

No. 864,287.

PATENTED AUG. 27, 1907.

H. BEHNFELDT.
ADJUSTABLE ROPE LOCKING REGISTERING HEAD.

APPLICATION FILED DEC. 17, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

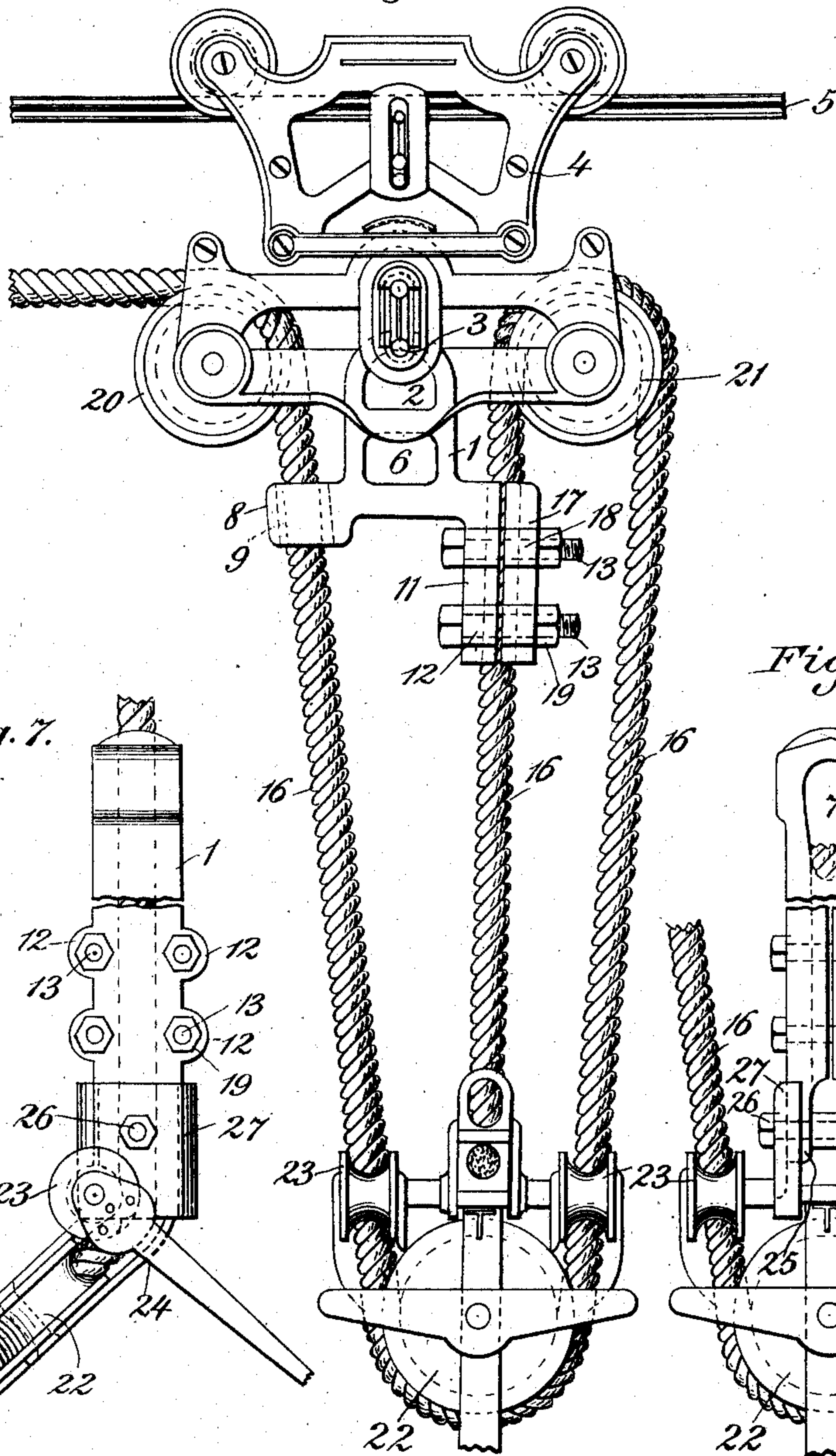


Fig. 7.

