

975,415.

Patented Nov. 15, 1910.

Fig. 1.

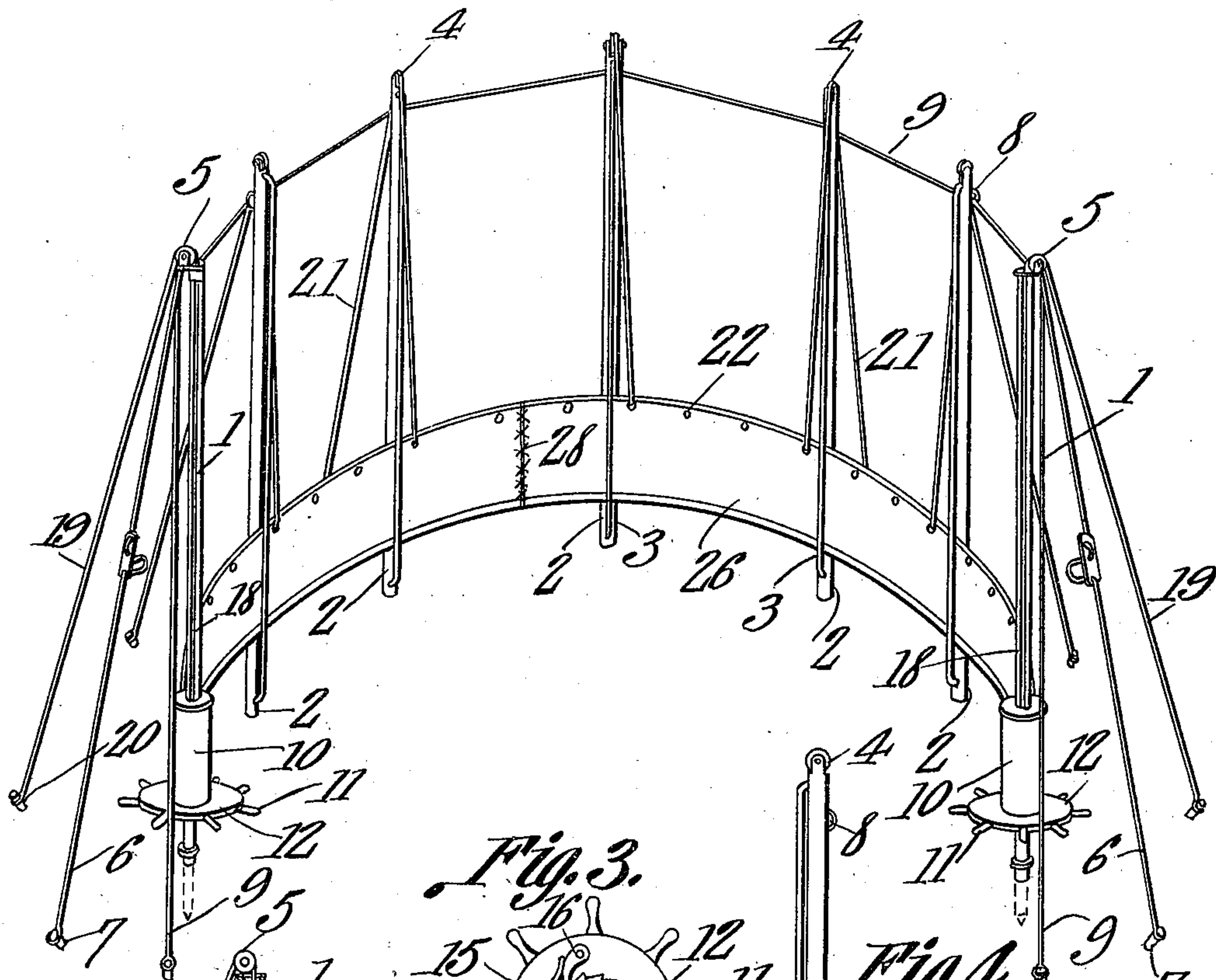


Fig. 3.

