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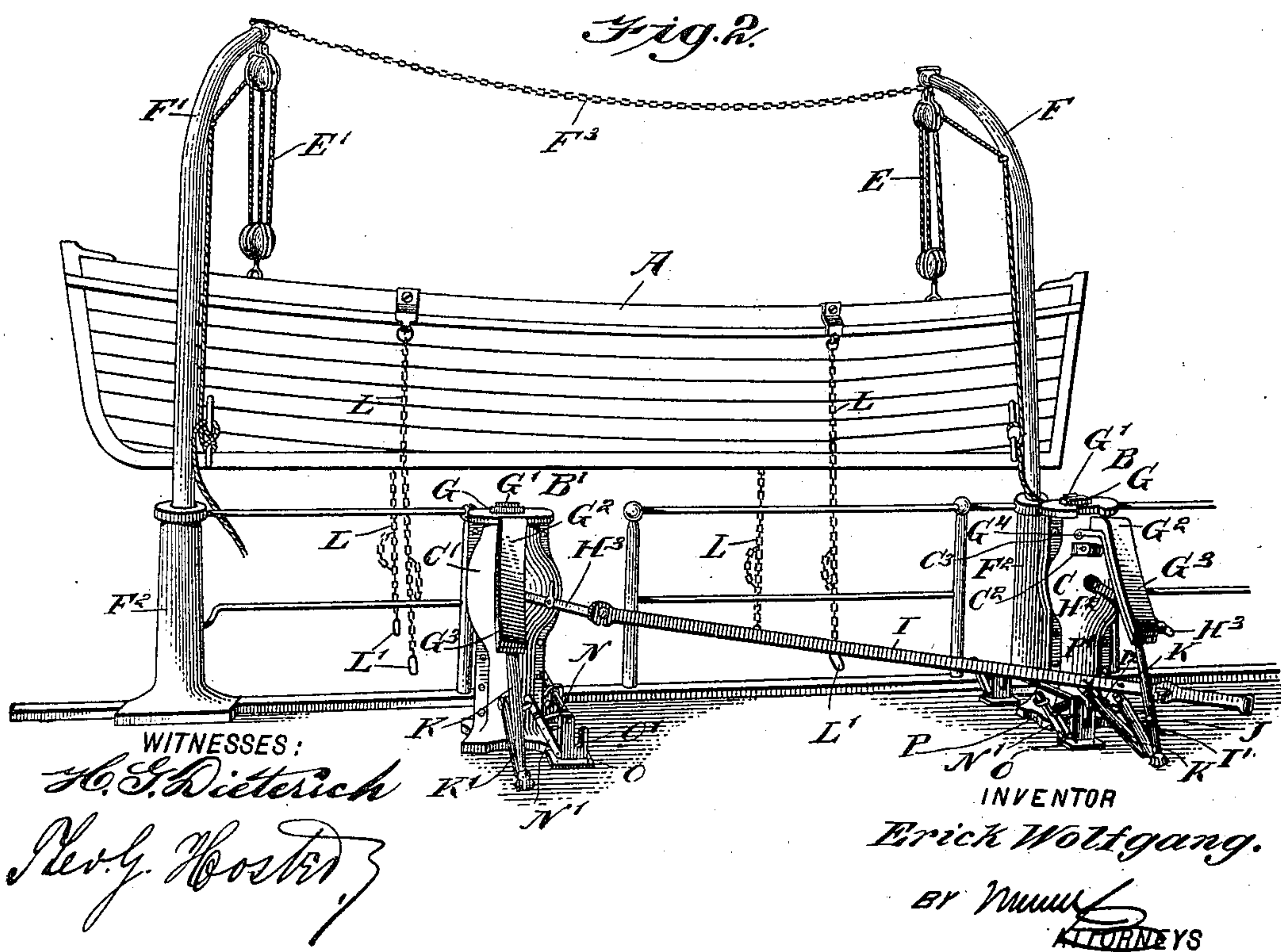
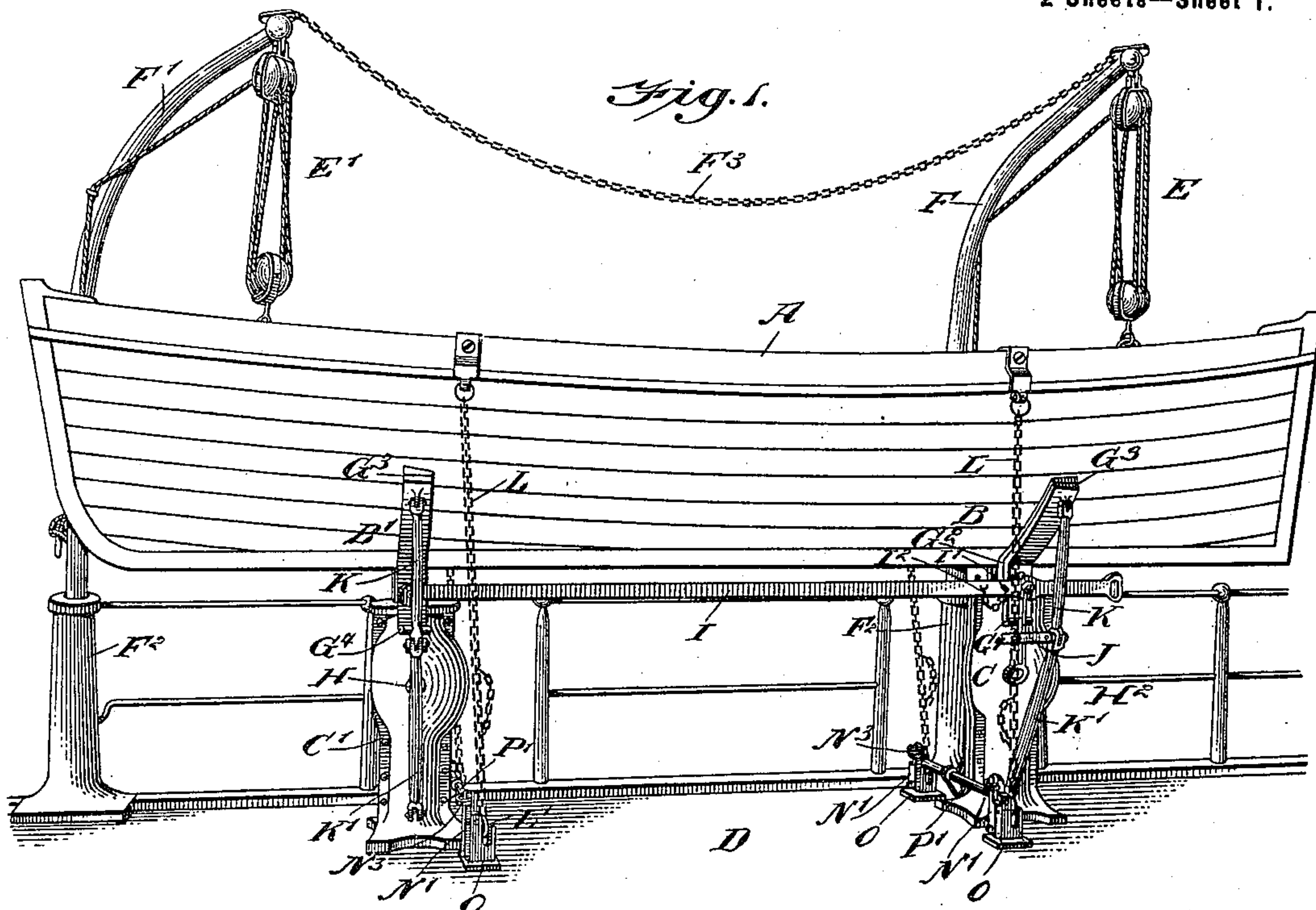
**Patented Feb. 5, 1901.**

