

No. 781,992.

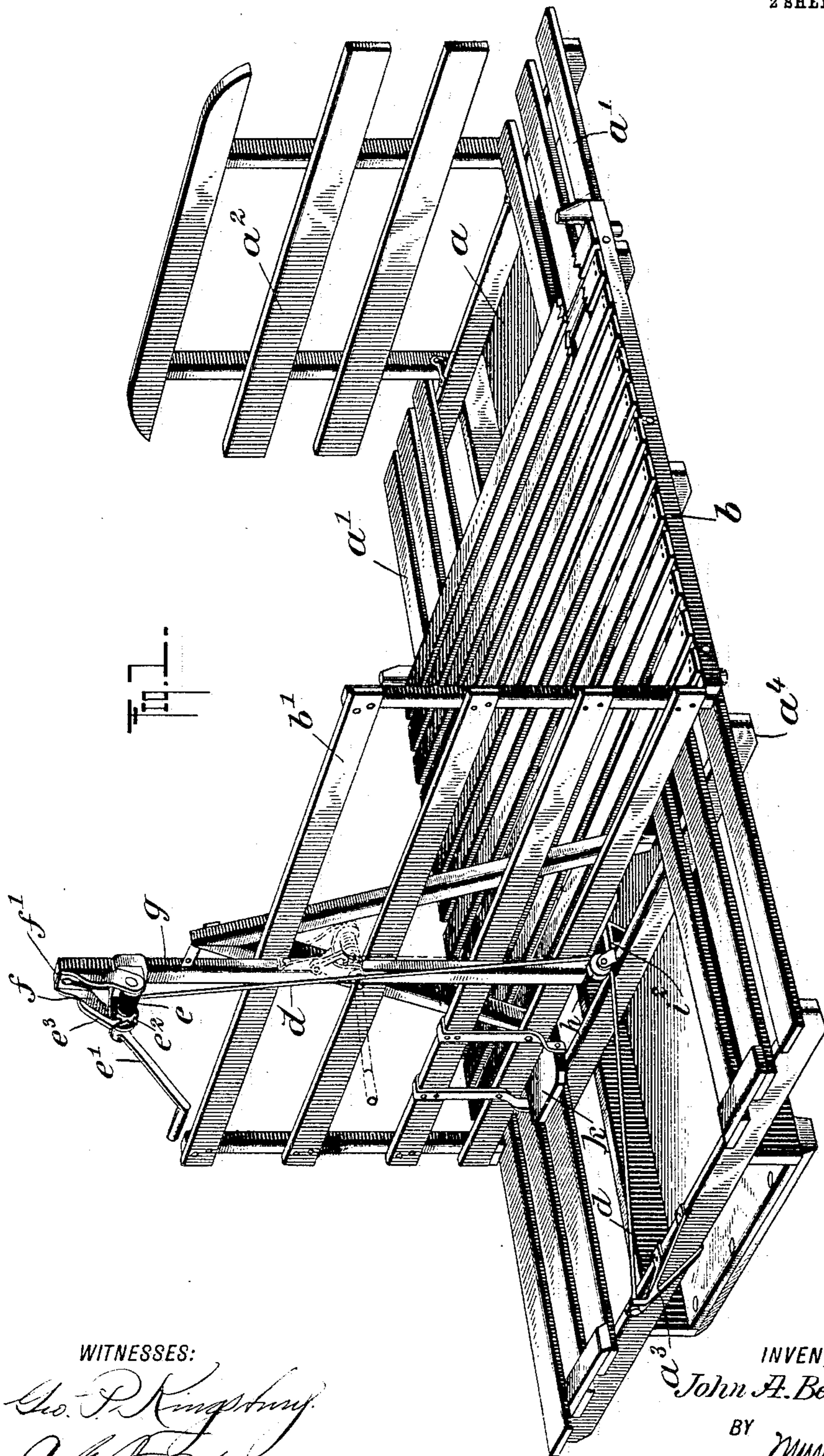
PATENTED FEB. 7, 1905.

J. A. BEIERSCHMITT.

HAY RACK.

APPLICATION FILED OCT. 18, 1904.

