No. 780,384. PATENTED JAN. 17, 1905.

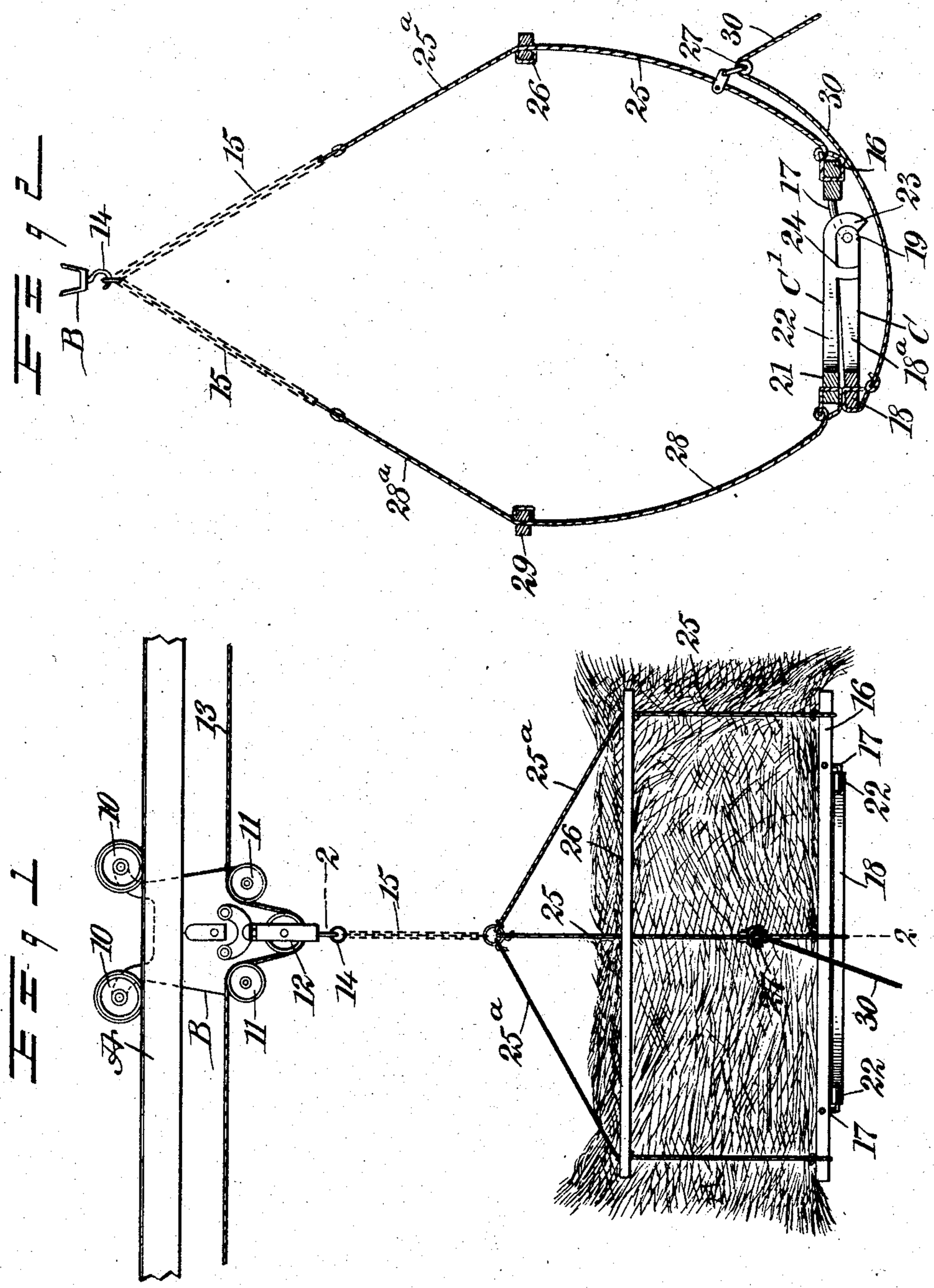
C. R. SCHULTZ.