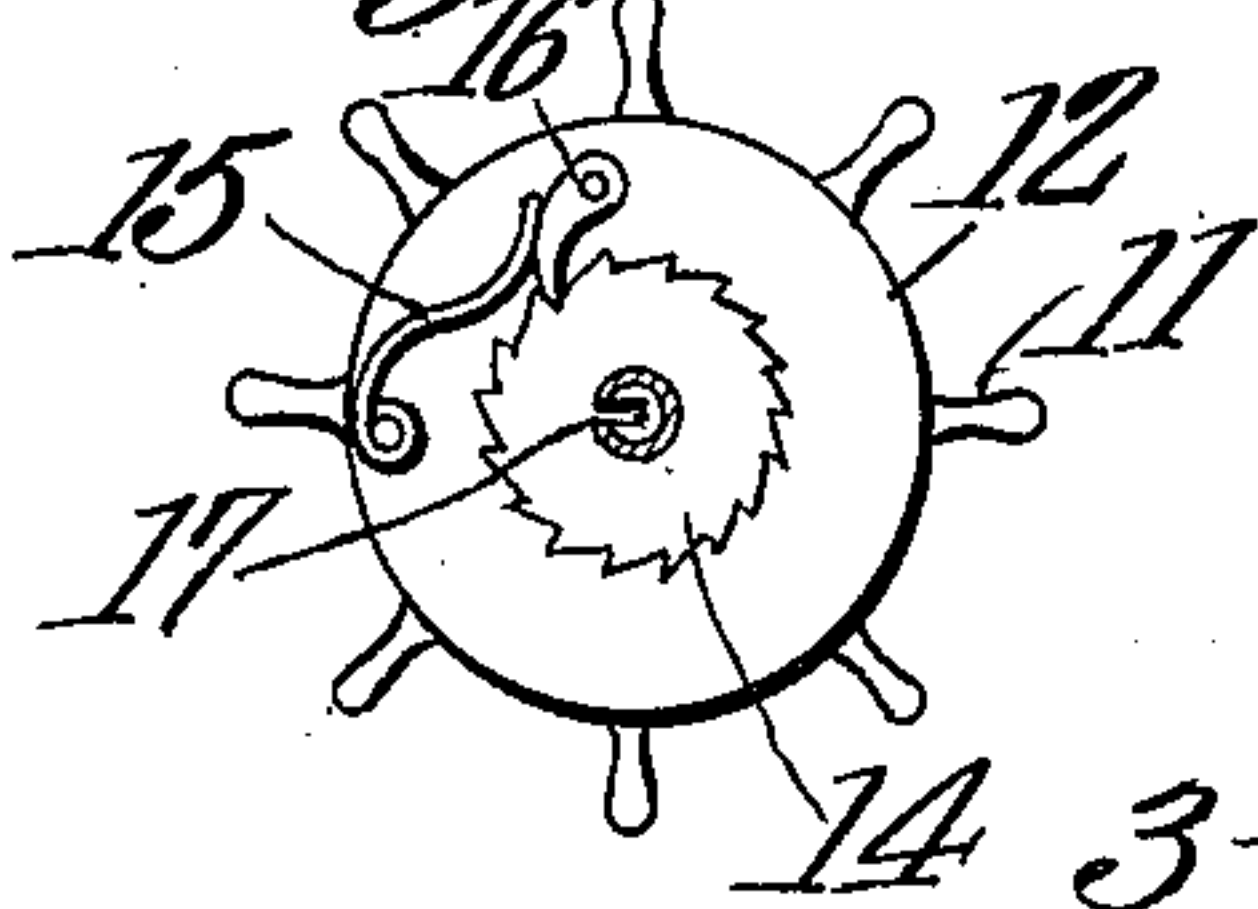


Fig. 4.

