P. E. SEVIN & S. P. ROUSSEL.

CANE SLING.

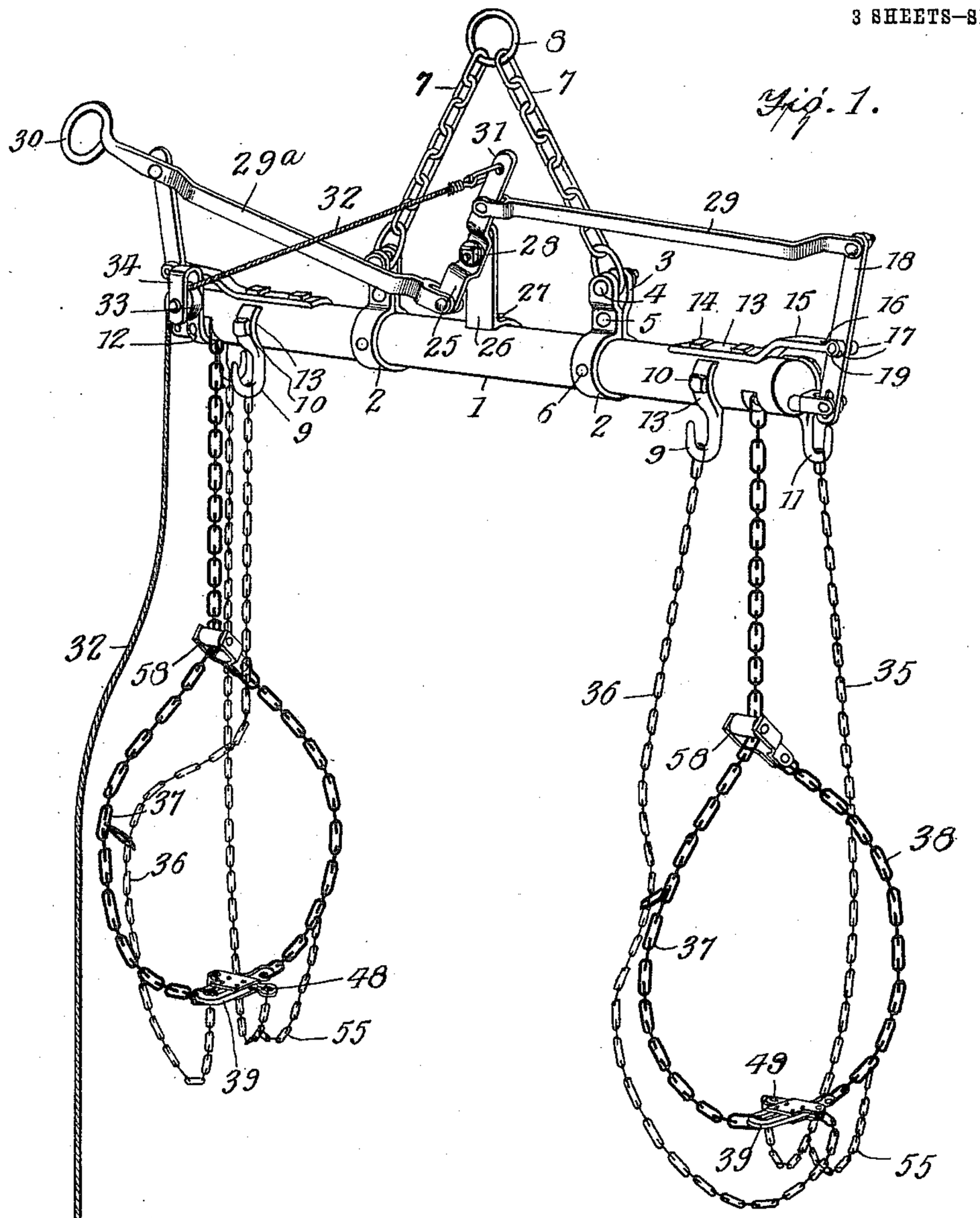
APPLICATION FILED DEC. 1, 1910.

994,608.

Patented June 6, 1911.

3 SHEETS—SHEET 1.

Fig. 1.