**E. WOLFGANG.**  
**CLEARING DEVICE FOR LIFE BOATS.**

(Application filed Nov. 1, 1900.)

(No Model.)

**2 Sheets—Sheet 1.**



**WITNESSES:**

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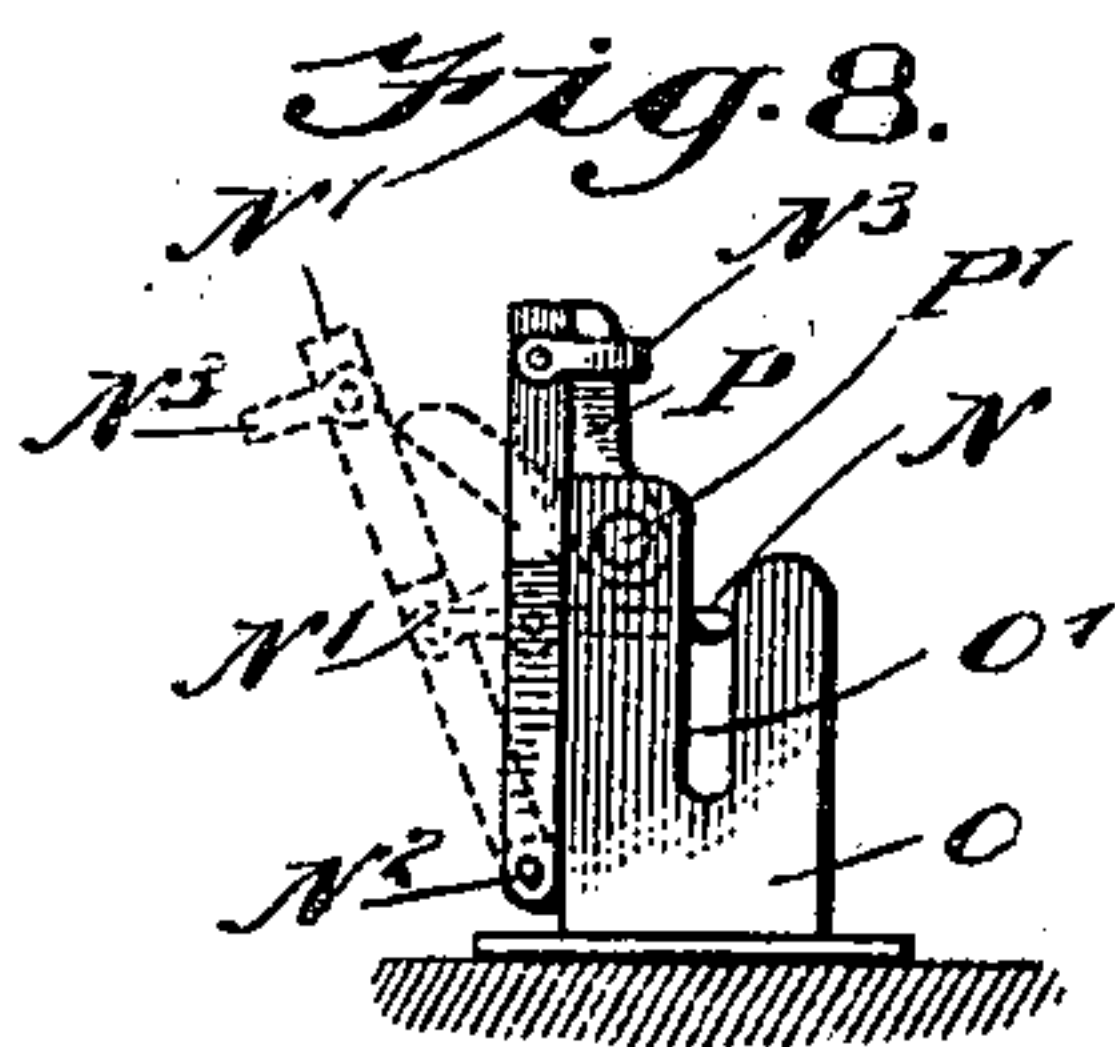
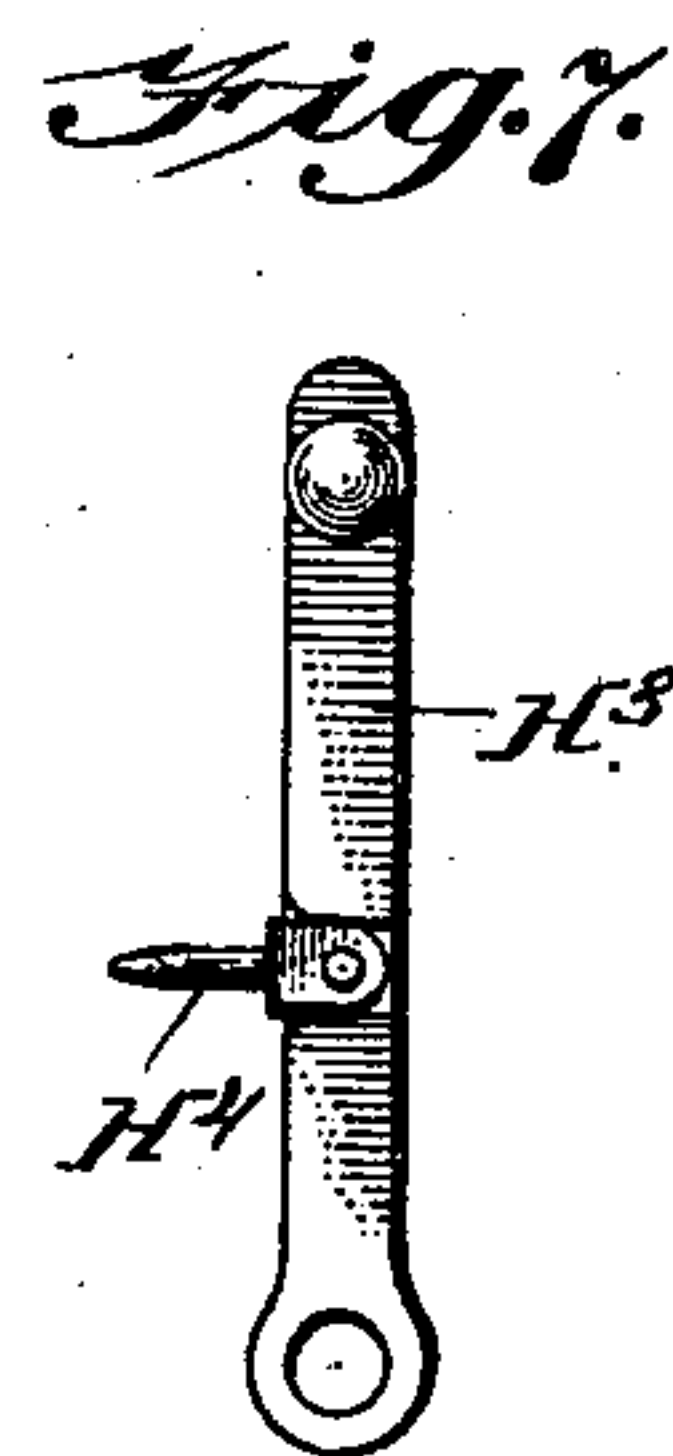
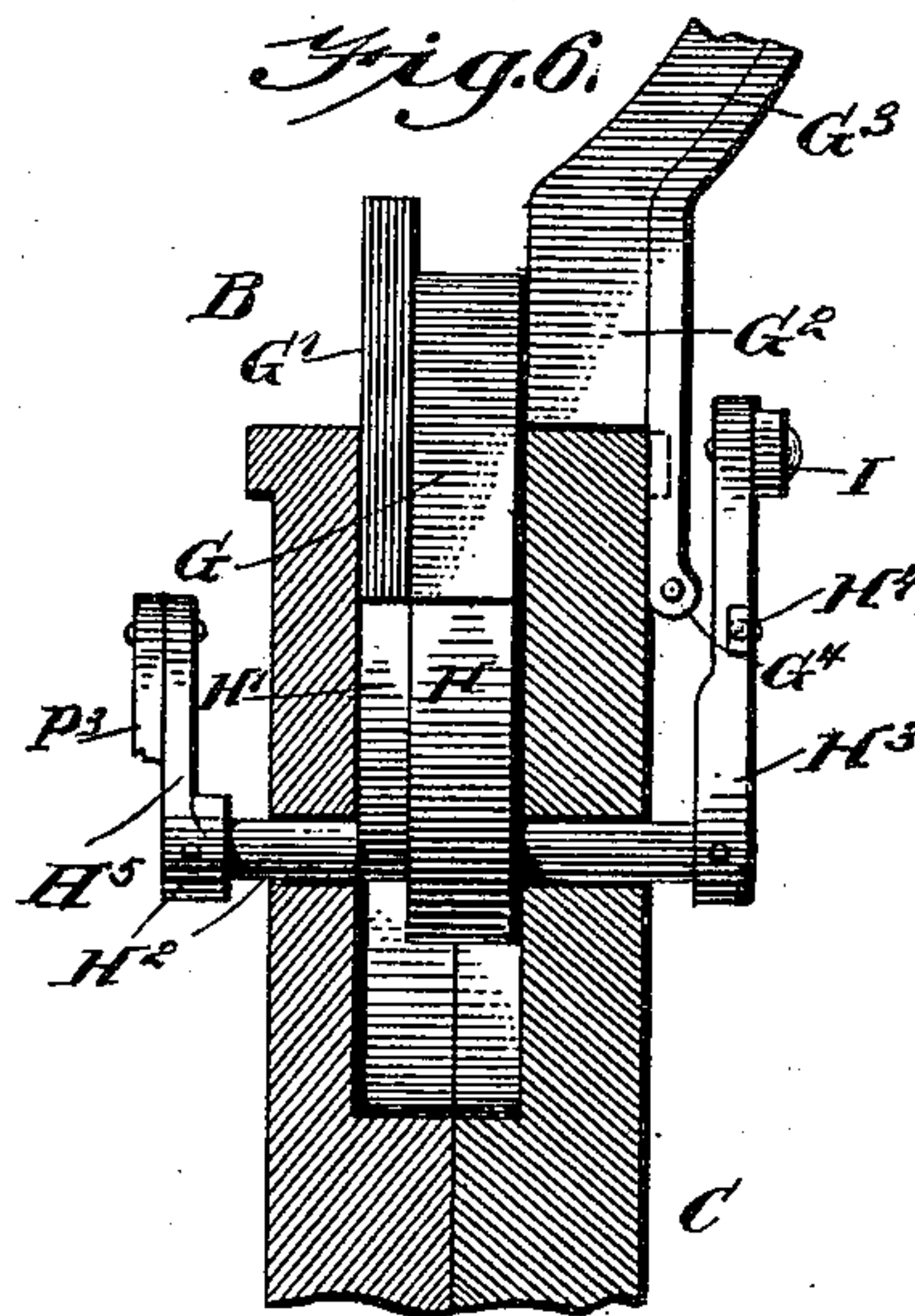