2 SHEETS—SHEET 1.



WITNESSES:

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A. V. Fay

INVENTOR

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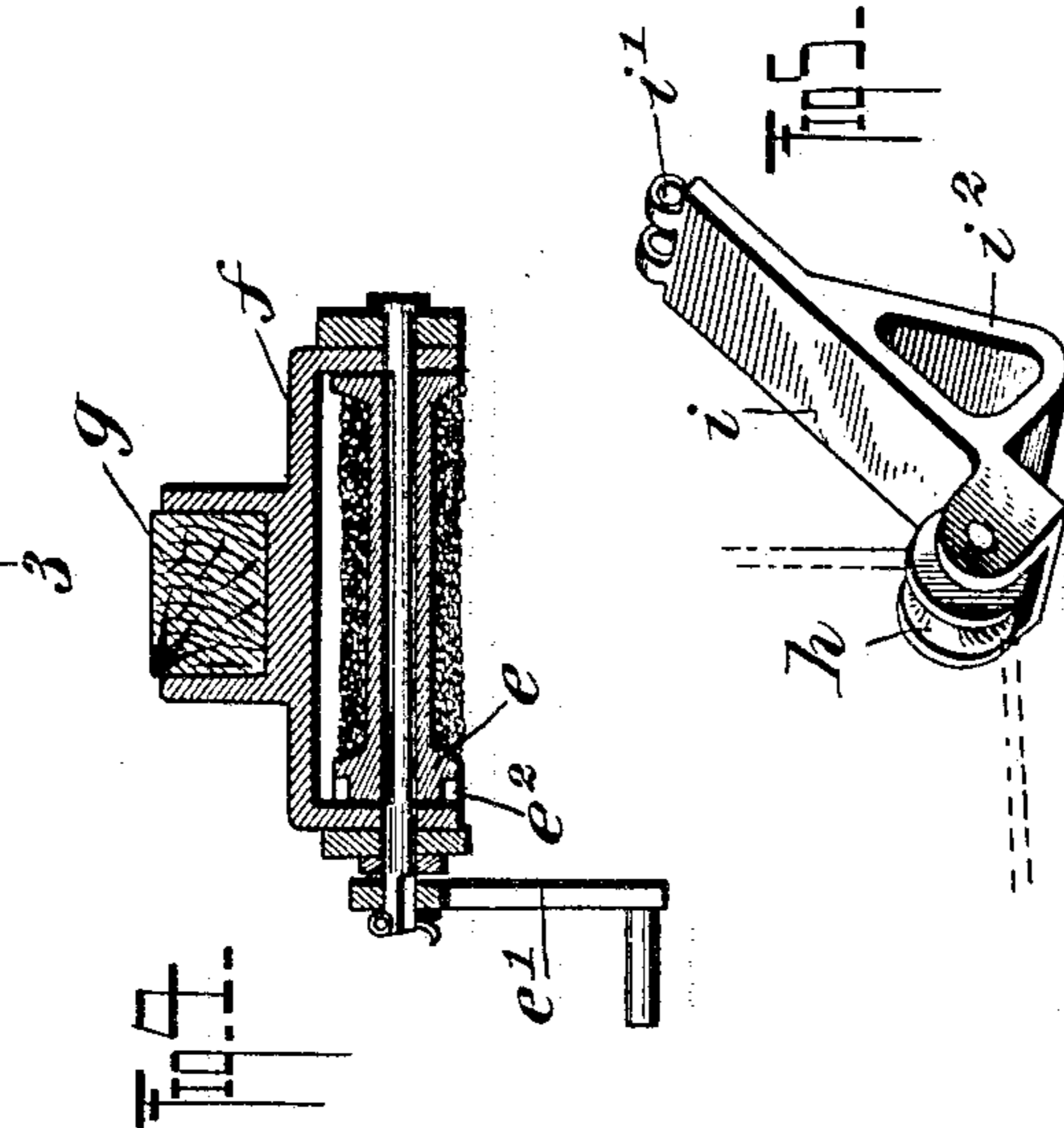