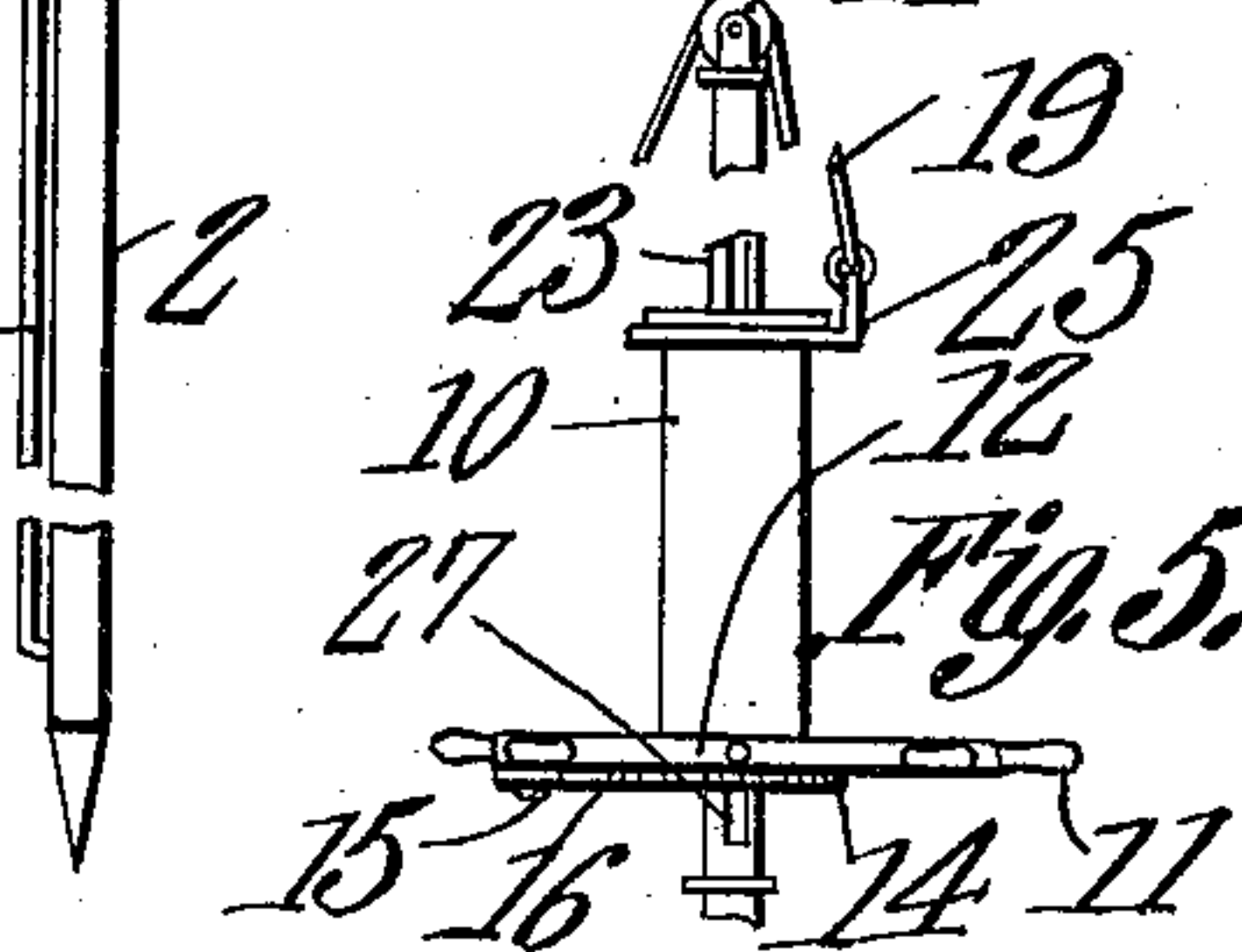


Fig. 2.