HAY SLING.

APPLICATION FILED AUG. 31, 1904.

2 SHEETS—SHEET 1.

FIG. 1



WITNESSES:

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Fred Acker

INVENTOR

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ATTORNEYS

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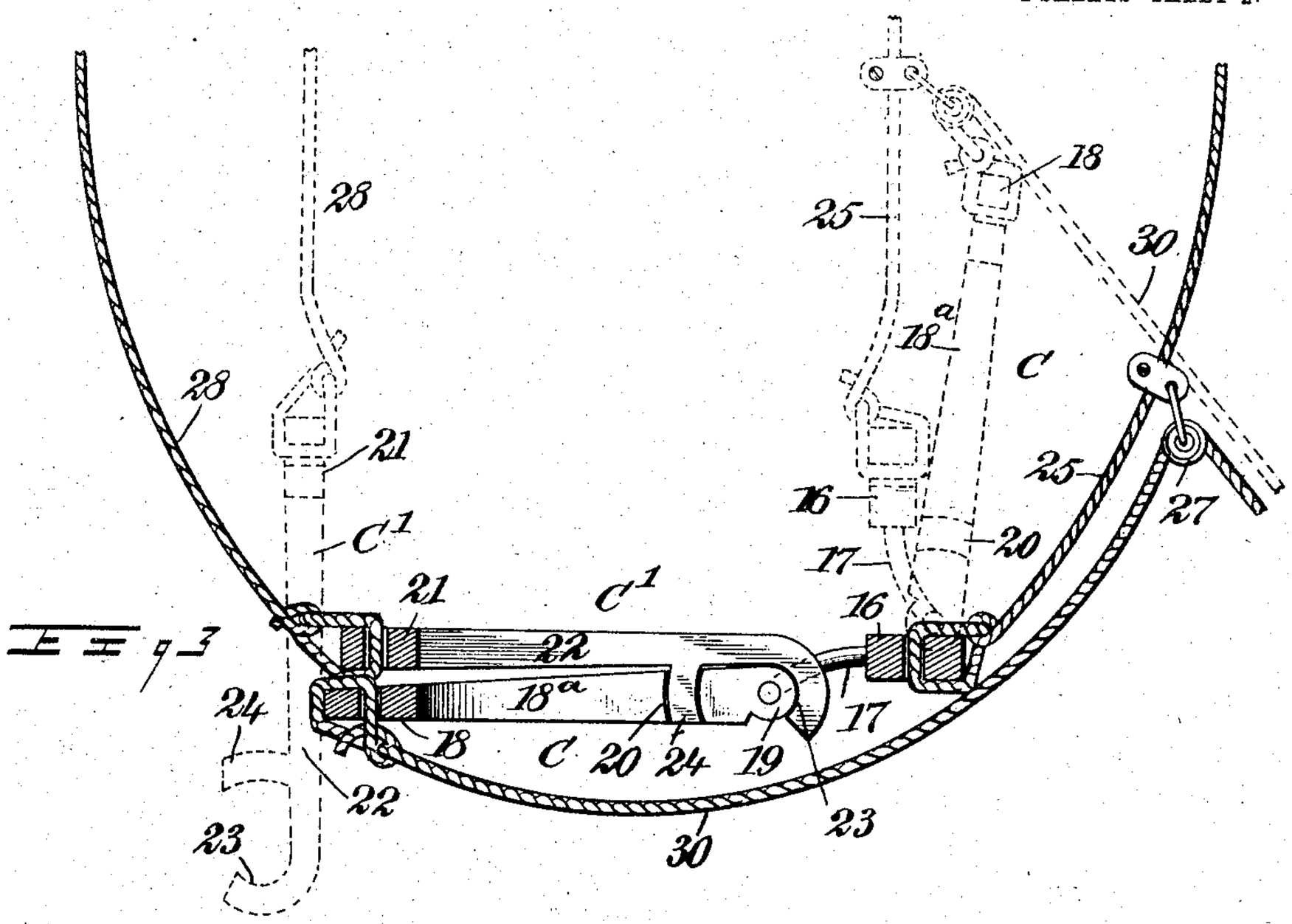