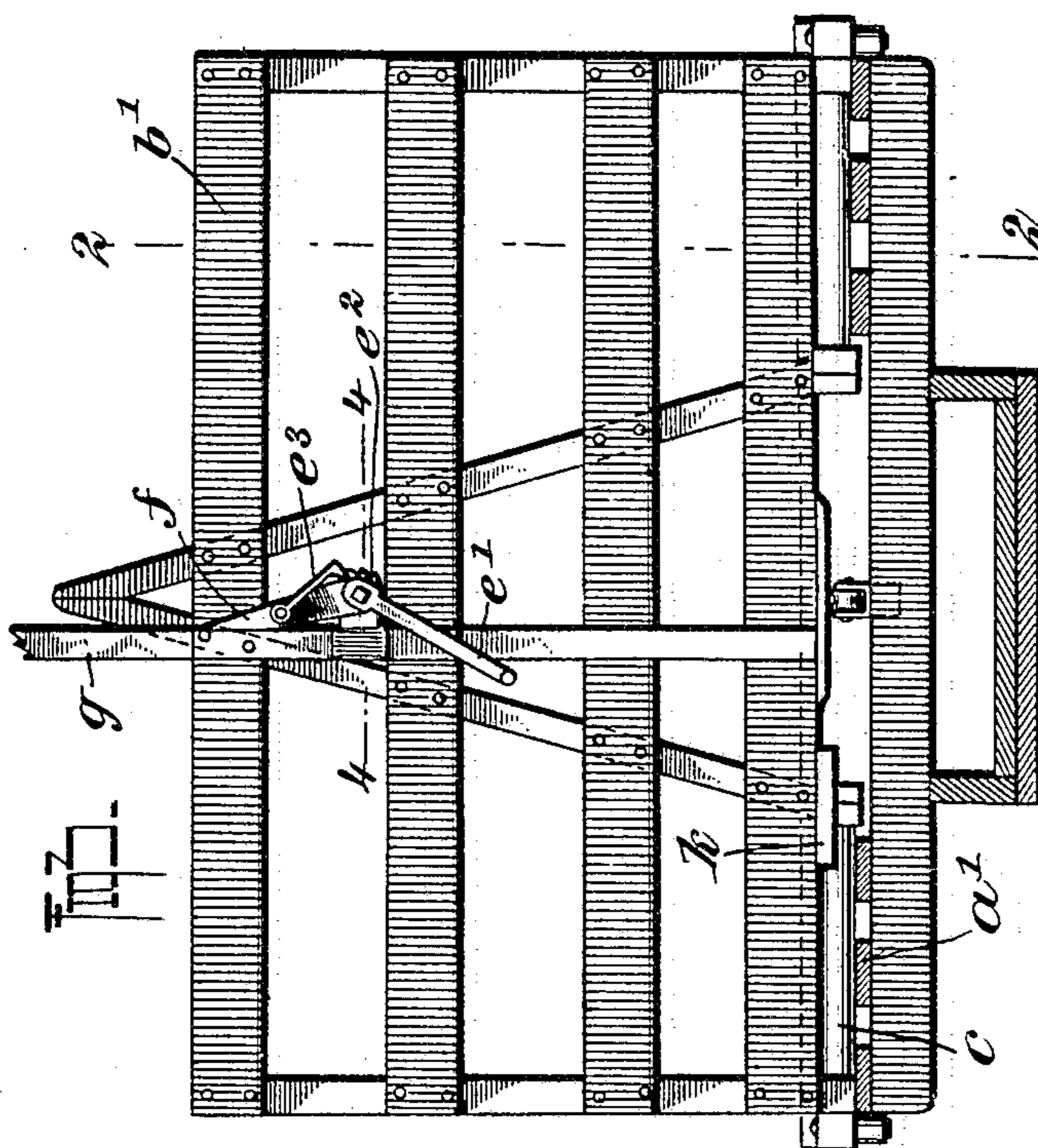
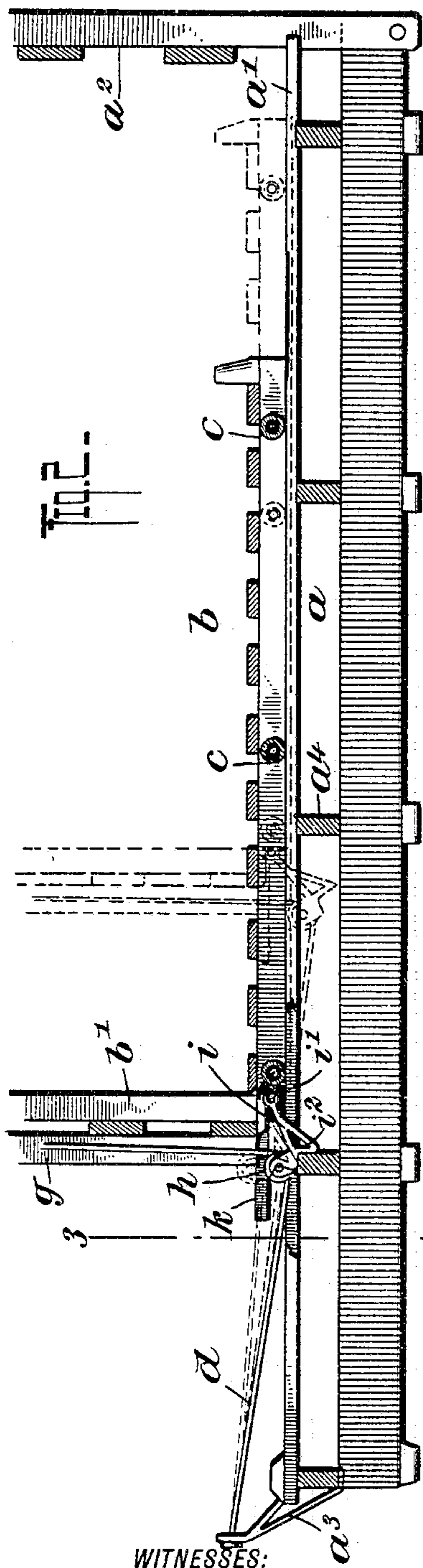
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UNITED STATES PATENT OFFICE.