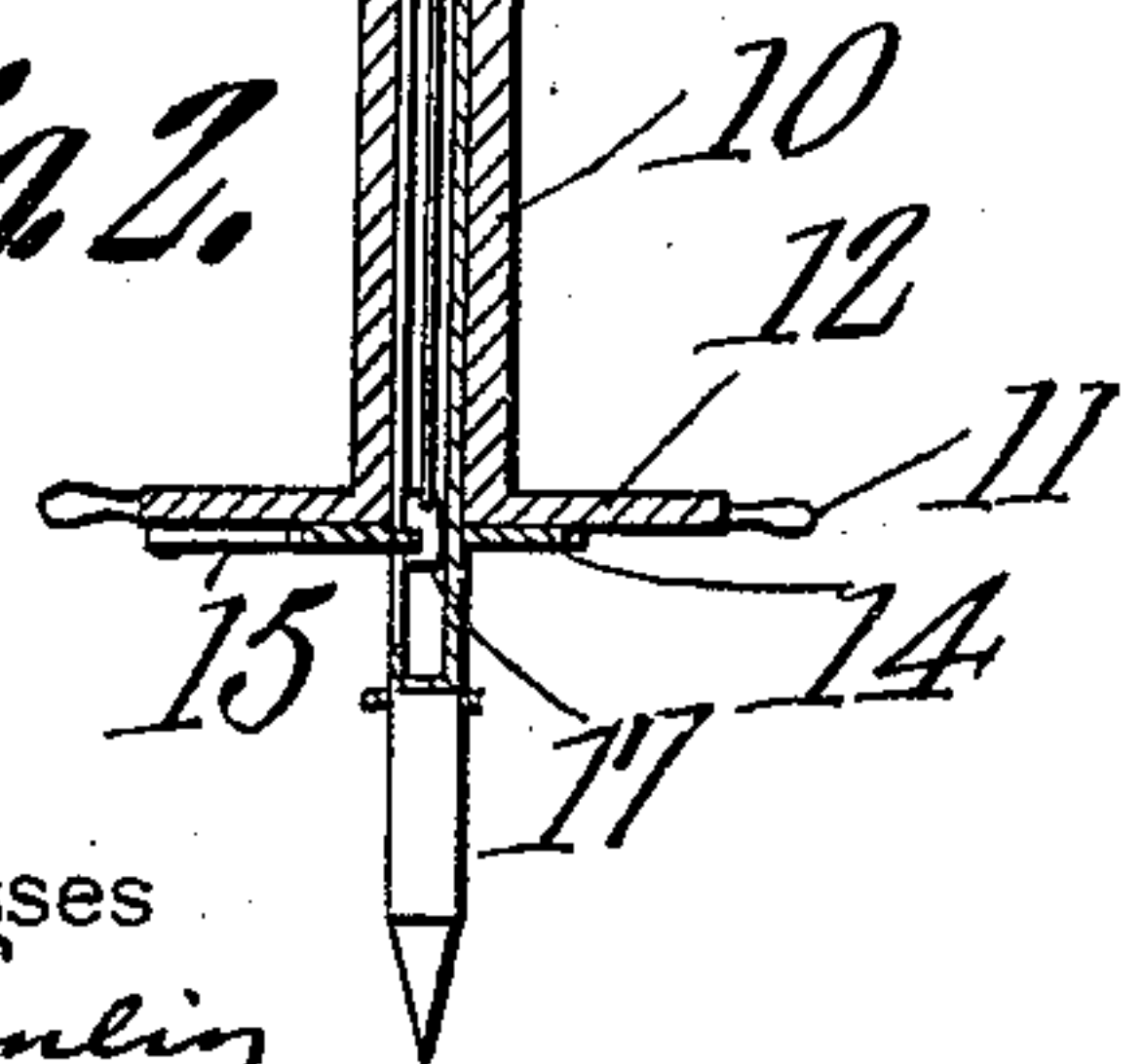


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

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STRAW-STACKER.

975,415.

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Application filed April 27, 1910. Serial No. 557,941.

To all whom it may concern:

Be it known that I, GEORGE W. HALANE, a citizen of the United States, residing at Covell, in the county of McLean and State of Illinois, have invented a new and useful Straw-Stacker, of which the following is a specification.