Fig. 3

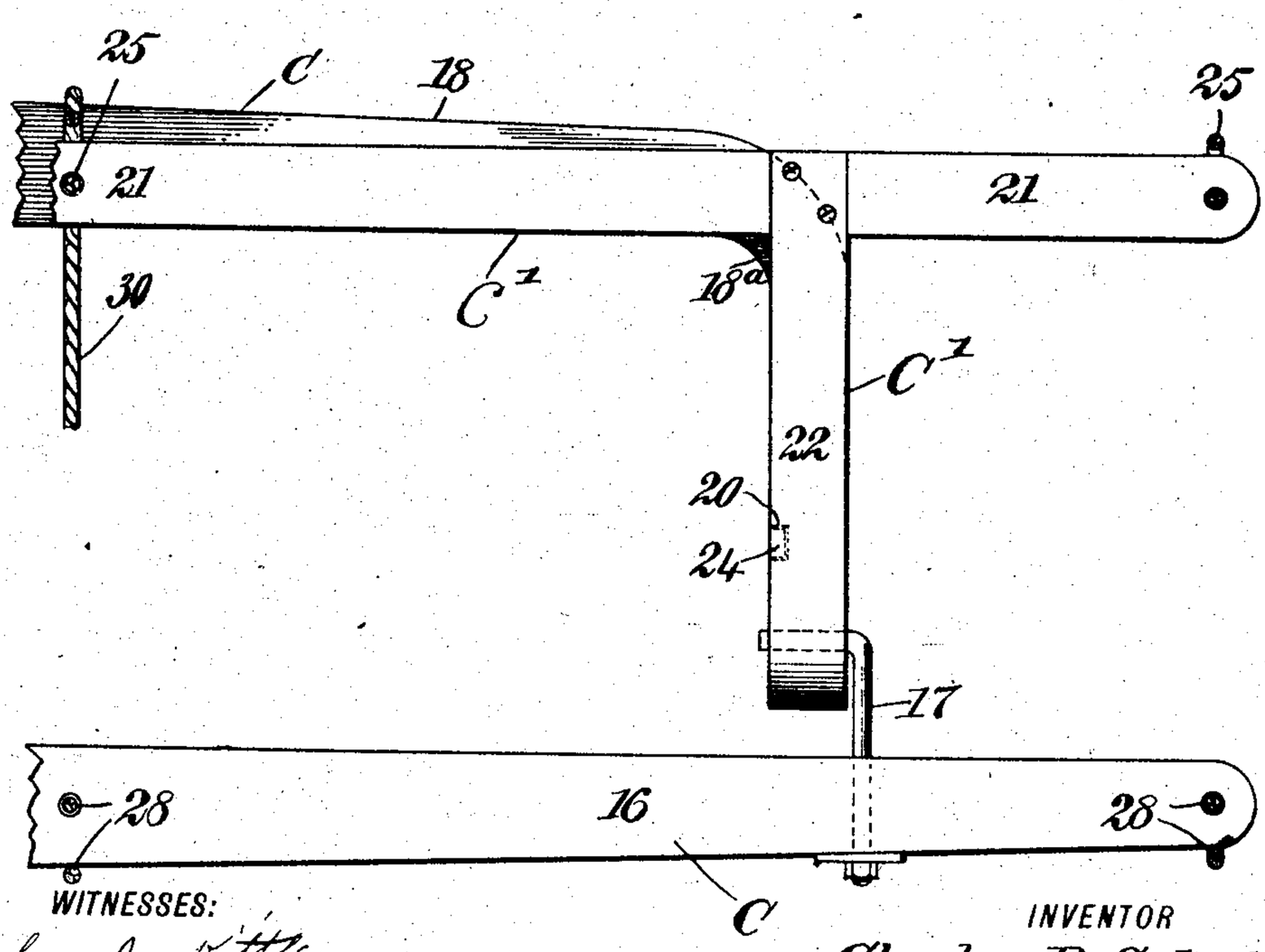

Fig. 4

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No. 780,384. Patented January 17, 1905.