JOHN A. BEIERSCHMITT, OF LESTER, IOWA.

HAY-RACK.

SPECIFICATION forming part of Letters Patent No. 781,992, dated February 7, 1905.

Application filed October 18, 1904. Serial No. 229,013.

To all whom it may concern:

Be it known that I, JOHN A. BEIERSCHMITT, a citizen of the United States, and a resident of Lester, in the county of Blackhawk and State of Iowa, have invented a new and Improved Hay-Rack, of which the following is a full, clear, and exact description.

Several attempts have been made to devise a hay-rack capable of receiving hay or straw at one end from a mechanical loader or otherwise and transferring a part of it to the other end in a convenient and efficient manner, so as to do away with the laborious pitching of the hay from one part of the rack to the other.

It is the object of my invention to improve upon these devices and produce one at once simple and inexpensive and entirely efficient.

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

Figure 1 is a perspective view of a preferred form of my invention. Fig. 2 is a longitudinal sectional view thereof on the line 2 2 of Fig. 3. Fig. 3 is a sectional view on the line 3 3 of Fig. 2. Fig. 4 is a sectional view, on an enlarged scale, of a detail taken on the line 4 4 of Fig. 3; and Fig. 5 is a perspective view of a detail, on an enlarged scale.

The main frame of my improved hay-rack is represented by the letter *a*. It is provided with boards *a'*, running longitudinally along the sides, and with a back board *a''*. *b* represents a movable platform mounted upon the frame on rollers *c*. These rollers are intended to move along the boards *a'*, so as to provide for supporting the platform upon the frame and permit it to be rolled from one end thereof to the other. The platform is provided with a front board *b'*. It will be readily understood that the platform can be placed at the rear of the frame so that the front board on the platform and back board on the frame together constitute the ends of the rack for receiving hay or straw. The material is then supplied to the rack upon the platform, and when the space is filled the platform is intended to be moved forward upon the frame. I have illustrated an efficient means for accomplishing this result. Upon the extreme