The device forming the subject matter of this application, is a simple screen, adapted to be raised and lowered in front of the discharge element of a threshing machine, to limit the movement of the straw from said discharge element, so that the straw will stack properly.

Another object of the invention is to provide a device of the character described, which may be readily raised and lowered, as the discharge element of the threshing machine is raised and lowered to accommodate the increasing height of the stack.

Another object of the invention is to provide a device of the character described, including a flexible screen which may be raised and lowered, and drawn taut between the supports upon which it is mounted.

The drawings show typical embodiments merely, and it is to be understood that changes, properly falling within the scope of what is claimed, may be made, without departing from the spirit of the invention, or sacrificing any of the advantages thereof.

In the accompanying drawings,—Figure 1 shows the device in perspective; Fig. 2 is a vertical longitudinal section of one of the end supports, and of the stretching device which is mounted thereon; Fig. 3 is a bottom plan of the stretching device; Fig. 4 is a side elevation of one of the intermediate supports; and Fig. 5 is a side elevation of a modified form of support, the view showing a modified means for raising and lowering the stretching device; parts being broken away.

In carrying out the invention, there is provided, as a primary and fundamental part thereof, a plurality of supports, preferably posts. The end supports are denoted by the numeral 1, and disposed between the supports 1, preferably in semi-circular relation, are other, intermediate supports 2. In the ordinary construction of the device, the supports 1 and 2 will be simply driven into the ground, near the point where the straw stack is to be formed. Disposed longitudinally of the intermediate supports 2, are guides 3, and upon the upper ends of

the intermediate supports, are anti-friction devices of some sort, preferably pulleys 4. Pulleys 5 are mounted upon the end supports 1. These pulleys 5 which are upon the end supports, are so positioned thereon that the treads of the pulleys 5 will be alined with the interior of the supports 1, it being understood that the supports 1 may, if desired, be of tubular form.

The supports are upheld by guys 6, of which there may be any number, the guys being connected at their upper ends with the supports, and at their lower ends secured by means of pegs 7, driven into the ground, or in any other desired manner. Upon the supports, adjacent their upper ends, are eyes 8. Through these eyes 8, a horizontally disposed rope or cable is passed, in order to strengthen and to stay the structure. This rope or cable, in the drawings, is denoted by the numeral 9.

Slidably and rotatably mounted upon the end supports 1, are stretching drums 10; spokes 11, outstand from the periphery of a wheel 12, which constitutes the bottom of the stretching drum 10. Slidably mounted upon the end supports 1, are ratchets 14 with which the stretching drums are rotatably connected. Springs 15 are located upon the bottoms of the stretching drums 10, and these springs 15 bear against pawls 16, to actuate the same to engage the ratchets 14. Upon the ratchets 14, there are inwardly extended lugs 17, adapted to extend through upright slots 18 in the end supports 1, to slide in the said slots. A hoisting rope 19 is connected at one end with the lug 17, the other end of the hoisting rope 19 being secured about a peg 20 driven into the ground, or in any other suitable manner, the intermediate portions of the hoisting rope 19 being carried by the pulleys 5. Other hoisting ropes 21 are passed over the pulleys 4 upon the intermediate supports 2, these hoisting ropes 21 being secured at one end, in eyes 22, located along the upper edge of a flexible shield 26, the intermediate portion of which is engaged by the guides 3 of the intermediate supports, the ends of the shield being secured to the stretching drums 10.

Sometimes, the end supports 2 are modified to the extent shown in Fig. 5. In such instance, these modified supports, denoted by the numeral 23, may be made solid. The stretching drums are rotatable upon the supports, which are slotted, as denoted by the

numeral 27, to receive the projections 17 of the ratchets 14. Pulleys 24 are mounted upon the upper ends of these modified supports 23, and the hoist rope 19 is carried
 5 over the pulleys 24 and secured to a collar 25, rotatably held upon the stretching drum 10. In this construction, the hoisting rope 24 is carried downwardly upon the exterior of the support 23, instead of being located
 10 in the interior thereof, as seen most clearly in Fig. 5.

