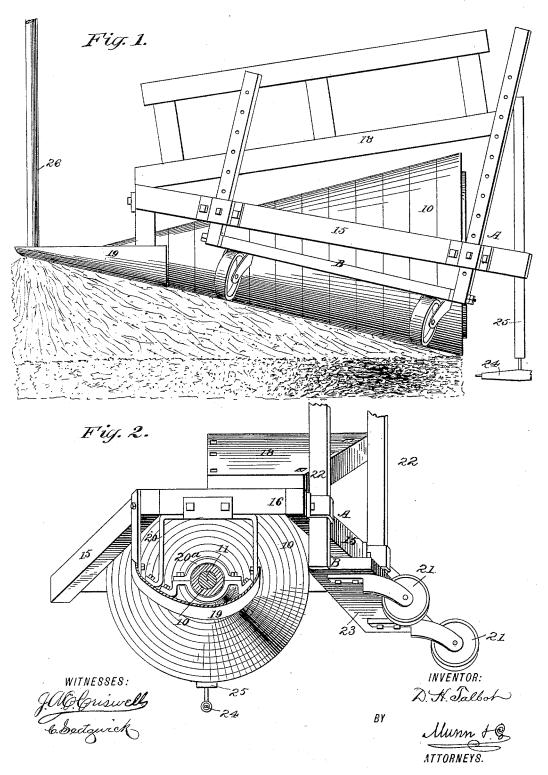
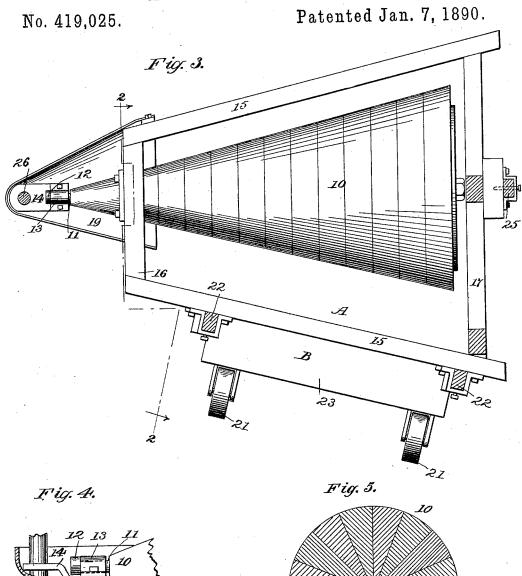
## D. H. TALBOT. MACHINE FOR STACKING HAY.

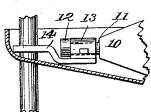
No. 419,025.

Patented Jan. 7, 1890.

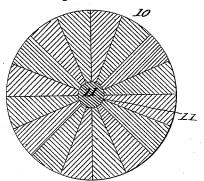


## D. H. TALBOT. MACHINE FOR STACKING HAY.





WITNESSES:



INVENTOR: D. H. Salbok

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ATTORNEYS.

## UNITED STATES PATENT OFFICE.

DANIEL H. TALBOT, OF SIOUX CITY, IOWA.

## MACHINE FOR STACKING HAY.

SPECIFICATION forming part of Letters Patent No. 419,025, dated January 7, 1890.

Application filed July 8, 1889. Serial No. 316,837. (No model.)

To\_all whom it may concern:

Be it known that I, DANIEL H. TALBOT, of Sioux City, in the county of Woodbury and State of Iowa, have invented a new and Improved Machine for Stacking Hay, Ensilage, &c., of which the following is a full, clear, and exact description.

My invention relates to a machine for stacking hay, ensilage, &c., and has for its object to provide a portable machine capable of automatic elevation as the stack is formed.

A further object of the invention is to provide a machine of simple and durable construction, capable of convenient manipulation, and which will expeditiously form a stack without causing the operator attending the machine much, if any, trouble.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter more fully described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters and figures of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the machine in operation. Fig. 2 is a section on line 2 2 of Fig. 3, looking in direction of the ar30 rows. Fig. 3 is a plan view of the machine. Fig. 4 is a detail view illustrating the attachment of the inner end of the drum; and Fig. 5 is a diametrical section through the drum, illustrating a modification of its con35 struction.

The drum 10, which is the leading feature of the machine, is adapted to act upon the material to be stacked and press or mold the same to shape. The drum is conical, and 40 may be constructed in various ways to facilitate transportation.