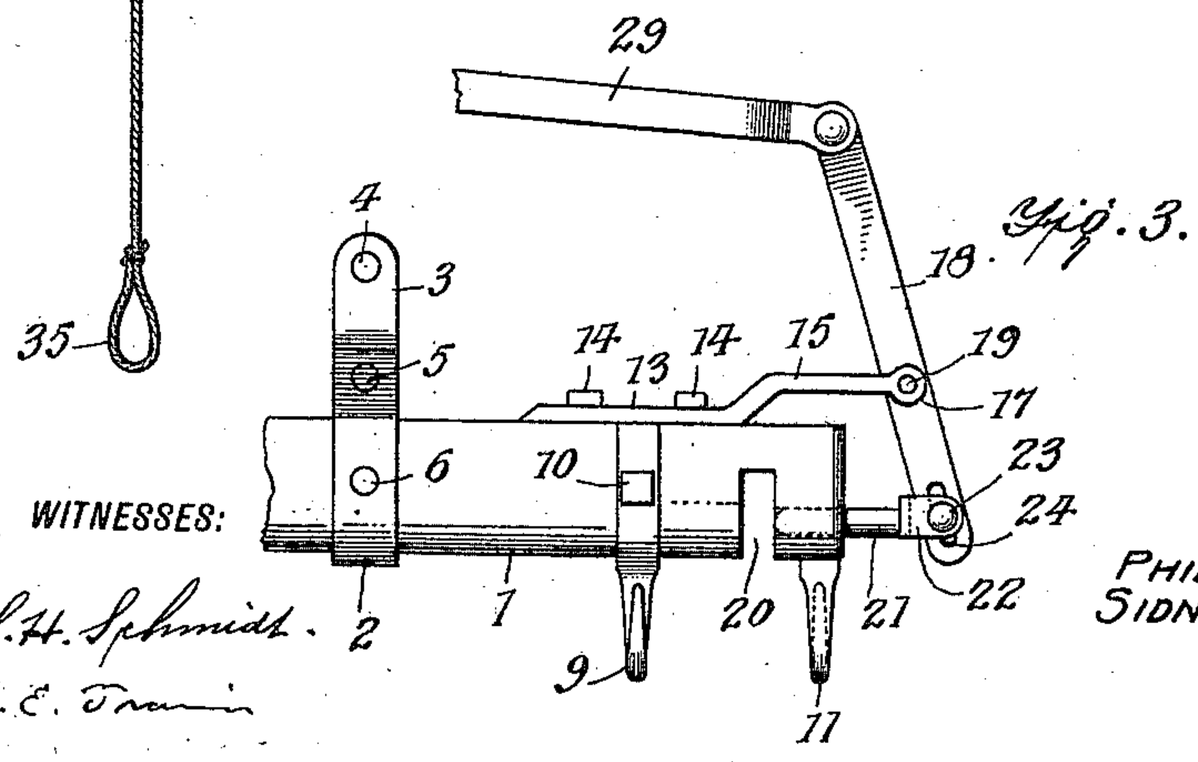


Fig. 3.