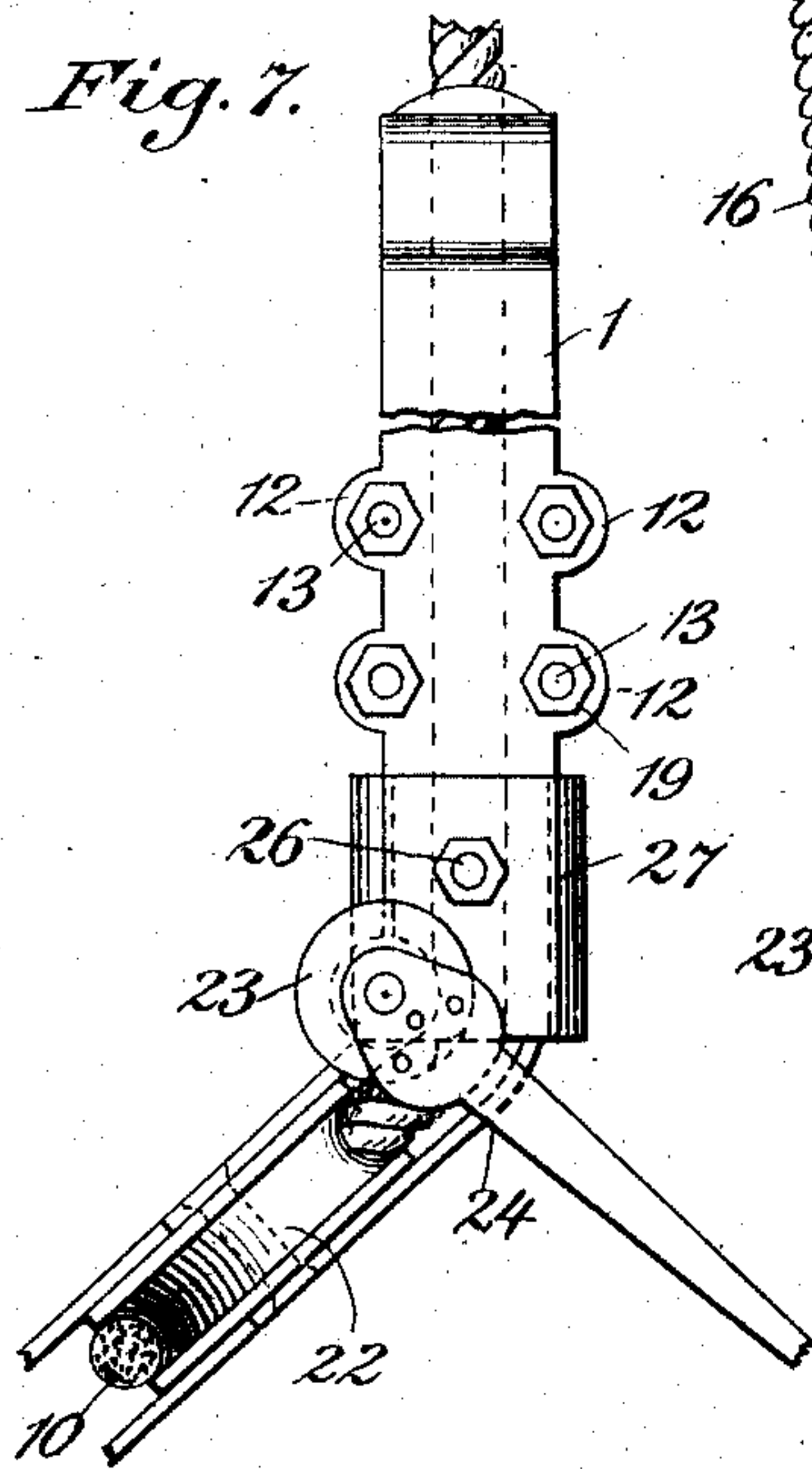