UNITED STATES PATENT OFFICE.

CHARLES RICHARD SCHULTZ, OF POYNETTE, WISCONSIN.

HAY-SLING.

SPECIFICATION forming part of Letters Patent No. 780,384, dated January 17, 1905.

Application filed August 31, 1904. Serial No. 222,851.

To all whom it may concern:

Be it known that I, CHARLES RICHARD SCHULTZ, a citizen of the United States, and a resident of Poynette, in the county of Columbia and State of Wisconsin, have invented a new and Improved Hay-Sling, of which the following is a full, clear, and exact description.

The purpose of my invention is to provide a hay-sling of simple and durable construction and one which may be easily and quickly dismembered, so that the contents of the sling may be dumped whenever and wherever desired.

Another purpose of the invention is to so construct the device that it may be expeditiously handled and so that all of the parts may be quickly assembled for use.

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

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 side elevation of the improved device, illustrating it in position for use. Fig. 2 is a section taken practically on the line 2 2 of Fig. 1. Fig. 3 is an enlarged section showing the parts of the device in condition for use and showing in dotted lines the position of the parts when the material is dumped, and Fig. 4 is an enlarged detail section of the body portions of the device.

A represents a rail or track, and B a carriage adapted to travel thereon, which carriage is provided with upper wheels 10, engaging with the track and with pulleys 11 and 12 at the bottom, over which pulleys the guide-rope 13 for the device is carried. The carriage B is further provided with the usual hook 14, adapted to receive chains 15, forming a portion of the device, as will be hereinafter described.

The body of the device consists mainly of two sections C and C′. These sections are adapted to be separated one from the other when a load of material carried by the sling is to be dumped, and when these parts separate they occupy the positions shown by dotted lines in Fig. 3, wherein it will be observed that quite a space is obtained at such time between the two sections, through which the material may freely drop. The section C consists of a horizontal bar 16, having pivot-hooks 17 secured thereto, and these pivot-hooks extend in direction of the opposing section C′. The section C further consists of a yoke-like member comprising a bar 18, parallel to the bar 16, and side bars 18^a, which extend from the longitudinal bar 18 in direction of the body-bar 16, as is best shown in Fig. 4. This yoke member of the section C is provided with a knuckle 19 at an end of each of said side pieces 18^a, and these knuckles receive the pivot-hooks 17, above described and as is illustrated in Figs. 2 and 3. The side bars 18^a of the yoke member of the section C are provided with transverse segmental recesses 20 in their inner faces curved in direction of the knuckles 19, as is also shown in Figs. 2 and 3. The section C′ consists of a body-bar 21, corresponding to the bar 18 of the section C, and arms 22, which extend from said body-bar 21 in direction of the body-bar 16 of the section C, and these arms 22 are immediately above the end pieces or bars 18^a of the yoke member of the section C, as is shown in Fig. 3. The free ends of the arms 22 are curved downwardly, as is shown in Fig. 3, forming segmental sockets 23, in which the knuckle ends 19 of the said yoke member of the section C rest when the parts are in position to carry hay. When the material is to be dumped, the yoke member of the section C is carried downward and then upward, releasing the arms 22 of the section C, and these arms then immediately drop to the position shown at the left in Fig. 3, and the yoke member will occupy the upper position. (Shown by dotted lines at the right in Fig. 3.) This dumping action is performed in a manner to be hereinafter described.

In order that the side pieces 18^a of the yoke member of the frame C shall have proper engagement with the arms 22 of the section C′ and the yoke member of the frame or section C be held in a horizontal position, segmental lugs or tongues 24 are formed on the arms 22, which enter the similarly-curved recesses 20 in the side portions 18^a of said yoke member

of the section C, and said lugs or tongues, acting in connection with the curved walls of the sockets 23, effectually prevent the said yoke member from dropping until properly released.