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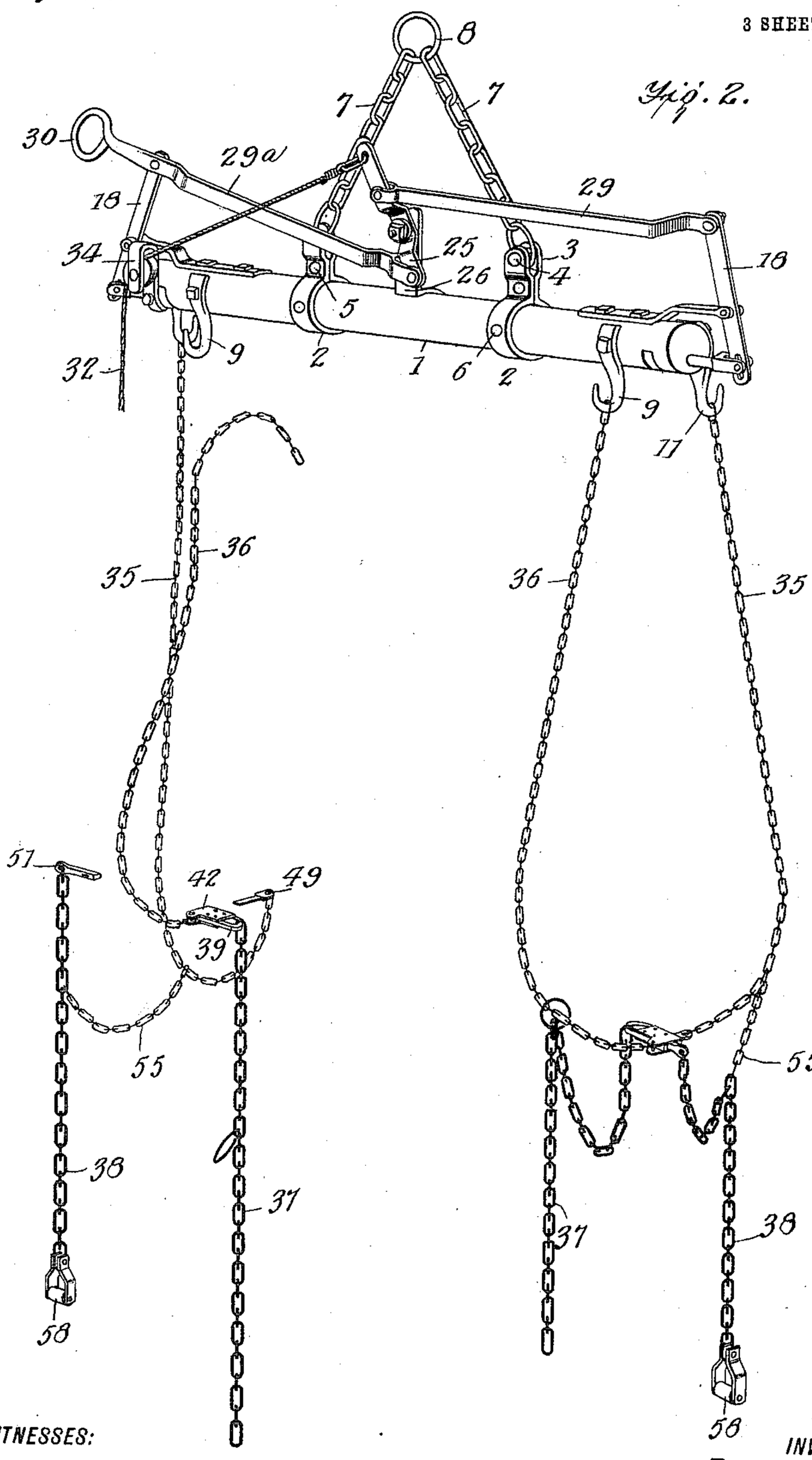
3 SHEETS—SHEET 2.

Fig. 2.



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3 SHEETS—SHEET 3.

Fig. 6.

