

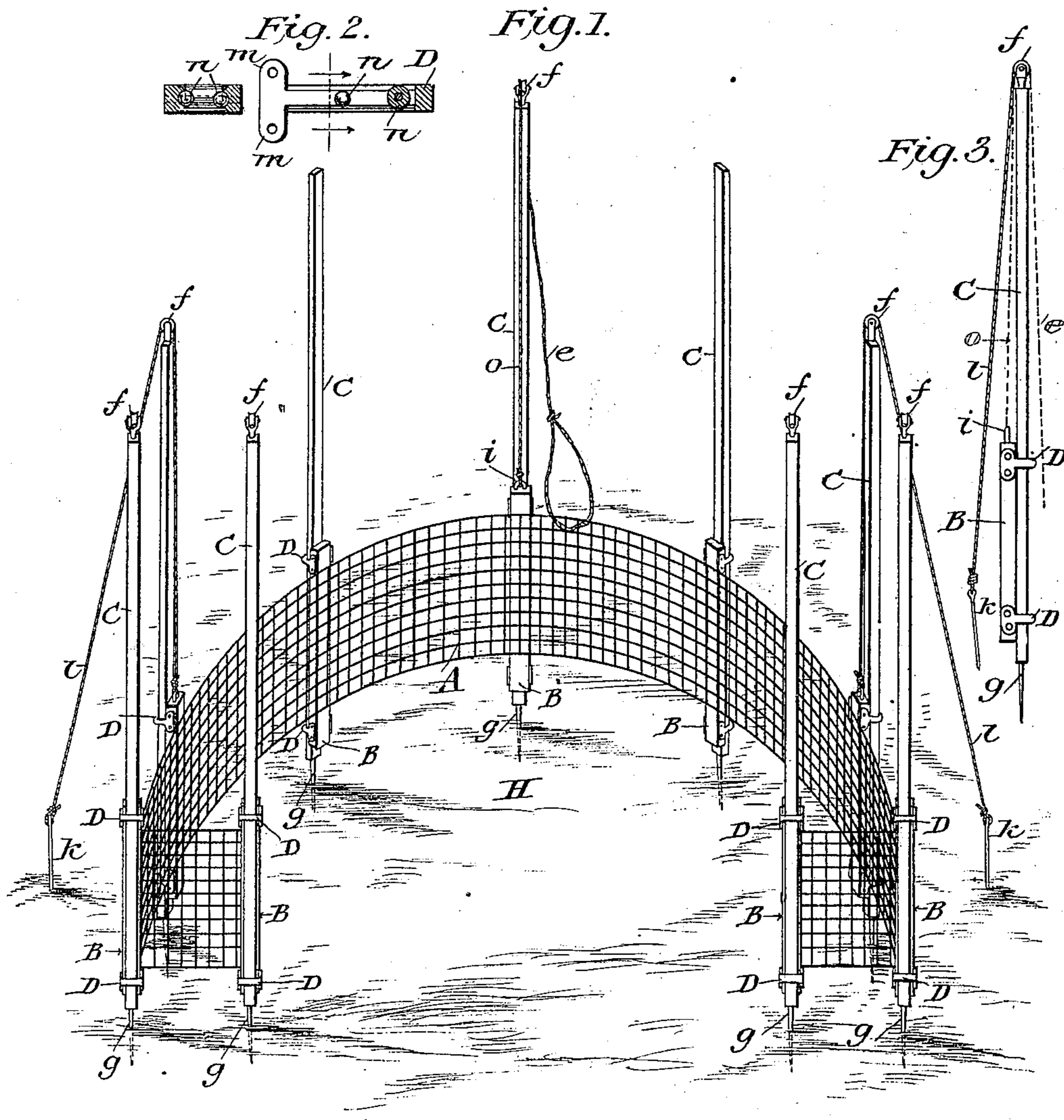
No. 670,314.

Patented Mar. 19, 1901.

I. DUNKEL.  
STRAWSTACK HOLDER.

(Application filed July 20, 1898.)

(No Model.)



I

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# UNITED STATES PATENT OFFICE.

ISAAC DUNKEL, OF CIRCLEVILLE, OHIO.

## STRAWSTACK-HOLDER.

SPECIFICATION forming part of Letters Patent No. 670,314, dated March 19, 1901.

Application filed July 20, 1898. Serial No. 686,474. (No model.)