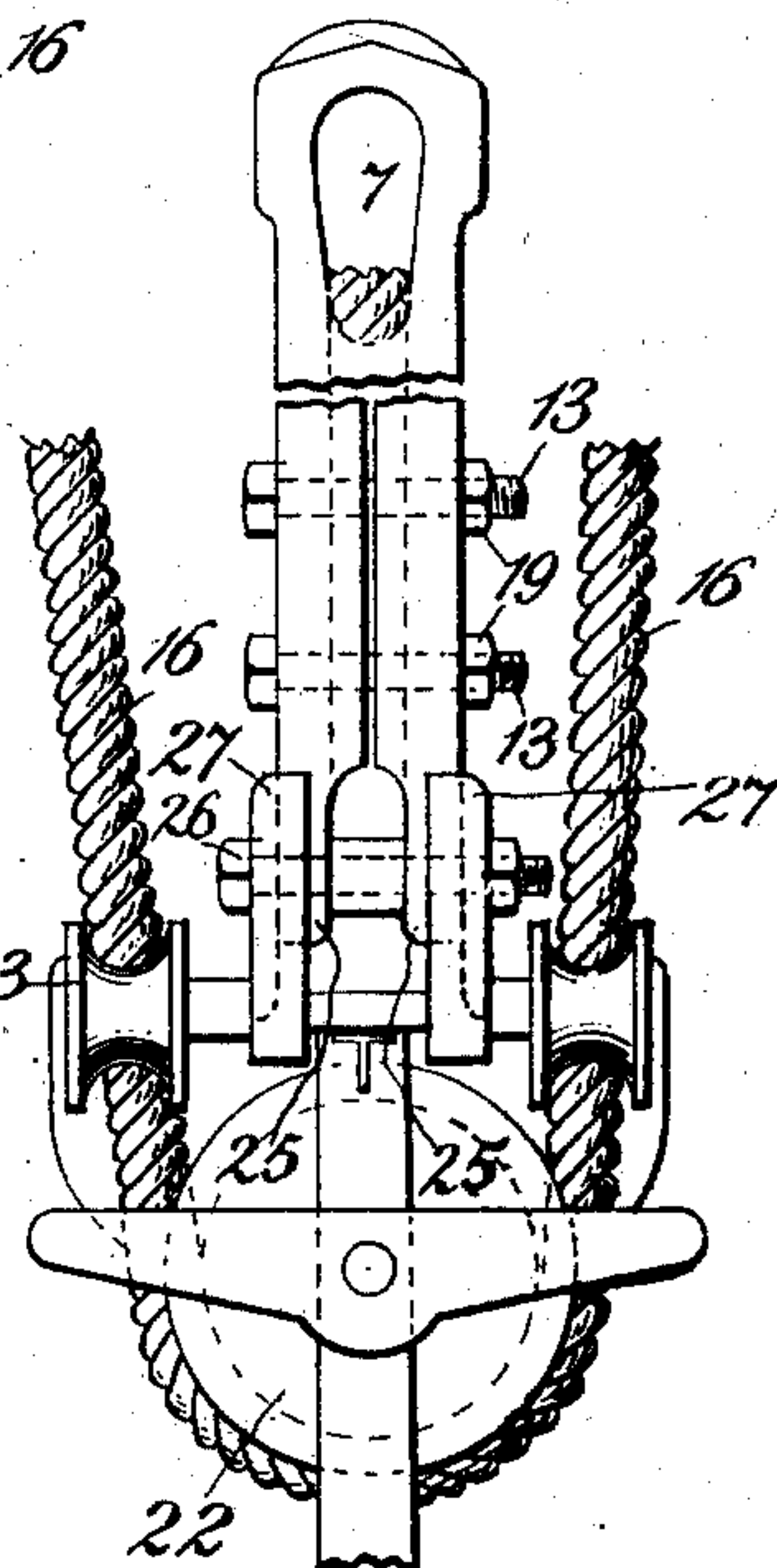