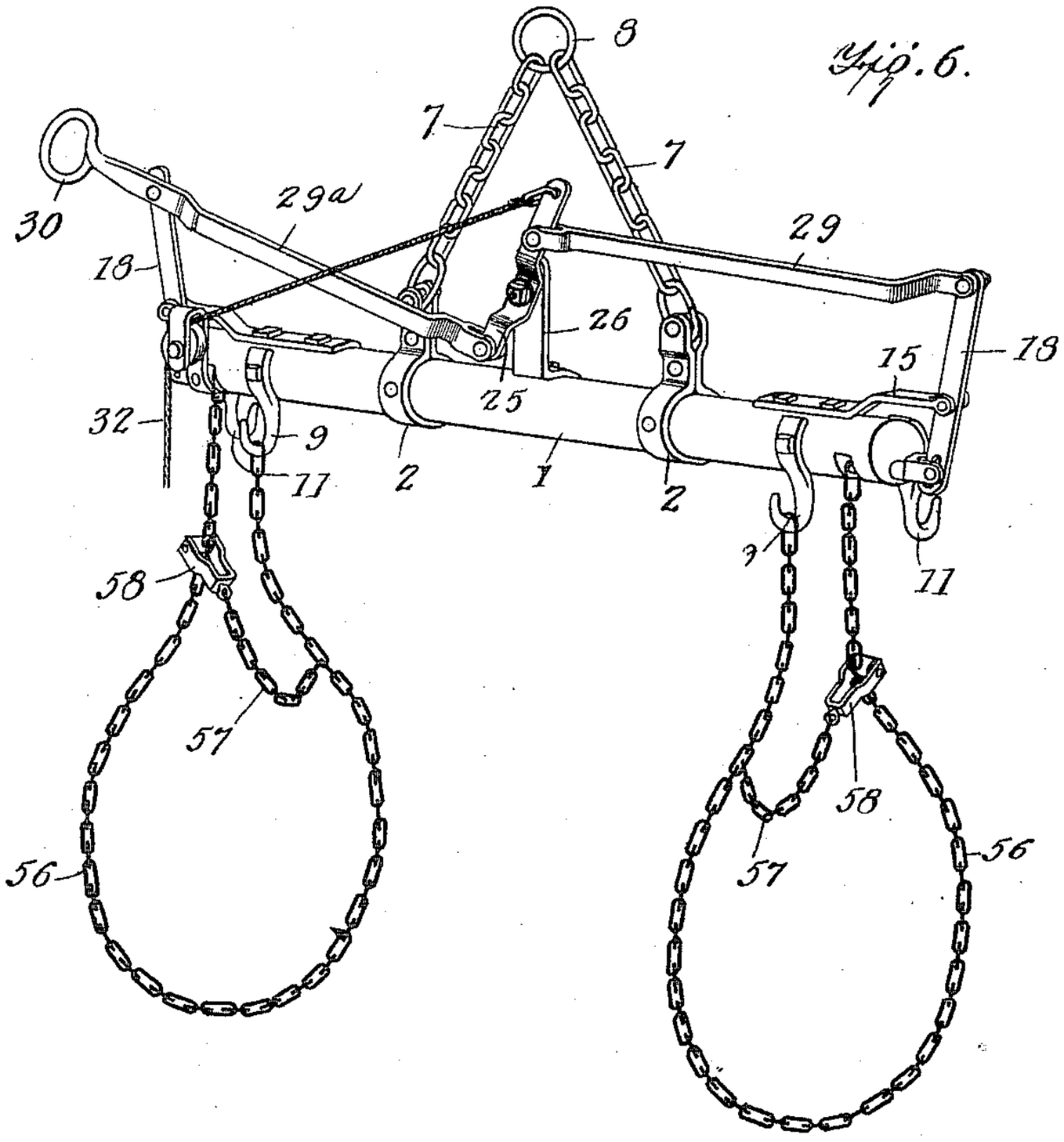


Fig. 4.

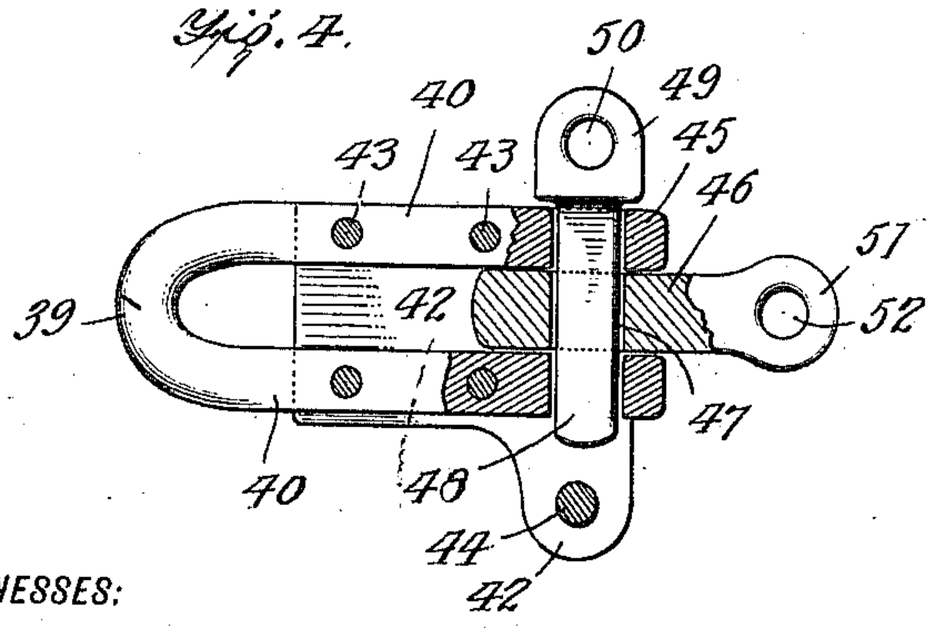
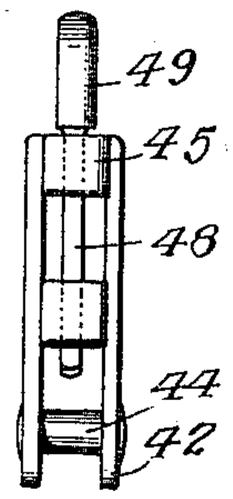


Fig. 5.



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UNITED STATES PATENT OFFICE.

