

966,572.

N. C. MILLER.
HAY DISTRIBUTER.
APPLICATION FILED AUG. 16, 1909.

Patented Aug. 9, 1910.

2 SHEETS—SHEET 1.

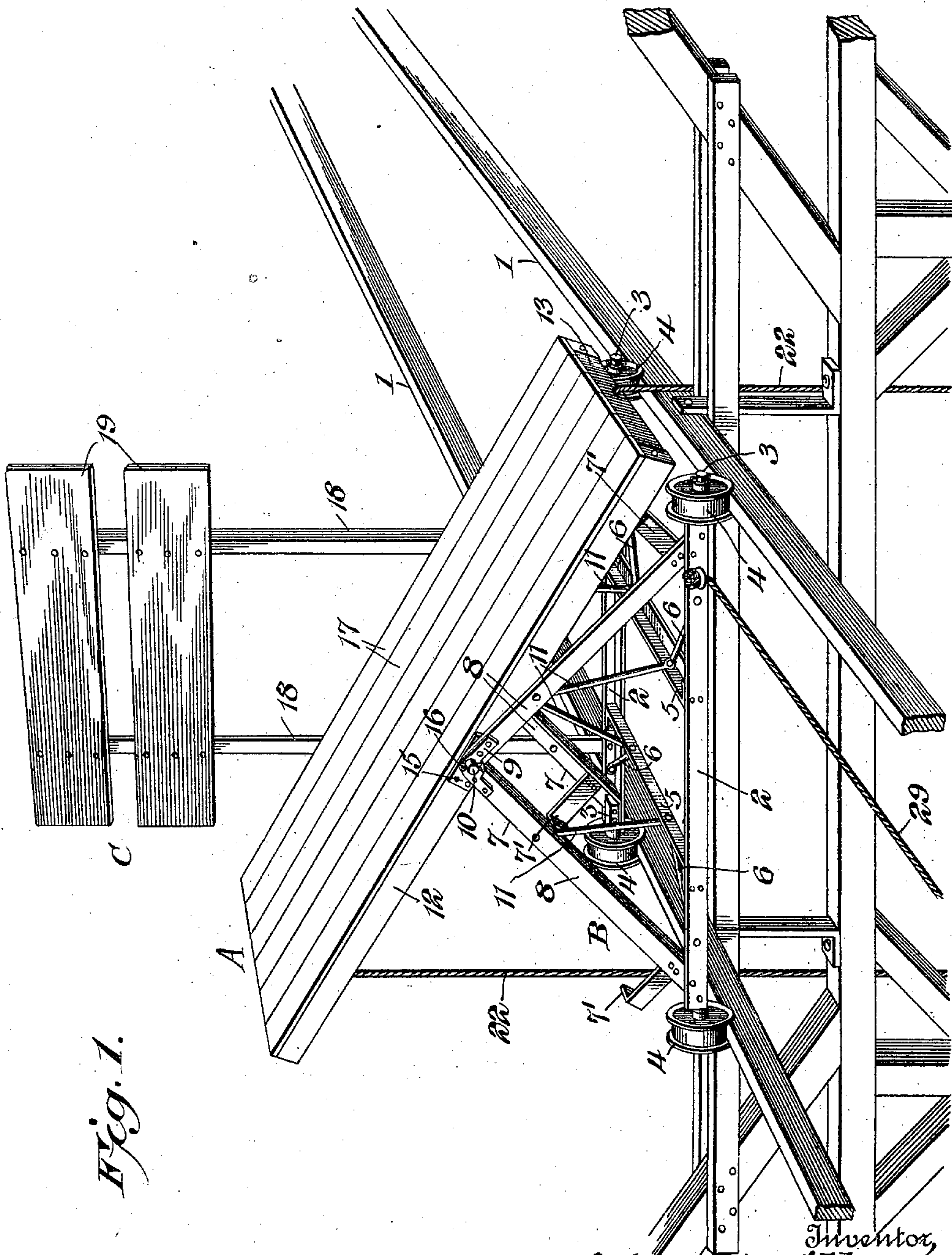


Fig. 1.

Witnesses
Howard D. Ott.
C. Bradway.

Inventor,
Nicholas C. Miller,
By
E. J. Siggers.
Attorney

APPLICATION FILED AUG. 16, 1909.

2 SHEETS—SHEET 2.

Fig. 1.

Fig. 2.

Fig. 3.

Inventor
Nicholas C. Miller,

By
E. J. Siggers.
Attorney

Witnesses
Howard D. Coe.
C. Bradley

Nicholas C. Miller, ^{Inventor}
By *E. G. Siggers.* ^{Attorney}

UNITED STATES PATENT OFFICE.

NICHOLAS C. MILLER, OF DODGEVILLE, WISCONSIN.

HAY-DISTRIBUTER.

966,572.

Specification of Letters Patent.

Patented Aug. 9, 1910.

Application filed August 16, 1909. Serial No. 513,157.

