported on the beam or bar *a*<sup>2</sup>, is a bearing plate *f*. Extending upwardly from the bearing plate *f*, passing through the supporting block *e*, in which it is suitably journaled is a vertical beam B, which carries at its top a cross bar B', and a brace connection B<sup>3</sup>, to form a derrick. The vertical beam B, is preferably formed of wood and provided at the bottom with a metal pin

or pivot *g*, journaled in the bearing plate *f*, on the supporting beam *a*<sup>2</sup>. Located at the respective ends of the cross bar B', are sheaves or pulleys *h* *h'*, over which passes a suitable hoisting rope C, which is extended downwardly and passes over a suitable sheave or pulley *h*<sup>2</sup>, suitably connected to the main frame A A. Extending laterally from the vertical beam B, between the supporting block *e*, and the supporting beam *a*<sup>2</sup>, is a projecting bar *i*, adapted to act as a hand-lever, by means of which the vertical beam B, and its cross bar B', may be turned to any position upon its pivotal bearing in the supporting beam *a*<sup>2</sup>. The vertical beam B, is preferably formed square in cross section, adapted to receive a sleeve or wearing plate *k*, which is provided with an opening corresponding to the beam B, and formed cylindrical on the outside to fit into a corresponding cylindrical sleeve or bearing *k'*, secured to the supporting block *e*. The beam B, is preferably reduced in size from a point immediately below the supporting block *e*, so as to receive the wearing plate or sleeve *k*, the outer diameter of said sleeve or wearing plate being equal to the greatest diameter of the lower part of the beam, to permit the lower portion of said beam to be elevated through the supporting block *e*, when desired, by first removing the bar or hand-lever *i*.

In operation any suitable elevating fork may be attached to the rope C, having a suitable discharging cord *l*, by means of which the load may be discharged by the operator when sufficiently elevated in a well known manner. The frame A A, is secured in proper position by stakes *m*, or in any other suitable manner. Horses or other motive power is attached to the rope C, and the device is ready for operation. When the fork is loaded it is readily elevated by starting the team, after which the load is turned to any desired position by swinging the beam B, upon its pivotal center through the medium of the handle *i*, and discharged in the proper position on the stack by drawing on the discharging cord *l*.

By forming the main frame in the nature of

a sled the device may be readily removed to any position by simply hitching the team thereto and drawing it to the proper point.

The supporting beam  $a^2$ , is preferably provided with suitable connecting hooks or eyes  $n$ , on the respective sides of the vertical beam B, to which the sheave or pulley  $h^2$ , may be attached, so that the team may pull in any desired direction from the main frame A A, thus furnishing the means for operating the device in any position of adjustment about its pivotal center without changing the supporting frame A A.

Having thus described my invention, I claim—

The combination with a sled-shaped frame having the runners and cross bars, as described, the vertical beam B, cross bar B', brace B<sup>2</sup>, supporting block  $e$ , wearing plate  $k$ , sleeve  $k'$ , ring plate  $f$ , pivot  $g$ , braces  $c$ , brace connections  $b$ , having projecting spurs  $b'$ , all arranged for joint operation, substantially as specified.

In testimony whereof I have hereunto set my hand this 20th day of August, A. D. 1892.

JOSEPH A. CARLISLE.

Witnesses:

ROBERT C. RODGERS,  
FRANK WATT.