Fig. 6.



Witnesses:

Augusta Viberg.
Lulla E. Traub

Henry Behnfeldt Inventor:
By Chapin & Denny
His Attorneys.

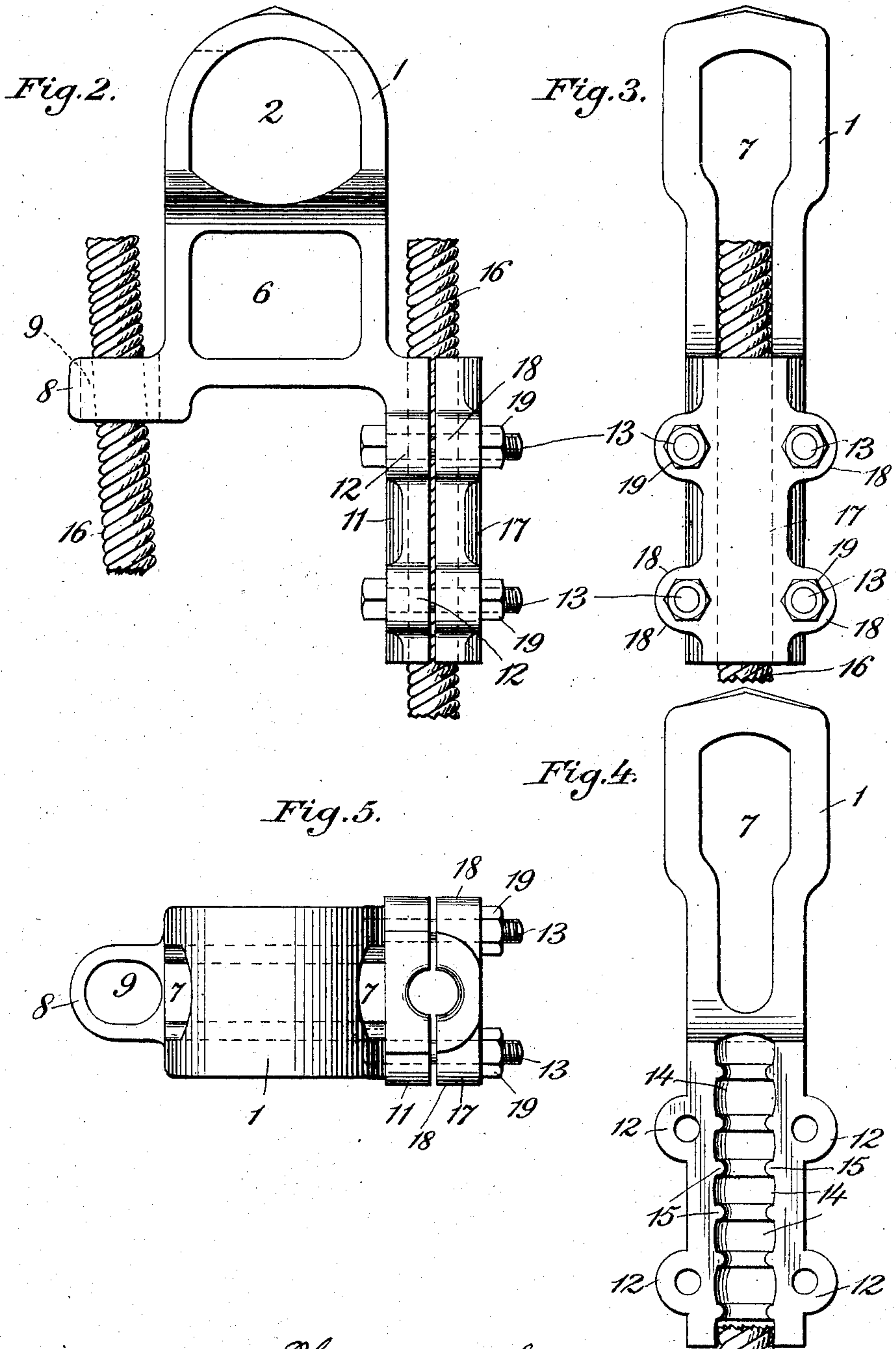
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2 SHEETS—SHEET 2.



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Inventor:

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His Attorneys.

UNITED STATES PATENT OFFICE.