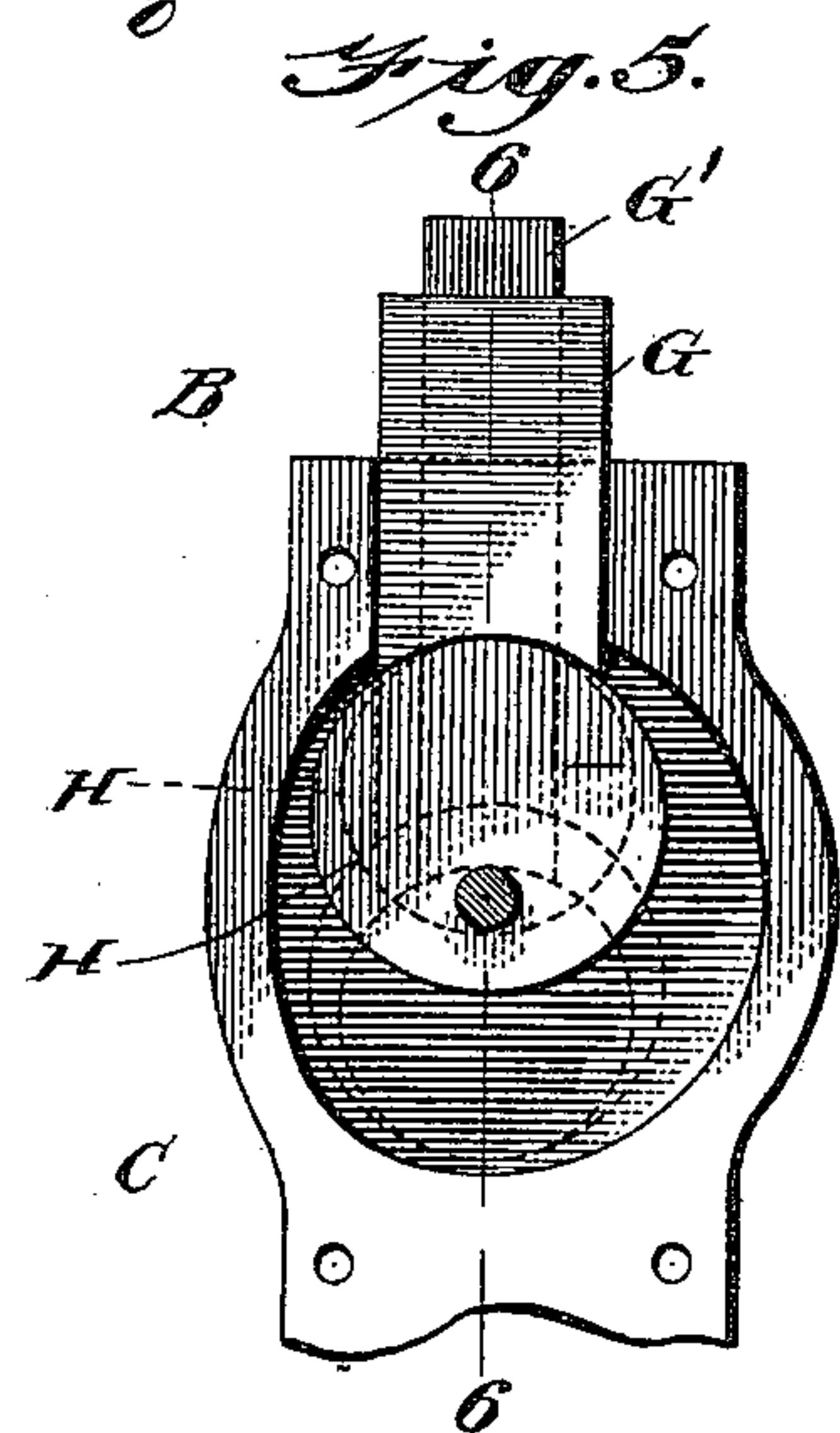
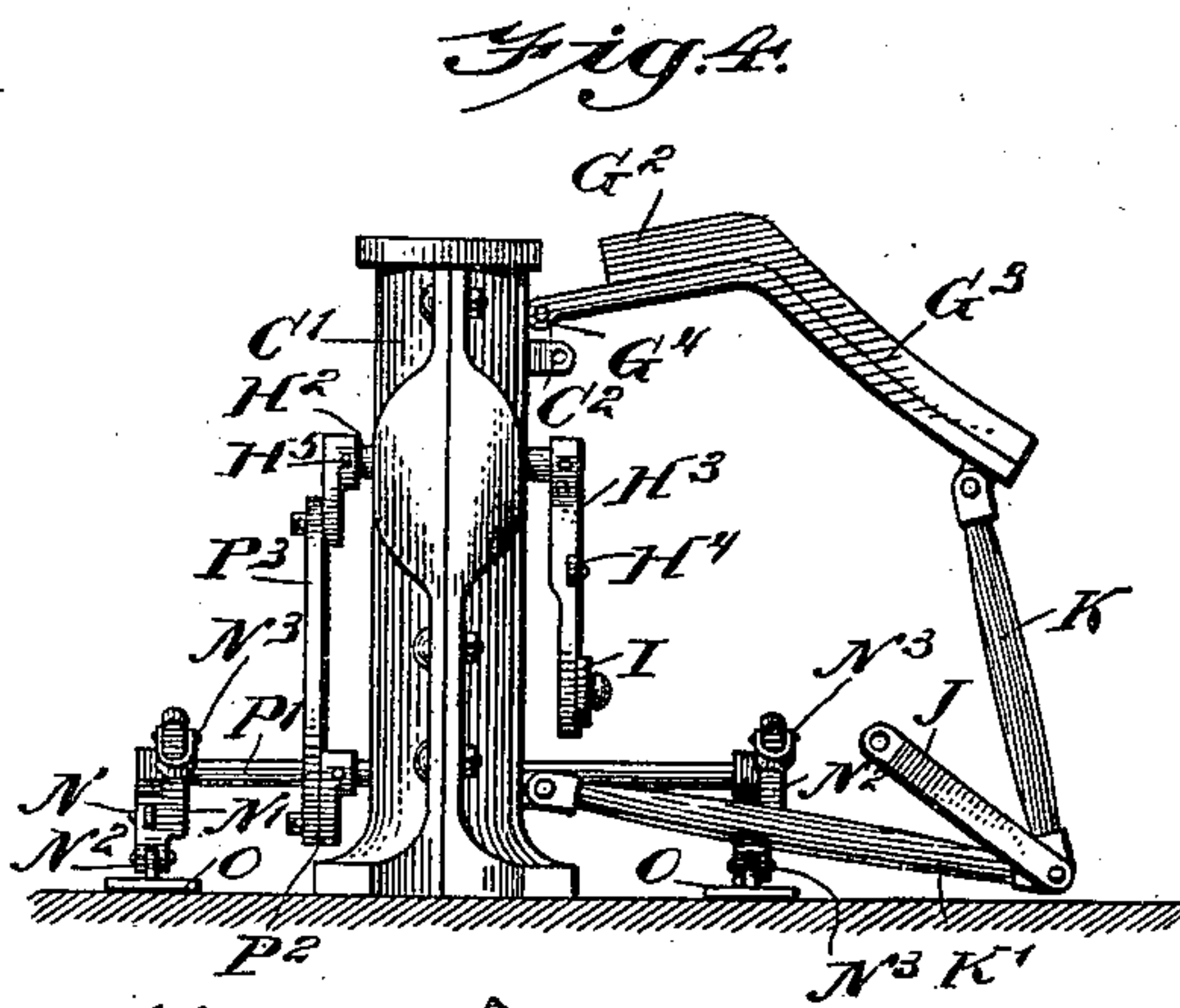
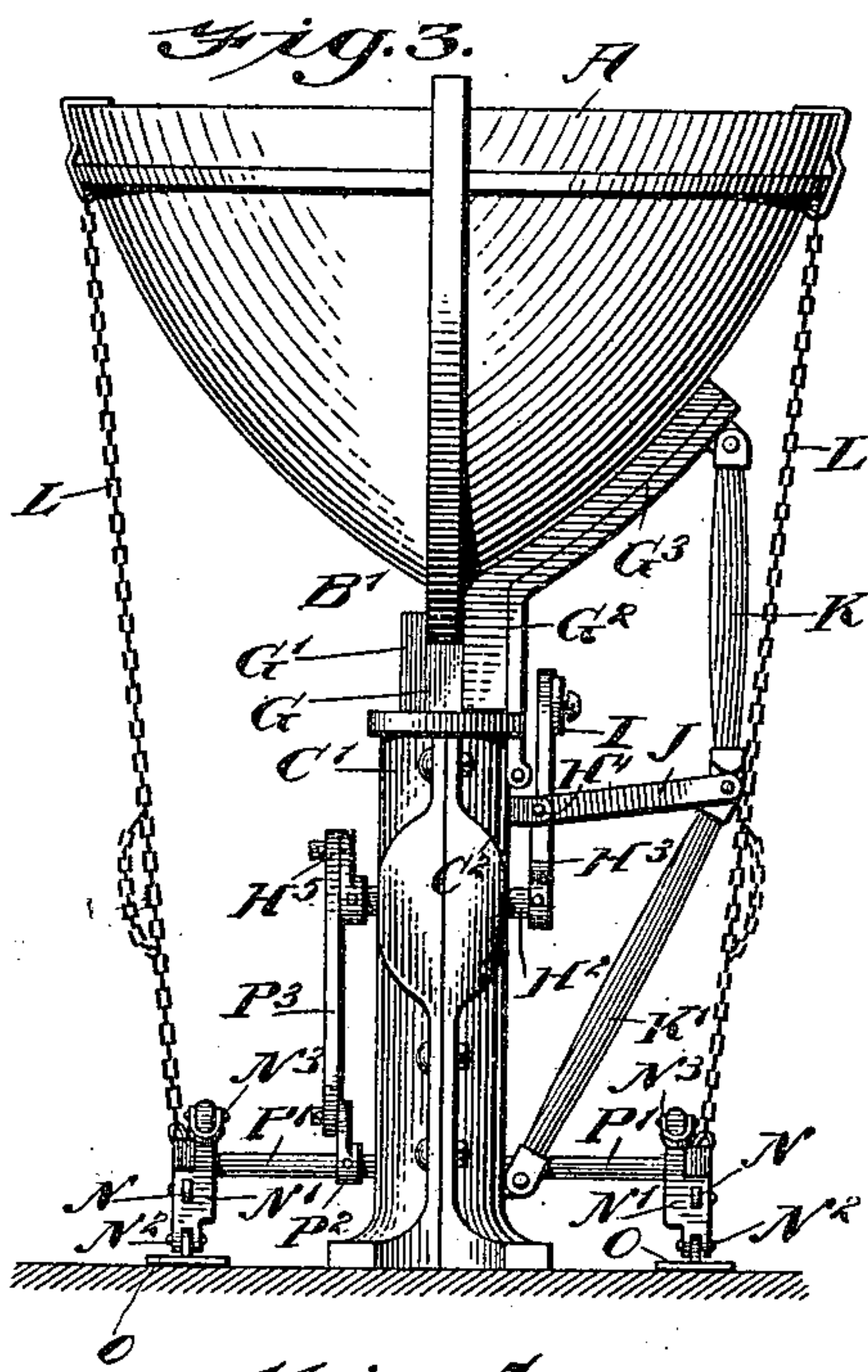
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CLEARING DEVICE FOR LIFE BOATS.

