

A. V. HODGSON.
HAY LOADER.
APPLICATION FILED OCT. 5, 1918.

1,310,187.

Patented July 15, 1919.
2 SHEETS—SHEET 1.

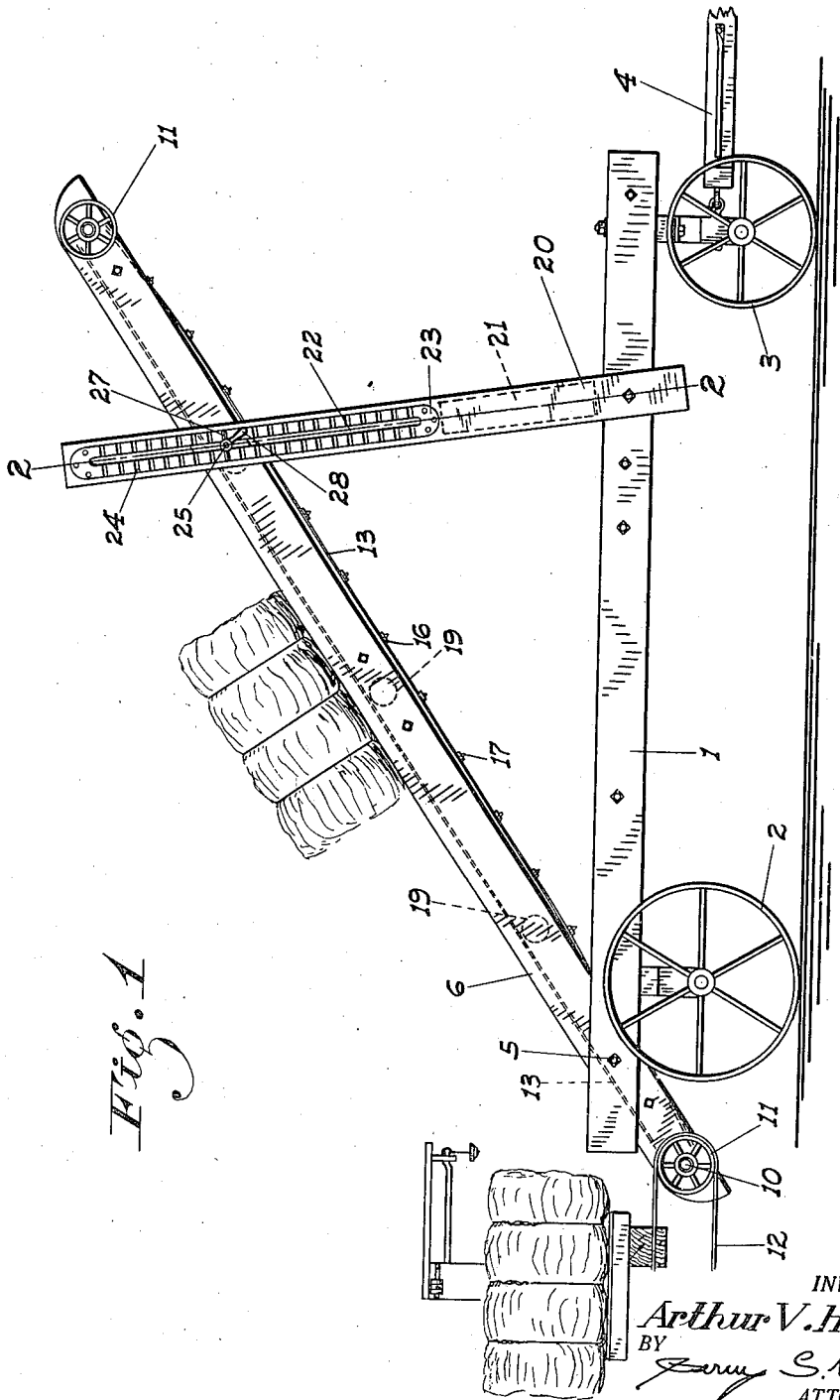


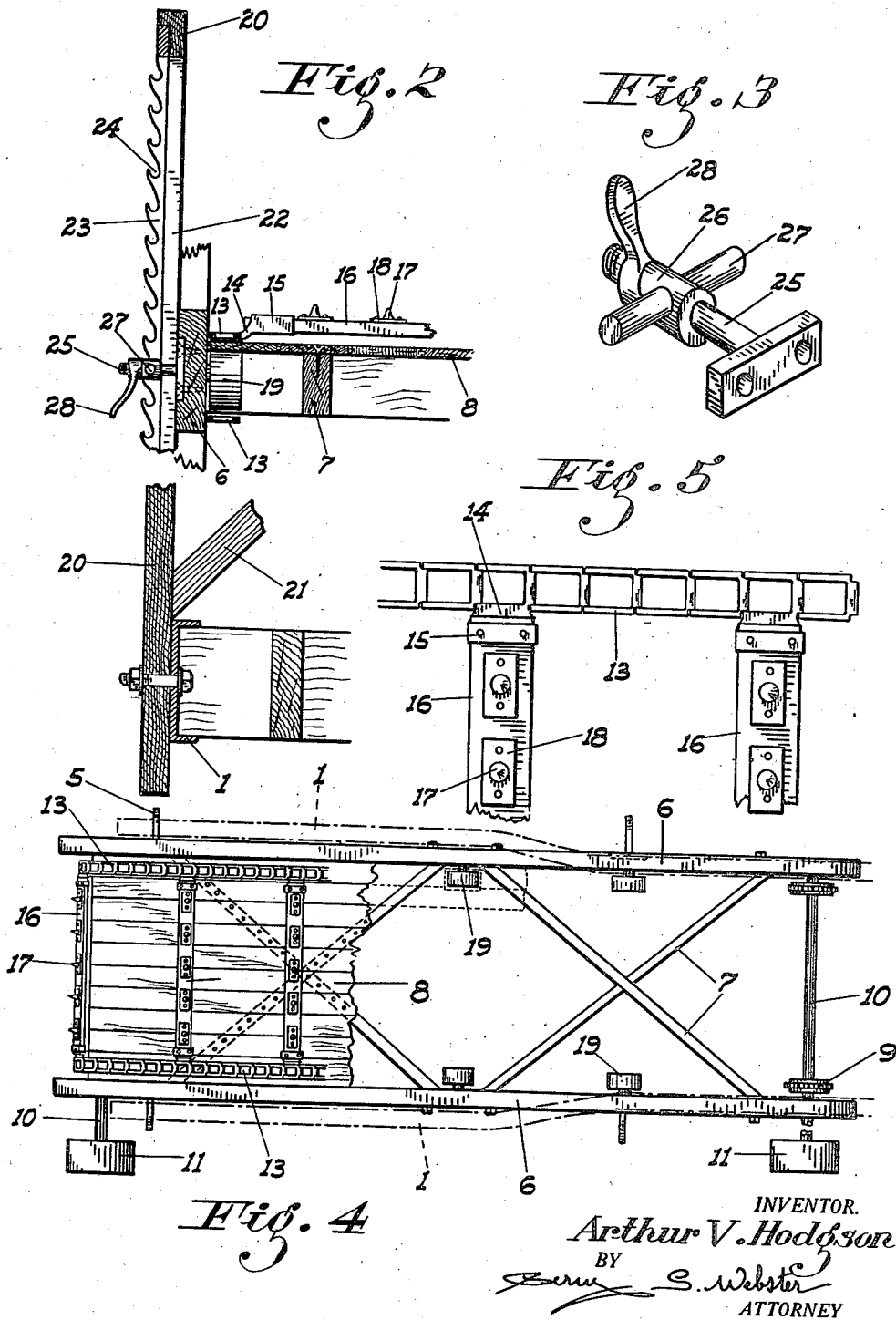
Fig. 1

INVENTOR.
Arthur V. Hodgson
BY *Samuel S. Webster*
ATTORNEY

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ATTORNEY

UNITED STATES PATENT OFFICE.

ARTHUR V. HODGSON, OF CECIL, OREGON.

HAY-LOADER.

1,310,187.

Specification of Letters Patent.

Patented July 15, 1919.

Application filed October 5, 1918. Serial No. 256,963.

To all whom it may concern:

Be it known that I, ARTHUR V. HODGSON, a citizen of the United States, residing at Cecil, in the county of Morrow, State of Oregon, have invented certain new and useful Improvements in Hay-Loaders; and I do declare the following to be a clear, full, and exact description of the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this application.

This invention relates to improvements in hay loaders and particularly to a portable type which may be used in connection with a hay press to elevate the baled hay from the press to any desired point, such as a wagon or a stack or hay loft; the principal object of the invention being to provide such a machine as may be readily set to discharge at different heights, and which will not require the services of a man to operate.

The device is adapted to be backed into position adjacent the discharge of a hay press and the hay emerging from the press is carried to the wagon or stack without any handling by the press crew, thereby rendering their labors much lighter and speeding up the handling of the hay. If the bales are weighed after leaving the press, a weighing scales is interposed between the press and the loader. This device is especially adapted to be used where extra high stacking is required. Under present conditions, this necessitates a relay of men or the use of a derrick with its attendant hooking and unhooking and manual hauling up of the bales.

As another object, I have produced a loader, the normally elevated parts of which may be disconnected from each other and lie horizontally on the longitudinal frame, thereby rendering it possible to more easily transport it from place to place or house the same in a barn, etc.