PHILIP E. SEVIN AND SIDNEY P. ROUSSEL, OF MATHEWS, LOUISIANA.

CANE-SLING.

994,608. Specification of Letters Patent. Patented June 6, 1911.

Application filed December 1, 1910. Serial No. 595,024.

To all whom it may concern:

Be it known that we, PHILIP E. SEVIN and SIDNEY P. ROUSSEL, citizens of the United States, residing at Mathews, in the parish of Lafourche and State of Louisiana, have invented a new and useful Improvement in Cane-Slings, of which the following is a specification.

Our invention is an improvement in cane slings, and consists in certain novel constructions, and combinations of parts, hereinafter described and claimed.

The object of the invention is to provide a simple and easily operated sling of the character specified, which will firmly hold the load during the hoisting and conveying, and which may be easily operated to release the load when ready to dump.

Referring to the drawings forming a part hereof, Figure 1 is a perspective view of the improvement in loaded position. Fig. 2 is a similar view in unloading position. Fig. 3 is a side view of one end of the support. Fig. 4 is a top plan view partly in section of the connecting device. Fig. 5 is an end view of the same, and Fig. 6 is a perspective view of another embodiment of the invention.

The present embodiment of the invention comprises a bar 1, of circular cross section, and a hanger or stirrup 2 is arranged on each side of the center of the bar. Each hanger comprises a body portion encircling the bar, and arms 2^a extending radially from the bar, and alongside each other.

The extremities of the arms are offset outwardly from each other at 3, and are transversely perforated, and a bolt 4 is passed through the alined perforations. The arms of each hanger, when they are superposed, are traversed by a rivet 5, and a similar rivet 6 is passed through the body portion of the hanger and the bar.

A supporting ring 8 is arranged above the bar, and a chain 7, connects each hanger with the ring. One end of each chain is engaged with a bolt 4, and the other with the ring. A hook 9 is secured to one side of the bar between each hanger and the adjacent end of the bar by means of a bolt 10 and a second hook 11 is secured to the end of the hanger by a bolt 12, on the opposite side of the bar from the hook 9.

A strap 13 is secured to the end of the bar by bolts 14, and the outer end of the strap extends beyond the end of the bar, and is offset upwardly at 15, and longitudinally notched or recessed at 16. A bearing 17 is formed on each side of the notch at the end of the strap. A lever 18 is pivoted, intermediate its ends in the notch, on a rivet 19, journaled in the bearings 17.

The bar 1 is transversely notched at 20 at each of its ends and a pin 21 is slidable transversely of the notch, the pin moving in a longitudinal bore in the bar. The outer end of the pin is provided with spaced ears 22, between which is secured the lower end of the lever. The lower end is longitudinally slotted at 24, and a pivot pin 23 is passed through the slot, and through registering openings in the arms.

It will be evident that when the upper end of the lever is moved, the pin will be moved transversely of the notch, to open or close the same. The levers are moved simultaneously by means of an intermediate lever 25, journaled on a bracket 26, secured to the center of the bar as at 27. The lever is journaled on a bolt 28 passing through the bracket and lever, and is offset laterally above and below the bolt.

A link connects the upper end of each lever 18 with the lever 25, one link 29 being connected to the lever 25 above the bolt 28, and the other 29^a below the said bolt, so that when the said lever 25 is swung on the bolt 28, the levers 18 will be moved together in opposite directions, to simultaneously move the pins inwardly or outwardly.

The link 29^a is extended beyond the lever 18 to which it is connected, and formed into a handle 30, and the lever 25 is extended above the link 29 and provided with an opening 20. A cord 32 has one end secured in the opening 31, and passes over a pulley 33 journaled in a hanger 34 secured to one end of the bar, to a point where the free end may be grasped easily, and the said end is provided with a loop 35.

It will be evident that the pins may be operated by the cord, or by the handle 30. The handle 30 is used to secure the load in place, that is to insert the pins, while the cord is made use of to trip the load.

The sling proper consists of a series of chains 35, 36, 37 and 38 connected with each end of the bar. Each of the chains of each series are connected at one end and with a connecting device shown in Figs. 4 and 5. The said device comprises a yoke 39, whose arms 40 are received between a pair of plates 41 and secured thereto by rivets 43.

Each plate is provided at one corner with a lateral ear 42, and the ears are connected by a rivet 44.