(Application filed Nov. 1, 1900.)

(No Model.)

2 Sheets—Sheet 2.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

ERICK WOLFGANG, OF LONDON, ENGLAND.

## CLEARING DEVICE FOR LIFE-BOATS.

SPECIFICATION forming part of Letters Patent No. 667,480, dated February 5, 1901.

Application filed November 1, 1900. Serial No. 35,103. (No model.)

*To all whom it may concern:*

Be it known that I, ERICK WOLFGANG, a subject of the Queen of Great Britain, and a resident of London, England, have invented  
5 a new and Improved Chock-Releasing Device for Boats, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved chock-releasing device for  
10 life-boats arranged to support and securely hold the life-boat in position when not in use and to permit a single operator to instantly release the boat in case of an emergency.

The invention consists of novel features and  
15 parts and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings,  
20 forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of the improvement with the boat secured in place on  
25 the deck of a vessel. Fig. 2 is a like view of the same with the boat released and free from the improvement and supported on the davits. Fig. 3 is an enlarged end elevation of the improvement with the boat in position thereon.  
30 Fig. 4 is a like view of the improvement unlocked and the boat removed. Fig. 5 is an enlarged sectional side elevation of the keel-blocks and means for actuating the same. Fig. 6 is a transverse section of the same on  
35 the line 6 6 in Fig. 5. Fig. 7 is a side elevation of one of the locking-levers, and Fig. 8 is a side elevation of one of the chain-holders.

The life-boat A, of any approved construction, is normally supported at its under side  
40 by two keel-supports B B', held on standards C C', attached to the deck of a vessel D, close to one side thereof, as is plainly indicated in the drawings. Normally the boat A rests on the said keel-supports B B', as described;  
45 but in case of an emergency the keel-supports are moved away from under the boat, so that the latter is freely suspended from an overhead support consisting of tackles E E', carried by davits F F', mounted to turn in  
50 sockets F<sup>2</sup>, the upper ends of the davits being connected with each other by chains F<sup>3</sup>, so that the davits swing in unison and move

the released boat outward beyond the side of the vessel to lower the boat in the water in the usual manner.

The supports B B' are alike in construction, and each consists, essentially, of keel-blocks G G' G<sup>2</sup>, of which the keel-block G is adapted to engage the under side of the boat-keel, while the blocks G' G<sup>2</sup> are adapted to engage  
55 the sides of said keel, and the block G<sup>2</sup> in addition is formed with an extension G<sup>3</sup>, adapted to engage the side of the boat A facing the vessel, as shown in Figs. 1 and 3. The blocks G G' are mounted to slide vertically in suitable bearings in the corresponding standards C or C', and the lower ends of said keel-blocks G G' rest on the peripheral tops of eccentrics H H', secured on a shaft H<sup>2</sup>, journaled in suitable bearings in the corresponding standard  
60 C or C'. The two shafts H<sup>2</sup> in the standards C C' are connected with each other, and for this purpose the shafts H<sup>2</sup> are provided with arms H<sup>3</sup>, connected with each other by a link I under the control of the operator and adapted to be disconnected from said arms H<sup>3</sup> after  
65 the same have been swung from an uppermost position into a lowermost position, as shown in Fig. 2. When the arms H<sup>3</sup> are in an uppermost position, then the blocks G G' project above the tops of the standards C C', the block G engaging the under side of the boat-keel and the block G' engaging one side thereof. When the arms H<sup>3</sup> are swung into a lowermost position by the operator manipulating  
70 the link I, (see Fig. 2,) then the turning of the shafts H<sup>2</sup> causes the eccentrics H H' to move downward and allow the blocks G G' to slide in a like direction by their own gravity, thus moving out of engagement with the keel  
75 of the boat. When this takes place, the boat A is suspended from the overhead supports. The other block G<sup>2</sup> is simultaneously actuated with the blocks G G'; but this block G<sup>2</sup> is hinged at G<sup>4</sup> to the front of the corresponding standard C or C', and each of the blocks G<sup>2</sup> is normally locked in an uppermost position, as indicated in Figs. 3 and 6. For this purpose each of the arms H<sup>3</sup> previously mentioned is provided with a pivot-pin H<sup>4</sup>, adapted to pass through apertured lugs C<sup>2</sup> on the standards C C' and also through apertures in links J, pivotally connected with levers K K', of which the levers K are pivoted to the free  
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100