If desired, the shield 26 may be fashioned in any number of sections, the sections being
 15 laced together, or otherwise secured in a single length, as denoted by the numeral 28.

In practical operation, by hauling upon the hoisting ropes 19 and 21, the shield 26, and the stretching drums 10 may be raised and lowered as desired, thus permitting the
 20 shield 26 to be disposed in front of the mouth of the discharge element of the threshing machine, the shield being thus adapted to receive the outcoming straw as the discharge element of the threshing ma-
 25 chine is raised to accommodate the increasing height of the straw stack. Obviously, by engaging the spokes 11, the stretching drums 10 may be operated, drawing the shield 26 tightly between the supports in
 30 which it is mounted. The pawl and ratchet mechanism seen most clearly in Fig. 3 will serve to maintain the shield 26 taut, the projections 17 upon the ratchets 14 serving at once as a means for preventing the ratchets
 35 from rotating upon the supports 1, and, at the same time, serving as points of attachment for the hoisting ropes 19.

When a compact and particularly presentable device is desired, the hollow, tubular
 40 supports 1 may be employed, and when an inexpensive structure is called for, the form of the invention delineated in Fig. 5 may be resorted to with advantage.

It will be seen that this device, although
 45 simple in construction, and of few parts, is well adapted to receive the tailings, and to stack the same up neatly. The shield 26 need be but relatively narrow, owing to the fact that the same may be hoisted and low-
 50 ered as desired.

Having thus described the invention, what is claimed is:—

1. A device of the class described comprising spaced supports; a stretching device ro-
 55 tatable and slidable upon one of the supports; a flexible screen secured at one end to the stretching device and at the other end slidable upon the other support; means for sliding the stretching device and the screen
 60 upon the supports; and means for holding the stretching device against rotation.

2. A device of the class described comprising spaced supports; a stretching device ro-
 tatable and slidable upon one of the sup- 65
 ports; a flexible screen secured at one end to the stretching device and at the other end
 slidable upon the other support; a flexible member extended downwardly within the
 first named support and connected with the stretching device; and anti-friction means 70
 upon said support to receive the intermediate portion of the flexible member.

3. A device of the class described comprising a tubular support provided with a
 longitudinal slot; a stretching device rotatable 75
 and slidable upon the support; a flexible screen secured at one end to the stretching device; means for securing the other end of
 the flexible screen; a ratchet slidable upon the support and rotatably connected with the 80
 stretching device, the ratchet having a projection extending into the slot of the support; a pawl upon the stretching device
 adapted to engage the ratchet; and a flexible member located within the support and con- 85
 nected with the projection upon the ratchet.

4. A device of the class described comprising a tubular support; a stretching de-
 vice rotatable and slidable upon the support; a ratchet slidable upon the support and ro- 90
 tatably connected with the stretching device, the ratchet being adapted to interlock with the support against rotation; a pawl located
 upon the stretching device and adapted to engage the ratchet; and means for sliding 95
 the stretching device upon the support.

5. A device of the class described comprising end supports; intermediate supports
 located between the end supports; stretching devices slidably and rotatably mounted upon 100
 the end supports; a flexible screen terminally secured to the stretching devices, and having its intermediate portion engaged by
 the intermediate supports; means for raising and lowering the stretching devices and the 105
 screen; and means for locking the stretching devices against rotation.

6. A device of the class described comprising fixed supports; a flexible screen extended
 between the supports; means for raising and 110
 lowering the screen; and means directly mounted and slidable upon the supports for drawing the screen taut between the sup-
 ports.

In testimony that I claim the foregoing as 115
 my own, I have hereto affixed my signature in the presence of two witnesses.

GEORGE W. HALANE.

Witnesses:

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 T. D. CANTRELL.