HENRY BEHNFELDT, OF OKOLONA, OHIO.

ADJUSTABLE ROPE-LOCKING REGISTERING HEAD.

No. 864,287.

Specification of Letters Patent.

Patented Aug. 27, 1907.

Application filed December 17, 1906. Serial No. 348,182.

To all whom it may concern:

Be it known that I, HENRY BEHNFELDT, a citizen of the United States, residing at Okolona, in the county of Henry, in the State of Ohio, have invented certain
5 new and useful Improvements in Adjustable Rope-Locking Registering Heads; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the
10 same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in adjustable rope locking registering heads.

It is well known that in the hay-carriers now in use
15 the registering heads are mounted upon the sling pulley and hay-fork attachment, whereby it is necessary to elevate the same to the upper limit of its movement and lock the registering head in the carrier before the load thus elevated can be transported horizontally by
20 the traveling carrier to the desired location to be deposited; that the rope clamp or lock which engages the hoisting rope when the registering head is in its above described engagement, is located in the traveling carriage upon its elevated trackway; that this rope lock
25 soon cuts and wears out the rope in use, and is not reliable in its gripping engagement; and that when for any cause it is desired to examine, repair, or readjust this rope-lock in use, it is necessary for the operator to climb up to the elevated situation of the carriage.

30 The primary object, therefore, of my present invention is to provide a comparatively cheap, simple, efficient and reliable rope locking registering head adapted for a convenient adjustment upon the elevating rope within easy reach of the operator to permit the
35 load to be transported horizontally at any desired elevation, and to permit of the elimination from the carrier of the said objectionable and destructive rope-clamp therein.

Another object of my invention is to provide an adjustable rope locking registering head having an integral draft rope-guide which will automatically and unerringly guide the registering head to its locked engagement with the traveling carriage.

My invention consists of a rope-lock registering head,
45 having an integral draft rope guide upon one side thereof, and upon the opposite side a pair of cooperating rope clamping jaws adapted to holdingly engage the hoisting rope at any desired vertical adjustment, and an upright vertically extended and laterally apertured
50 head adapted for registering with and holdingly engaging the carrier in the usual or other proper manner.

The principal novel feature of my present invention resides in the construction and cooperative arrangement of the coacting parts by which the usual carriage rope lock is eliminated, the load can be transported horizontally at any desired elevation without changing

the carrier track-way, and the registering head is automatically guided and directed to its seat at each hoist of the load.

Similar reference numerals indicate like parts
60 throughout the several views of the drawings in which

Figure 1 is a view in elevation of my invention in operative position upon the elevating rope, and in its locked engagement with a common form of hay carrier or carriage upon its over-head track-way, broken away
65 in part. Fig. 2 is an enlarged detail side view of my invention showing the means for clamping it in position upon the elevating rope, and the means for guiding the registering head to its seat. Fig. 3 is a side view of the same taken at right angles to Fig. 1 and
70 looking toward the left. Fig. 4 is a similar view to Fig. 3 with the detachable rope clamping jaw removed to show the concave recesses into which the rope is firmly compressed in use by its companion jaw. Fig. 5 is a plan view of the same. Fig. 6 is a fragmentary view
75 of a modified form of the same rigidly secured to a common form of hay-sling attachment. Fig. 7 is a view of the same taken at right angles to Fig. 6 with the section of the elevating rope omitted.