front of the frame is placed a bracket *a'''*, and to this is connected the end of a flexible connection *d*, which may be in the form of a rope, chain, or cable. The other end of this flexible connection is secured to a windlass *e*, which is provided with a handle *e'* and is mounted upon a frame *f*. The windlass is also provided with a ratchet-wheel *e''* and pawl *e'''* to permit the windlass to be rotated in one direction and prevent its being rotated in the other when the pawl is in engagement with the ratchet. The frame *f* is provided with a pin *f'*, which is designed to enter in one of a series of holes in a standard *g* upon the front board of the platform. Consequently the frame and windlass can be mounted at any desired point upon the standard either upon the front or side thereof, so that it will be located conveniently for the person who wishes to operate it. The flexible connection in passing from the bracket *a'''* to the windlass passes over a guide-roller *h*. This guide-roller is mounted upon a frame *i*, which is pivoted at *i'* to the lower portion of the platform. This frame is also provided with a projection *i''*, which extends downwardly from the frame itself, so that it will come into contact with any one of a number of cross-bars *a''''*, which constitute a portion of the frame. The projection *i''* therefore serves as a stop for the platform when the flexible connection *d* is loose. By this construction it will be readily observed that the manipulation of the crank *e'* will cause the frame *i* to be swung upwardly upon its pivot until the stop *i''* is disengaged from the cross-bar *a''''*, after which the continued rotation of the crank will cause the flexible connection *d* to be wound up upon the windlass and will also cause the platform to be moved forward upon the frame. When the operation of moving the platform forward is stopped, the flexible connection will become slackened upon any forward movement of the platform or upon a slight rearward motion of the handle *e'*, and consequently the frame *i* will sink downwardly upon its pivot and cause the projection *i''* to come into position for engagement with the next adjacent cross-bar *a''''*. A step *k* is placed upon the front of the platform for the support of the operator thereof.

It will be readily understood that a hay-rack constructed in accordance with the principle of the invention either in the form illustrated or in any other form falling within the scope of my invention will be simple, efficient, and inexpensive, that the hay or straw can be readily loaded upon the platform when in its position at the extreme rear of the frame, that then the platform can be carried forward and locked in position, that material supplied to the rear of the frame after this will simply fill up the portion at the rear of the platform, and that any pressure exerted will only provide for locking the platform more firmly in position. Furthermore, the simple rotation of the crank *e'* will unlock the platform and then cause it to move forward.

While I have illustrated and described a particular embodiment of my invention, it is to be understood that the latter is not limited thereto and that many modifications may be made without departing from the spirit of the invention.

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

1. A hay-rack comprising a frame, a movable platform thereon, means for moving the platform, and a stand for an operator, mounted on the platform.
2. A hay-rack comprising a frame, a platform movably mounted thereon, a bracket, a standard mounted on the platform and provided with a plurality of means for removably mounting the bracket thereon in different positions, a windlass mounted on the bracket, and a flexible connection adapted to be wound upon the windlass and having its free end fixed to the frame.
3. A hay-rack comprising a frame, a platform movably mounted thereon, and having a front board, a stand for an operator located on the platform in front of the front board, a wind-

lass rotatably mounted on the platform, a flexible connection between the windlass and the frame, and a pulley connected with the platform for guiding the flexible connection.

4. A hay-rack comprising a frame, a platform movably mounted thereon, a windlass mounted on the platform, a flexible connection between the windlass and a second frame pivoted to the platform and provided with a stop, and a pulley mounted upon said pivoted frame and adapted to guide said flexible connection.

5. A hay-rack comprising a frame having cross-bars, a platform movably mounted thereon, a windlass on the platform, a connection between the windlass and the frame, and a second frame pivoted to the front portion of said platform and provided with a projection adapted to engage with said cross-bars for locking said platform in position.

6. A hay-rack comprising a frame having a back board and ways upon its sides, rollers mounted upon said ways, a platform supported by said rollers, said platform being provided with a standard and a front board, a windlass movably mounted upon said standard and provided with means for permitting it to rotate in one direction but for preventing it from rotating in the other, a flexible connection secured to said windlass and to the front end of said frame, a second frame pivoted to the front portion of said platform and provided with a stop for the platform, and a guide-roller for said flexible connection mounted upon said last-named frame.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN A. BEIERSCHMITT.

Witnesses:

GEO. W. MONROE, Jr.

C. B. EVERETT.