As a third object, I have provided a simple and inexpensive device and yet one which will be exceedingly effective for the purpose for which it is designed.

These objects, I accomplish by means of such structure and relative arrangement of the parts as will fully appear by a perusal of the following specification and claims.

On the drawings, similar characters of

reference indicate corresponding parts in the several views.

Figure 1 is a side elevation of the complete elevator, showing the same backed up against a weighing scales.

Figure 2 is an enlarged fragmentary section taken substantially on a line 2—2 of Fig. 1.

Fig. 3 is a perspective view of a T-head bolt attachment.

Fig. 4 is a top plan view of the elevator partly broken out.

Fig. 5 is a top plan view of a portion of a sprocket chain showing cross slat attachments thereon.

Referring now more particularly to the characters of reference on the drawings, the numeral 1 designates the main or carrying frame of the device. This frame may be made of steel channels or I beams, or of wood, and is slightly narrower at its front end than at the rear, as shown in dotted lines on Fig. 4, in order that the elevator frame, which fits inside the main frame, will be in close relation with the holding beams, hereinafter described, which are mounted outside the main frame. This main frame has suitable cross beams and is mounted on rear wheels 2 and front wheels 3, which latter are turnably mounted on a king pin and provided with double trees and a tongue 4, all of the standard or customary form of construction, for the hitching of a pair of horses thereto to pull the device when it is desired to transport the same.

Pivotally mounted in the frame 1 at the rear end thereof, as at 5, is the elevator frame 6. This frame has suitable cross braces 7 and a flooring 8 secured thereon.

At both ends of this frame are a pair of chain sprockets 9 on shafts 10, which project at one end outside the frame and have pulleys 11 secured thereon to either one of which a belt 12 from a gas engine or similar power means may be attached to turn the sprockets.

Endless sprocket chains 13 pass around these wheels. The majority of the chain links used may be of any of the standard types used for such purposes, but at spaced intervals the links are provided with horizontally projecting extensions 14, which extensions are further formed into outwardly projecting rectangular guides or loops 15 into which fit the ends of cross slats 16. These cross slats are riveted to the loops and

are provided with suitably spaced barbs 17. These barbs project outwardly from individual plates 18, which are riveted or bolted to the slats 16.

5 At spaced intervals, the frame 6 is provided with idler rollers 19 which project through the flooring 8 and on which ride the chains 13, so that some of the weight thereof will be taken off the flooring.

10 Pivottally mounted to the outside of the frame 1 toward the forward end thereof are upright beams 20.

These beams have connecting braces 21 at their lower ends and above the same are provided with longitudinal slots 22 centrally thereof. Secured to the beams 20 to register with said slots are slotted metallic members 23, provided on each side of the slot with upwardly opening notches or hooks 24. Adapted to pass through each slot is a bolt 25 rigidly secured to the frame 6 on which bolt is mounted a slidable sleeve 26 from each side of which projects a short bar 27 adapted to fit into the notches 24. A hand screw 28 is threaded onto the bolt 25 beyond the member 27.

Thus, when it is desired to position the elevator to discharge at any given height, the hand screws 28 are retracted on their bolts, the weight of the elevator being taken off the bolts momentarily by the field crew.

The members 26 are then slid out of engagement with one pair of notches, and the elevator lowered or raised until it is in the desired position. The members 26 are then again slid into places in the notches 24 and the hand screws tightened up. Thus, the whole device is held rigidly as a unit until it is desired to again change the position thereof.

40 If it is desired to use the elevator in connection with a thresher, etc., to lift the sacks of grain, beans, etc., the barbs 17 may be

removed from the slats or the slats themselves replaced by barbless ones.

Thus, from the foregoing description, it will readily be seen that I have produced such a device as substantially fulfils the objects of the invention as set forth herein.

While this specification sets forth in detail the present and preferred construction of the device, still in practice, such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention, as defined by the appended claim.

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

A loader for hay bales and the like comprising a rigid wheel mounted frame, an elevator frame pivottally mounted at the rear end of the first named frame, an endless driven conveyer in the elevator frame, uprights pivottally mounted to the rigid frame at the forward end thereof on either side of the elevator frame, said uprights being provided with longitudinal slots, bolts rigidly mounted on the elevator frame and projecting through the slots, notched members on the uprights provided with slots central of the notches in alinement with the first named slots, slidable T-shaped members on the bolts adapted to seat in the notches, and hand screws on the bolts whereby when the T-shaped members are seated in any of the notches to fix the slant or angle of elevation of the elevator frame the hand screws will bind the elevator frame and uprights together to form a rigid unit.

In testimony whereof I affix my signature in presence of two witnesses.

ARTHUR V. HODGSON.

Witnesses:

TILDA BJORK,
JOHN NASH.