The preferred form of my invention shown in Figs. 1, 80 2 and 3, consists of a two-part casting of any desired contour having a semicircular head 1, laterally apertured at 2 to receive the usual locking device 3 carried by the traveling carriage 4 of common form and operated upon the elevated trackway 5 in the usual
85 manner. The body of this casting preferably has a lateral aperture 6 of relative large size, and also a longitudinal aperture 7 both of which are simply designed to lighten the casting without appreciably affecting its required strength. The body of this casting has upon
90 one side of its lower end a lateral lug 8 provided with a vertical opening or aperture 9 of sufficient diameter to loosely receive the draft rope 16 for the purpose of guiding the head 1 to its engagement with the lock 3 of common form and well understood construction as
95 shown in Fig. 1, and it has upon its opposite side a pendant lug or jaw 11 having a plurality of laterally apertured ears 12 adapted to receive the bolts 13. The inner face of the lug 11 has a longitudinal central semicircular recess whose face is preferably provided with two series
100 of corrugations or transverse recesses 14 and ribs 15 the former of which is of somewhat greater depth than the latter to insure a better bite or binding grip upon the elevating rope 16 in the manner about to be described. A detachable jaw 17 has lateral ears 18 provided with
105 perforations in register with the openings in the ears 12 and adapted to receive the said bolts 13 which are provided upon their screw-threaded end with the nuts 19. The inner face of the jaw 17 has a longitudinal recess provided with a corresponding series or corrugations or
110 recesses 14 and 15 in register with those of the fixed jaw 11.

The operation and manner of employing my invention thus described is obvious, and briefly stated is as follows: The carrier 4 being properly arranged on the trackway 5 and the hoisting and draft rope being properly mounted on the supporting and guiding pulleys 20 and 21 of common form and function, and properly mounted in the carrier, and the said rope being also properly mounted on the sling pulley 22 and the guide pulleys 23 of the hay fork attachment 24, all of common form and well known operation, the operator employs my invention as follows: Before the end of the hoisting rope 16 has been secured to the said hay fork attachment it is passed downwardly through the opening 9 in the lateral lug 8. My invention is now rigidly secured to the rope 16 at the proper distance from the adjacent end thereof to secure the desired elevation of the fork attachment by tightly clamping the said coacting gripping-jaws upon the rope by means of the bolts 13. When the load of the fork attachment is elevated to the predetermined height the head 1 will automatically form an interlocked engagement with the said carrier in the usual manner of locking registering heads, after which the hoisting rope is employed as a draft rope to transport the load horizontally in the usual manner.

Evidently the guiding lug 8 will prevent my invention in its ascent from becoming twisted or deranged, and will so guide the same as to direct the head 1 unerringly and automatically to its locked engagement, as described, with the traveling carrier. It is also evident that the operator can readily and conveniently secure any desired adjustment of my invention upon the hoisting rope from his position on the ground, and that by its employment the usual rope clamping or locking devices are obviated.

The gripping jaws 11 and 17 may each be provided with a pendent extension 25 having registering lateral perforations for the bolt 26 which also passes through

the laterally apertured lugs 27 of the said fork attachment, and thereby rigidly securing my invention thereto as shown in Figs. 6 and 7.

Having thus described my invention and the manner of operating the same what I desire to secure by Letters Patent is:

1. An adjustable rope locking registering head comprising a two-part casting, one part consisting of a body having an upright laterally apertured registering head, and provided upon its lower end with a vertically apertured lateral lug adapted to receive the draft rope, and a pendent fixed jaw having its gripping face longitudinally recessed; and the other part consisting of a removable jaw whose gripping face is longitudinally recessed and adapted to cooperate with the fixed jaw in forming a locked engagement with the hoisting rope.

2. A rope locking registering head consisting of a body portion having an apertured head, a vertically apertured guiding lug, pendent gripping jaw, and a removable cooperating gripping jaw; and means for firmly securing the jaws in their holding engagement.

3. A rope locking registering head having its upper end laterally slotted, and its lower end provided with an apertured guiding lug for the draft rope, and a pair of coacting gripping jaws adapted for a holding engagement with the hoisting rope, one of said jaws being detachable.

4. A rope locking registering head adapted for an interlocked engagement with a carrier, and having an integral guiding means to prevent lateral derangement in use, and provided with a pair of rope gripping jaws adapted for a locked engagement with the hoisting rope, one of which jaws is integral with the said head.

5. A rope locking registering head having integral guiding means to direct it to its locked engagement, and provided with coacting rope-gripping jaws in vertical arrangement, adapted to afford a vertical adjustment of the said head, as described.

Signed by me at Fort Wayne, Allen county, State of Indiana, this 14th day of December, A. D. 1906.

HENRY BEHNFIELDT.

Witnesses:

WATTS B. DENNY,
AUGUSTA VIBERG.