*To all whom it may concern:*

Be it known that I, ISAAC DUNKEL, a citizen of the United States, residing at Circleville, in the county of Pickaway and State of Ohio, have invented a new and useful Strawstack-Holder to be Used with Threshing-Machine Wind Straw-Stackers, of which the following is a specification.

My invention relates to a strawstack-holder in which woven-wire netting is made to hold the straw in place on the strawstack while it is being delivered there by the wind strawstacker.

The objects of my invention are, first, to hold the straw in place and make a nice, smooth, and substantial stack, which it is well known cannot be done with the stacker alone; second, to build an evenly solid stack which will turn the water and run it off the stack, and thus keep the straw in good sound condition over the winter season, which cannot well be done with the use of the stacker alone and by tramping the straw, and, third, to save all manual labor on the stack. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents the strawstack-holder set up ready for use; Fig. 2, the clip; Fig. 3, the post, slide-beam, pulley, draw-rope, and stay-rope.

In Fig. 1, A is the woven-wire netting used to hold the straw in place. H represents the ground on which the strawstack is to be built. I represents the place to be occupied by the threshing-machine.

In Fig. 2, D is a clip, with oval flange-shaped sides *m m* on either of its sides. At *n n* on the inner sides of the free end of the clip are nests to receive balls to make it ball-bearing. It is bevel-edged on the inner side and roller-bearing on the inner side of the end opposite the flanges.

In Fig. 3, B is the sliding beam, D the clip, and *j* the eye. C is the post; *g*, an iron point; *f*, a pulley. *e o* represent the draw-rope, *e* being the free end and *o* the end attached by a hook in the eye *j*, the rope working over the pulley *f*. *l* is a stay-rope attached to the post C, and it is fastened to the ground and made to hold the posts and stack-holder upright and in place by driving the stake *k* in the ground, the ones at the end of the net-

ting being set on the inside of the semicircle formed next to the strawstack, the others being set on the outside.

Each of the posts C and slide-beams B (seen in Fig. 1 with the wire-netting attached) have all the parts as shown and described in Fig. 3 except a few of the intermediate ones, which do not have the stay-ropes.

The woven-wire netting A is fastened to the side of the sliding beam B between the clips D D, so that in rolling the netting up for moving it will fold entirely between these clips, and thus make as small a bundle as possible without separating the wire-netting and the sliding beams. The ends of the netting are fastened in the middle of the side of B, so as to draw directly endwise on the post C. D is attached to each end of B by pinning the flanges *m m*, which hold it securely in place and prevent its working loose. The bevel edges on the inside and the ball-bearings at *n n* enable the sliding beam B to slide up and down the post C with ease, as that part of the clip in which they are placed slips over and works around the post C. As many of these posts may be used as are found necessary.

To use the holder, unfold the wire-netting A, which has fastened to it the sliding beams B, and slip the posts C through the free ends of the clips at *n n*. Hook the one end *o* of the draw-rope in the eye *j*, and take the rope over the pulley *f*, allowing the other end *e* to hang free about four feet from the ground. Then set up the netting and posts thus combined in the form of a semicircle, placing it close to the stacker for a narrow rick and farther from it for a wide one and making it in a small circle for a round stack, with the exception of the end posts and the netting between them and the posts next to them, which is turned in along the diameter of the circle, as shown at P P, for the purpose of building up the ends of the rick, placing the ends of the posts *g* in the ground and also the stakes *k*, which hold the posts by the use of the stay-ropes *l*, putting those attached to the end posts on the inside of the netting next to the strawstack and all the others on the outside, putting those attached to the corner-posts at right angles to the netting at P P. The wire-netting being at the lower end of

the posts, the strawstack-holder is now ready for use. The threshing is continued with the netting in this position until the straw is stacked to the top of the netting, when the wire-netting is raised, so that its lower edge comes up even with the top of the stack thus far built, by taking hold of the loose ends of the draw-ropes *e* and pulling them up, the sliding beams *B* sliding up the posts *C*, being held to said posts by the clips *D D*. The same operation is repeated until the netting reaches the tops of the posts. The netting is made shorter at the top, so as to incline it more toward the stack at the top than at the bottom for the purpose of raising the netting easier and also of drawing in the strawstack at the top.