The plates are spaced from the body portion of the yoke a sufficient distance to form a loop, and each arm 40 is provided with a transverse opening 45. The openings are in alinement, and a pin 46 is received between the arms 40 and is provided with an opening 47, registering with the openings 45. A second pin 48 is passed through the alined openings.

The pin 48 is provided with a head 49 having a transverse opening 50, and the pin 46 is provided with a similar head 51 having an opening 52. The chain 35 has one end connected with the opening of the pin 48, and the other end is detachably connected with the hook 11 at one end of the bar. The chain 36 is connected at one end with the rivet 44, and at the other end it is detachably connected with the hook 9.

The chain 37 is connected at one end with the body of the yoke 39, and the other end is adapted to enter the notch 20, and to be held by the pin 21. One end of the chain 38 is connected with the head of the pin 46, and the other end is provided with a stirrup 53, provided with a roller 54 between the arms thereof, and the stirrup is designed to receive the chain 37, before it is connected with the pin.

In operation, the chains are connected with the load by placing the connecting device at each end beneath the load, and the chain 37 is passed through the stirrup and engaged with the pin 21, the said chains being on opposite sides of the load, and encircling the same while the chains 35 and 36 are on the opposite sides, but hanging loose. The load is ready to hoist and may be transported to the place of deposit. When to be unloaded, the rope 32 is pulled, releasing the chain 37 from the pin. The weight of the load pulls the connecting device away from the pin 48, which is held by chain 35, and the pulling of the said pin releases the pin 46 thus separating the chains 37 and 38 beneath the load. The chain 38 is connected to the chain 35 by a short chain 55, so that when the bar is raised, all of the chains are carried with it.

In the modified form shown in Fig. 6, the bar construction is precisely the same as that shown in Figs. 1, 2 and 3, but the chain arrangement is different. The chains 35 and 36 are omitted, and a single chain 56 is provided at each end of the bar. Each chain is connected at one end with the adjacent hook 9, and at the other end with the pin 21. Near the end of the chain connected with the hook, a branch chain 57 is arranged, one end being connected with the chain 56, and the other end being provided with a stirrup 58, through which is passed the other end of the chain 56.

In operation, the chain 56 is passed beneath the load, through the stirrup of the chain 57, which passes above the load, and into engagement with the pin. When the cord is pulled and the chain ends released, the chain 56 pulls through the stirrup releasing the load. The embodiment shown in Figs. 1 to 3 is especially adapted for heavy loads, since the chains separate beneath the load.

It will be evident that the chains 35 and 36 are merely for connecting the holding chains to the bar. The chain 36 also acts as a tripping chain. The chains 37 and 38 are practically one chain consisting of a plurality of sections detachably connected together, and the embodiment shown in Fig. 6 differs from that shown in Figs. 1 to 3 only in the fact that the coupling is omitted.

The coupling consists essentially of a socket, a pin, and a locking pin for preventing detachment of the socket and pin.

It will be observed that a ring 37^a is provided on the chain 37 and that the chain 36 is passed through the said ring.

We claim—

1. A device of the character specified, comprising a bar provided with means whereby it may be suspended, and having at each end a transverse notch, and a longitudinal bore passing transversely of the notch, a pair of holding chains at each end of the bar, one of the chains being adapted to enter the notch and engage the pin and the other having a stirrup at one end, through which the first named chain is adapted to pass, means for detachably connecting the other ends of the said chains, said means comprising a socket on the first named chain, and a pin on the other for engaging the socket, a tripping pin passing transversely of the socket and pin for preventing disengagement thereof, a connection between the pin and the bar, a connection between the socket and the bar, and means for simultaneously moving the pins, said means comprising a lever at each end of the bar and pivoted intermediate its ends to the bar, a connection between one end of the lever and the adjacent pin, a lever pivoted on the bar at the center thereof, a link connecting the other end of each of the first named levers to the last named lever, one of said links being connected with the last named bar above the pivot and the other below, and means for swinging the lever.

2. A device of the character specified, comprising a bar provided with means whereby it may be suspended, and having at each end a transverse notch, and a longitidinal bore passing transversely of the notch, a pair of holding chains at each end

of the bar, one of the chains being adapted to enter the notch and engage the pin and the other having a stirrup at one end, through which the first named chain is adapted to pass, means for detachably connecting the other ends of the said chains, said means comprising a socket on the first named chain, and a pin on the other for engaging the socket, a tripping pin passing transversely of the socket and pin for preventing disengagement thereof, a connection between the pin and the bar, a connection between the socket and the bar, and means for simultaneously moving the pins.