To all whom it may concern:

Be it known that I, NICHOLAS C. MILLER, a citizen of the United States, residing at Dodgeville, in the county of Iowa and State of Wisconsin, have invented a new and useful Hay-Distributor, of which the following is a specification.

This invention relates to an apparatus for distributing hay to either one or both mows of a barn or other shelter, such for instance as the invention disclosed in United States Letters Patent No. 691,405, granted to me January 21, 1902.

One of the objects of the present invention is to improve and simplify the construction and operation of apparatus of this character so as to be comparatively simple and inexpensive to manufacture, reliable and efficient in use, and readily manipulated.

Another object of the invention is the provision of a distributor carriage movable on a track extending longitudinally between the mows of a barn or other sheltering building and on which carriage is mounted a tiltable platform having a shifting weight for holding the platform inclined to discharge the hay, straw or the like to either mow.

With these objects in view and others, as will appear as the description proceeds, the invention comprises the various novel features of construction and arrangement of parts which will be more fully described hereinafter and set forth with particularity in the claims appended hereto.

In the accompanying drawings, which illustrate one embodiment of the invention, Figure 1 is a perspective view of the distributor. Fig. 2 is a section thereof taken in a central plane parallel with the line of travel. Fig. 3 is a section taken longitudinally through the platform or table. Fig. 4 is a bottom plan view of the platform.

Similar reference characters are employed to designate corresponding parts throughout the views.

Referring to the drawings, A designates the tiltable platform or table which is mounted on a carriage B that moves on track rails 1 extending longitudinally of the barn or other sheltering building between the mows. The carriage is provided with an upstanding abutment C that rises above the platform at one side thereof and with which the grapple or hay carrier, with

its load of hay, is adapted to strike when the grapple full of hay is in a position to be discharged.

The carriage comprises horizontal angle bars 2 disposed transversely to the track 1 and having at their ends axle studs 3 on which are journaled double flange wheels 4 which ride over the rails of the track. These bars are connected by intermediate right-angularly disposed angle bars 5 set inwardly from the ends of the bars 1, which latter are braced from the bars 5 by the members 6. Rising from the axle bars 2 are inverted V-shaped frames 7 which are spaced apart to receive between them the platform A. The upper ends of the members 8 that form each frame 7, are connected together by a strap 9 which forms a bearing for the axle or shaft 10 of the platform, while the lower ends of the members 8 are connected with the outer ends of the axle bars 2. Between the members 8 and longitudinally-extending bars 5 are stiffening braces 11.

The platform A comprises a rectangular frame composed of side angle bars 12 and end and intermediate angle bars 13 and 14. The shaft 10 extends through the side bars in a median plane at which points are riveted stiffening plates 15, the ends of the shaft extending through the bearings 9, in which the shaft is held against longitudinal movement by cotter pins 16. On this frame are riveted or otherwise secured boards or other material 17 that extend longitudinally or in the direction in which the hay slides off the table.

The abutment or stop C comprises standards 18 which can be attached to either side of the carriage, according to the requirements, and on these standards are fastened horizontal plates or boards 19 disposed under the rail 20, Fig. 2, on which the hay grapple or carrier 21 is adapted to travel.

The platform A is adapted to be tilted for chuting the hay to either mow, and for this purpose, the ends are provided with pull cables 22, Fig. 1, which hang down to such a point as to be within convenient reach of the operator on the floor of the barn. When the table is to be tilted, the operator merely pulls the proper cable to thereby tilt the platform on its axis. In order to prevent the accidental tilting of the table when a load of hay is deposited thereon, a shifting weight 23 is mounted on the table to move from one end to the other thereof. This

weight travels on a rail 24 disposed under the platform and supported on hangers 25 secured to the latter. The weight has upwardly-extending side plates 26 between which is rotatably mounted a wheel 27 that rides over the rail 24. On the lower ends of the hangers 25 or at the extremities of the rail 24 are depending members 28 located in the path of the weight to form means for arresting the movement of the latter when the table is tilted. Thus, if the load of hay should be placed on the platform more to the upper side of the shaft or axle 10, the weight 23 would prevent the platform from tilting out of its proper position. When the platform is tilted, the lower end rests on outstanding members 7' on the frames 7 of the carriage, said members forming stops for limiting the tilting movement of the platform. The carriage can be moved to any desired point on the track by a cable 29 connected with the carriage and extending longitudinally of the track and terminating at a point within convenient reach of the operator.

In practice, the distributor is moved to the proper place on the track to deposit the hay on the mow. The hay is conducted to the platform by the usual grapple or carrier, and as soon as the load in the latter reaches the abutment C, as shown by dotted lines in Fig. 2, the grapple is opened to allow the hay to drop on the platform, on which latter it slides downwardly and drops on the mow. As the mow fills up, the carriage is moved forwardly another step by allowing the horse to pull the carriage when the next load of hay in the grapple strikes the abutment C. When the desired point is reached, the horse is stopped so as to arrest the movement of the carriage and the grapple opened to discharge the hay. This operation is repeated until the new portion of the mow is filled. In this way, the process of filling the mow is completed on one side of the barn and then the platform can be tilted to fill the mow at the other side. If desired, however, the filling of both mows can be carried on during one travel of the carriage over the track, the mows being filled alternately between each step through which the carriage is moved during the distributing of the hay in the mows.