Ropes 25, preferably three in number, are secured, respectively, to the end portions of the body-bar 16 of the section C and to the central portion of the same bar and are connected at a point above the said section C by a cross-bar 26. The ropes 25 are continued past the connecting or cross bar 26, forming strands 25ª, which are brought together and are secured to a ring at the end of one of the chains 15, connected with the carriage B. A pulley 27 is secured in any suitable or approved manner to the central rope 25 at a point between the connecting or cross bar 26 and the section C of the device, as is shown in Figs. 2 and 3. Ropes 28, also preferably three in number and corresponding to the ropes 25, are secured, respectively, to the end and central portions of the body-bar 21 of the section C′, as is shown by Figs. 2 and 3. These ropes are connected above the said section by a bar 29, as is shown also in Fig. 2, and the ropes are continued above said bar, forming strands 28ª, which in their turn are connected together and likewise connected to the other chain 15, attached to the carriage B.

A tug-rope 30 is attached to the central portion of the longitudinal bar 18 of the body member of the section C, and this tug-rope is then carried down under the section C and over the pulley 27, above referred to, and then downward to the ground or within reach of the operator, and by drawing on this rope the two sections C and C′ are separated and take the positions shown by dotted lines in Fig. 3, causing the load carried to be dumped wherever desired. The yoke member is first carried downward and is then carried upward at the right-hand side of the device, for example, and as the said yoke member turns upward the lugs or tongues 24 are withdrawn from the recesses 20 and the knuckles 19 leave the sockets 23, thereby permitting the section C′ to drop downward, as is shown by dotted lines to the left in Fig. 3.

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

1. In a hay-sling, opposing sections connected in a detachable manner, ropes extending from the outer side portions of said sections, means for attaching the said ropes to a carrier, and a tug-rope having a roller-support on one of the said ropes and an attachment to one of the said sections to separate that section from the opposing section when the load is dumped.

2. In a hay-sling, a section comprising a body-bar, arms extending from the body-bar and having segmental sockets formed at their free ends and segmental tongues extending downward between their ends, a second section comprising a body-bar and a yoke member pivotally connected with said body-bar, the free ends of the yoke member having the form of knuckles and being adapted to enter the said sockets, the sides of the yoke members having transverse segmental recesses to receive the said segmental tongues, ropes extending upward from the body-bars of the sections, and a tug-rope connected with said yoke member and having guided support from one of the ropes attached to a body-bar to separate said member from the said arms.

3. In a hay-sling, two opposing sections, one section consisting of a body-bar, arms extending from said body-bar, each arm terminating at its free end in an open segmental socket and being provided with segmental lugs adjacent to the sockets and curved in direction thereof, the other section comprising a body-bar having pivot-pins thereon, and a yoke member pivoted on said pins at its extremities, which extremities are in the form of knuckles, the extremities of the yoke members being adapted in the carrying position of the sling to enter the said sockets, the said yoke member near its terminals being provided with segmental recesses to receive the lugs of the said arms, ropes connected with the body-bars of the sections, connecting-bars for the said ropes at points above the sections, and chains to which the said ropes are attached above the connecting-bars, a pulley secured to one of the ropes between a body-bar of a section and the connecting-bar of the same section, and a tug-rope attached to the said yoke member, which tug-rope is passed over the said guide-pulley and is carried to a point within convenient reach of the operator.

4. In a hay-sling, overlying, detachably-connected sections adapted to separate from each other in opposite directions, one section assuming an upper vertical position and the other section a lower vertical position, confining-ropes attached to the outer side portions of said sections, and means for separating the two sections, which means constitute a portion of the sling.

5. In a hay-sling, overlying combined supporting and dumping sections having detachable interlocking connection intermediate of their ends, being independent of each other at their outer ends, confining-ropes attached to transversely-opposing outer ends of the sections, and a tug-rope secured to an outer end of the lowermost section, and a guide for the tug-rope carried by a confining-rope attached to the other end of the said section.

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

CHARLES RICHARD SCHULTZ.

Witnesses:
W. G. ROBINSON,
K. A. MACKENZIE.