3. A device of the character specified. comprising a bar provided with means for suspending the same, a sling connected with each end of the bar, each sling comprising a pair of chains, one chain having a stirrup at one end for receiving the other, means for detachably connecting one end of the other chain to the bar, means for simultaneously releasing the chains from the bar, and means for detachably connecting the opposite ends of the chains, said means comprising a socket on one chain, a pin on the other engaging the socket, a tripping pin traversing the socket and pin to prevent disengagement thereof, a tripping chain connecting the tripping pin with the bar, and a connection between the socket and the bar.

4. A device of the character specified, comprising a bar provided with means for suspending the same, a sling connected with each end of the bar, each sling comprising a pair of chains, one chain having a stirrup at one end for receiving the other, means for detachably connecting one end of the other chain to the bar, means for simultaneously releasing the chains from the bar, and means for detachably connecting the opposite ends of the chains, said means comprising a socket on one chain, a pin on the other engaging the socket, a locking device for locking the pin to the socket, and a tripping chain connecting the said device with the bar.

5. A device of the character specified, comprising a bar provided with means for suspending the same, a sling connected with each end of the bar, each sling comprising a pair of chains, one chain having a stirrup at one end for receiving the other, means for detachably connecting one end of the other chain to the bar, means for simultaneously releasing the chains from the bar, a pin for detachably connecting the other ends of the chains, a tripping chain connecting the pin and the bar, and a releasable flexible connection between both chains and the bar.

6. A device of the character specified, comprising a bar provided with means for suspending the same, a sling connected with each end of the bar, each sling comprising a pair of chains, one chain having a stirrup at one end for receiving the other, means for detachably connecting one end of the other chain to the bar, means for simultaneously releasing the chains from the bar, a pin for detachably connecting the other ends of the chains, a tripping chain connecting the pin and the bar, and a connection between the socket and the bar.

7. A device of the character specified, comprising a bar having means whereby it may be suspended, and having at each end a transverse notch and a longitudinal bore passing transversely of the notch, a holding chain having one of its ends adapted to enter the notch, a pin in the bore for engaging the chain, a stirrup on the other end of the chain through which the first named end is adapted to pass, means for simultaneously moving the pins to release and engage the chains, each of said chains consisting of a plurality of sections, a detachable coupling between the sections, said coupling comprising a socket on one chain and a pin on the other for engaging the socket, a locking pin traversing the pin and the socket, a tripping chain connecting the locking pin and the bar, and a connection between the socket and the bar.

8. A device of the character specified, comprising a bar having means whereby it may be suspended, and having at each end a transverse notch and a longitudinal bore passing transversely of the notch, a holding chain having one of its ends adapted to enter the notch, a pin in the bore for engaging the chain, a stirrup on the other end of the chain through which the first named end is adapted to pass, means for simultaneously moving the pins to release and engage the chains, each of said chains consisting of a plurality of sections, a detachable coupling between the sections, a locking pin for the coupling, and a connection between the pin and the bar for releasing the coupling when the chains are released from the bar.

9. A device of the character specified, comprising a bar having means whereby it may be suspended, and having at each end a transverse notch and a longitudinal bore passing transversely of the notch, a holding chain having one of its ends adapted to enter the notch, a pin in the bore for engaging the chain, a stirrup on the other end of the chain through which the first named end is adapted to pass, means for simultaneously moving the pins to release and engage the chains, each of said chains consisting of a plurality of sections, a detachable coupling between the sections, and means for releasing the coupling when the chain is released from the bar.

10. A device of the character specified, comprising a bar having means whereby it may be suspended, and having at each end a transverse notch and a longitudinal bore

passing transversely of the notch, a holding chain having one of its ends adapted to enter the notch, a pin in the bore for engaging the chain, a stirrup on the other end of the chain through which the first named end is adapted to pass, means for simultaneously moving the pins to release and engage the chains, each of said chains consisting of a plurality of sections, and a detachable coupling between the sections.

11. A device of the character specified, comprising a bar having means whereby it may be suspended, and having at each end a transverse notch and a longitudinal bore passing transversely of the notch, a holding chain having one of its ends adapted to enter the notch, a pin in the bore for engaging the chain, a stirrup on the other end of the chain through which the first named end is adapted to pass, and means for simultaneously moving the pins to release and engage the chains.

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