To move the strawstack-holder, take it down, removing the posts *C*, and fold the netting, with the beams *B* fastened to it, between the clips *D D*.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a strawstack-holder, the combination with a series of perpendicular posts, set in a line more or less curved, comprising an iron point attached to the lower end of each post for fastening it into the ground, a pulley at the top of each and a stay-rope attached near its top; of the shorter beam sliding perpendicularly on each of said posts and attached to its posts by means of ball-bearing bevel-edged clips, and having an eye attached to its upper end and the draw-rope fastened on said eye and passing over the pulley on the upper end of its post; and of the flexible woven-wire netting attached to the sliding beam of each post and extending continuously from one sliding beam to the other throughout the whole series of posts, all substantially as described and shown.

2. The combination with the discharge-nozzle of a pneumatic straw-stacker, of a barrier forming a partial inclosure, and means for supporting said barrier opposite the nozzle and upon the desired boundary-line of the rear side of the stack to be formed, the side of the barrier nearest the nozzle being open, substantially as described.

3. The combination with the discharge-nozzle of a pneumatic straw-stacker, of a barrier, means for supporting said barrier opposite the nozzle and upon the desired boundary-line of the rear side of the stack to be formed, and means for raising said barrier as the height of the stack increases, substantially as described.

4. The combination with the discharge-nozzle of a pneumatic straw-stacker, of a barrier, means for supporting said barrier opposite the nozzle and upon the desired boundary-line of the rear side of the stack to be formed, and means for throwing the upper portions of the barrier inward for "topping off" the stack, substantially as described.

5. The combination with the discharge-noz-

zle of a pneumatic straw-stacker, of a barrier, and means for supporting said barrier opposite said nozzle so as to form a practically semicircular wall against which the straw is discharged, the side of the barrier nearest the nozzle being open, substantially as described.

6. In a device of the class described, the combination of a barrier forming a partial inclosure and disposed upon the desired boundary-line of the rear side of the stack to be formed, a series of posts by which said barrier is supported with its open side presented toward the discharge-nozzle of a pneumatic stacker, and means for preventing the posts from falling outward in response to pressure against the interior of the barrier, substantially as described.

7. In a device of the class described, the combination of a barrier forming a partial inclosure and disposed upon the desired boundary-line of the rear side of the stack to be formed, a series of posts by which said barrier is supported with its open side presented toward the discharge-nozzle of a pneumatic stacker, means for connecting said posts and holding them at proper distances apart, and means for preventing the posts from falling outward in response to pressure against the interior of the barrier, substantially as described.

8. In a device of the class described, the combination of a barrier forming a partial inclosure and adapted to be arranged upon the desired boundary-line of the rear side of the stack to be formed, a series of posts located outside of the barrier and supporting it, with its open side presented toward the discharge-nozzle of a pneumatic stacker, and means for preventing the posts from falling, substantially as described.

9. In a device of the class described, the combination of a barrier adapted to be arranged in, practically, a semicircle, a series of posts by which the barrier is supported, with its open side presented toward the discharge-nozzle of a pneumatic stacker, and guys attached to said posts and anchored to the ground preventing the posts from falling, substantially as described.

10. In a device of the class described, the combination of a barrier, means for supporting it in, practically, a semicircle, with its open side presented toward the discharge-nozzle of a pneumatic stacker, and means for raising it, as the height of the stack increases, substantially as described.

11. In a device of the class described, the combination of a barrier, means of supporting it in, practically, a semicircle, with its open side presented toward the discharge-nozzle of a pneumatic stacker, means for raising it, as the height of the stack increases, and means for throwing its upper portion inward for topping off the stack, substantially as described.

12. In a device of the class described, the combination of a barrier, posts by which it

is supported in the desired position, said posts being vertically extensible, means for extending the posts vertically and thereby raising the barrier as the height of the stack increases, and means for holding them in extended position, substantially as described.

13. In a device of the class described, the combination of a barrier, adapted to be arranged in the desired position, posts by which the barrier is supported, each of said posts being made of a plurality of sections, one of which is adapted to slide vertically upon the other for raising the barrier as the height of the stack increases, and means for holding the movable section in elevated position, substantially as described.

14. In a device of the class described, the combination of a series of posts, each made up of a plurality of sections adapted to slide one upon the other, straps secured to one of said sections and loosely embracing the other for holding them in parallelism, means for holding the movable section in elevated position, and a barrier supported by the movable sections of the posts, whereby it may be raised with said movable sections as the height of the stack increases, substantially as described.

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