In the drawings two modes of construction are illustrated—that set forth in Figs. 1 and 3 consisting of a series of graduated rings, 45 disks, or wheels united or tied together in such manner that they may be detached one from the other when desirable, and that shown in Fig. 5, which consists in forming the drum of a series of strips essentially trioangular in cross-section and provided with a longitudinally-tapering outer cylindrical surface.

The drum is provided with a trunnion 11 at its reduced end or apex only, usually terminating in a cap 12 to retain in position 55 upon the trunnion a loose sleeve 13, having secured to its under face, preferably, an outwardly-projecting arm 14, provided with an opening in the outer end, as illustrated in Figs. 3 and 4.

The frame A, employed in connection with the drum, is constructed substantially in the following manner: Two oppositely-diverging and downwardly-inclined side beams 15 are attached at their inner ends to a cross bar or 65 beam 16, (see Fig. 2,) the said side beams being united or tied at their outer ends by a longer cross bar or beam 17, whereby the frame is essentially triangular in shape, as shown in Fig. 3. Upon this main frame a 70 platform 18 is constructed, preferably upwardly and rearwardly inclined, upon which any hay-elevating mechanism may be placed and from which the material is fed in the track of the drum. The forward end of the 75 drum is protected by a shield 19, preferably triangular in general contour and dished in cross-section. The shield is usually attached to the forward end of the frame by a bracket, as shown at 20, Fig. 2, and extends outward 80 under and upward beyond the sleeve-arm 14, being provided with an opening in the bottom aligning the opening in the arm. The shield effectually protects the forward or journal end of the drum from contact with 85 the material to be stacked. Upon the inner face of the shield a bearing 20° is usually secured, in which the drum is journaled, as shown in Fig. 2.

In order to support the load of hay or other 90 material to be stacked carried by the platform and release the bearing of the drum from this burden, a vertically-adjustable auxiliary frame B is attached to the main frame at one side, to which casters 21 are secured. 95 This frame usually consists of two upright side pieces 22, provided with a series of apertures, which uprights pass through straps secured to the main frame, being attached to the said straps and frame by a bolt or pin. 100 To the lower end of the uprights a horizontal sill 23 is fastened in such manner that it may be inclined vertically when desired, and to said sill the casters are secured.

The machine is ordinarily operated with a team attached, and to that end a single or a double tree 24 is secured to the lower end of a vertical beam 25, adjustably fastened to the rear or outer end of the main frame.

In operation a perpendicular bar or post 26 is planted at a point which is to be the center of the stack, which bar passes through the opening in the forward end of the shield on and the sleeve-arm 14. This bar forms the pivot around which the machine travels. The material is fed in the track of the drum, which presses it in shape, rising upward upon the pivot as each layer is placed.

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

1. In a machine for stacking hay, ensilage, and other material, the combination, with an upright bar constituting the center of a stack, of a conical pressure-drum pivotally attached at its apex to the rod or bar, and draft mechanism secured to the outer or base portion of said drum, said drum adapted to revolve upon the top of the stack about its pivot, substantially as and for the purpose described.

2. In a machine for stacking hay, ensilage, and other material, the combination, with a rod or bar adapted to constitute the center of a stack, of a conical pressure-drum pivotally attached at one end to the rod or bar, and a shield supported beneath the said drum, substantially as shown and described, and for the purpose specified.

3. In a machine for stacking hay, ensilage, 35 and other material, the combination, with a bar or post adapted to constitute the center of a stack, of a conical pressure-drum pivotally attached at one end to the rod or bar, a shield extending beneath the pivotal end of 40 the drum, and casters which are adjustably secured at one side of the drum, substantially as shown and described.

4. In a machine for stacking hay, ensilage, and other material, the combination, with an 45 upright rod or bar, of a frame and conical pressure-drum mounted thereon, said frame and drum pivoted at one end to said rod or bar, and means for revolving said frame and drum about said pivot, substantially as and 50 for the purpose described.

5. A machine for stacking hay, ensilage, and other material, comprising a frame, a conical pressure-drum held to revolve in the frame, and a shield connected with the drum, sub- 55 stantially as described.

6. A machine for stacking hay, ensilage, and other material, comprising a frame, a conical pressure-drum held to revolve in the frame, an arm swiveled to the smaller end of the 60 drum, and a shield extending beneath the smaller end of the drum and beyond the arm, substantially as described, and for the purpose specified.

DANIEL H. TALBOT.

Witnesses:

H. M. Donoho, M. E. Janssen.