From the foregoing description, taken in connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention, together with the apparatus which I now consider to be the best embodiment thereof, I desire to have it understood that the apparatus shown is merely illustrative, and that such changes may be made

when desired as are within the scope of the claims appended hereto.

Having thus described the invention, what I claim as new, and desire to secure by Letters Patent, is:—

1. In an apparatus of the class described, the combination with track rails, of a carriage movable thereon, a platform mounted on the carriage to tilt on a centrally disposed axis, and means on the platform located to one side of such axis for yieldingly holding the platform in either of its inclined positions.

2. In an apparatus of the class described, the combination with track rails, of a carriage movable thereon, a tilting platform mounted on the carriage, and a device mounted on the platform and shiftable to either end thereof to hold the platform in either of its inclined positions.

3. In an apparatus of the class described, the combination with a track, of a carriage movable thereover, a platform mounted on the carriage to tilt on an axis disposed parallel with the line of travel, and a weight movable to either side of the axis of the table for holding the latter in either of its tilted positions.

4. In an apparatus of the class described, the combination with a track, of a carriage movable thereover, a platform mounted on the carriage to tilt on an axis disposed parallel with the line of travel, a weight movable to either side of the axis of the table for holding the latter in either of its tilted positions, and a rail on the platform along which the weight travels.

5. In an apparatus of the class described, the combination with a track, of a carriage movable thereover, a platform mounted on the carriage to tilt on an axis disposed parallel with the line of travel, a weight movable to either side of the axis of the table for holding the latter in either of its tilted positions, a rail on the platform along which the weight travels, and stop devices against which the weight strikes at the end of its movement.

6. In an apparatus of the class described, the combination of a movable carriage, a platform, a shaft mounted in the median plane of the platform for mounting the latter on the carriage, and a device under the table and movable automatically toward either end of the table for holding the latter in either of its tilted positions.

7. In an apparatus of the class described, the combination of a movable carriage, a platform, a shaft mounted in the median plane of the platform for mounting the latter on the carriage, a device under the table and movable automatically toward either end of the table for holding the latter in either of its tilted positions, a rail extending longitudinally of the table at the bottom

thereof, and means for supporting the weight on the rail.

8. In an apparatus of the class described, the combination of a movable carriage, a platform, a shaft mounted in the median plane of the platform for mounting the latter on the carriage, a device under the table and movable automatically toward either end of the table for holding the latter in either of its tilted positions, a rail extending longitudinally of the table at the bottom thereof, means for supporting the weight on the rail, hangers securing the rail to the table, and means adjacent the ends of the rail forming stops for the weight.

9. In an apparatus of the class described, the combination of a carriage, a platform mounted to tilt thereon, the axis of tilting being located intermediate the ends of the platform, devices secured to the platform for tilting the same, and a shiftable weight carried by the platform and movable automatically from one end thereof to the other during the tilting movement for holding the table in either of its tilted positions.

10. In an apparatus of the class described, the combination of a track, a carriage movable thereover, a tiltable table on the carriage, a shiftable device on the table automatically movable from one end to the other thereof during the tilting of the table for holding the latter in either of its tilted positions, and an abutment mounted on the carriage and extending upwardly above the table at one side thereof.

11. In an apparatus of the class described, the combination of a track, a carriage movable thereover, and a tiltable platform on the carriage, said carriage comprising a base frame, inverted V-shaped frames mounted thereon, and an axle supported by the V-shaped frames and on which the table tilts, and means on the base frames for engaging the track.

12. The combination of a track, a carriage

movable thereover, and a tiltable platform on the carriage, said carriage comprising axle bars extending transversely to the track, wheels on the ends of the bars, means for connecting the bars together, spaced upstanding frames on the bars, and an axle shaft mounted on the upstanding frames and extending parallel with the line of travel to form a support for the platform.

13. The combination of a track, a carriage movable thereover, a platform separate from and tiltable mounted on the carriage, and members fixed on and extending outwardly from the ends of the carriage and above the track for supporting the lower end of the tilted platform.

14. The combination of a track, a carriage movable thereover, and a platform separate from and tiltable mounted on the carriage, said carriage comprising a base frame, upstanding frames thereon, bearings on the upstanding frames, a shaft supported in the bearings and extending from one upstanding frame to the other to form a support for the platform, and members on the upstanding frames projecting outwardly from the carriage to form stops to limit the tilting movement of the platform.

15. The combination of a track, a carriage movable thereover, a tiltable platform mounted on the carriage, members forming stops extending laterally from the carriage and above the track for supporting the lower end of the tilted platform, and a device carried by and shiftable from one end of the platform to the other for holding the latter in engagement with the said stops.

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

NICHOLAS C. MILLER.

Witnesses:

WILLIAM N. MILLER,
J. E. O'NEILL.