ends of the extensions  $G^3$  of the keel-blocks  $G^2$ , while the levers  $K'$  are fulcrumed at their lower ends on the standards  $C C'$ . When the arms  $H^3$  are actuated in case of an emergency, as described, then the pins  $H^4$  are withdrawn from the lugs  $C^2$  and the links  $J$ , so that the latter are released, and consequently the levers  $K K'$  and the keel-block  $G^2$ , so that the several parts mentioned swing downward, the keel-block  $G^2$  and the extension  $G^3$  being out of engagement with the side of the boat. (See Fig. 2.) Normally the operating-link  $I$  is locked in position on the arms  $H^3$  by a pin  $I'$ , held on a chain  $I$  and extending through the link  $I$  into an aperture  $C^3$  on the standard  $C$ .

In order to normally hold the boat  $A$  down on the keel-blocks  $G G' G^2$ , I provide sets of chains  $L$ , attached at their upper ends to the sides of the boat  $A$ , as is plainly shown in Figs. 1 and 2. The lower links  $L'$  of the chains  $L$  are adapted to be engaged by pins  $N$ , arranged to slide in the members of a fork  $O'$ , formed on posts or bearings  $O$ , attached to the deck of the vessel adjacent to the standards  $C C'$ , as is plainly shown in the drawings. Each of the pins  $N$  (see Fig. 8) is pivoted on a lever  $N'$ , fulcrumed at  $N^2$  on the corresponding post  $O$ , and on the upper end of said lever is arranged a pivoted clip  $N^3$ , adapted to hook over an arm  $P$ , held on a shaft  $P'$ , journaled at its ends in a pair of posts  $O$ , as will be readily understood by reference to Fig. 1. Each of the shafts  $P'$  is provided with an arm  $P^2$ , (see Figs. 3 and 4,) pivotally connected by a link  $P^3$  with a crank-arm  $H^5$  on the corresponding shaft  $H^2$ , so that when the latter is actuated, as previously mentioned, then a turning motion is given to the shafts  $P'$  by the link  $P^3$  and the arms  $P^2$   $H^5$ , whereby the arms  $P$  impart an outward swinging movement to the levers  $N'$  (see dotted lines in Fig. 8) to withdraw the pins  $N$  from the lower links  $L'$  of the chains  $L$ . Thus in an emergency the keel-blocks are moved out of engagement with the boat and the chains  $L$  are released, so that the boat is freely suspended from the overhead support, which permits of swinging the boat to the side of the ship and lowering it in the water, as previously described.

From the foregoing it is evident that in order to release the boat it is only necessary for a single operator to remove the pin  $I'$  and then pull on the link  $I$ , so as to cause the arms  $H^3$  to swing downward and release the chains  $L$  to cause the keel-blocks to move out of engagement with the boat. As the boat is now suspended from the tackles  $E E'$  of the overhead support, it is evident that it can be readily moved into position for lowering it in the water.

By having substantial supports for the boat  $A$  while in a normal position it is evident that the boat may be loaded with people to its fullest capacity previous to releasing it,

as the loaded boat can be as easily released as an empty boat.

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

1. A chock-releasing device for life-boats, comprising an overhead support for the life-boat and normally in an inactive position, and a keel-support for the boat and normally supporting the boat, said keel-support being movable and under control of the operator, to move the keel-support from under the life-boat and allow the latter to hang suspended from the overhead support, said keel-support comprising a plurality of center keel-blocks and side keel-blocks movable independently of each other, one side block and the bottom keel-block being arranged to move vertically and the other side keel-block being hinged to swing transversely relatively to the life-boat, as set forth.

2. A chock-releasing device for life-boats, comprising an overhead support for the life-boat and normally in an inactive position, and a keel-support for the boat and normally supporting the boat, said keel-support being movable and under control of the operator, to move the keel-support from under the life-boat and allow the latter to hang suspended from the overhead support, said keel-support comprising a plurality of center keel-blocks and side keel-blocks movable independently of each other, one side keel-block and the bottom keel-block being arranged to move vertically and the other side keel-block being hinged to swing transversely relatively to the life-boat, said hinged keel-block having an extension-arm for engaging one side of the life-boat, as set forth.

3. A chock-releasing device for boats, comprising an overhead support for the boat and normally in an inactive position, a keel-support for the boat and normally supporting the boat, said keel-support comprising a plurality of center keel-blocks and side keel-blocks, the center keel-block and one of the side keel-blocks being movable vertically and the other side keel-block being mounted to swing, and an operating device for said keel-blocks, substantially as set forth.

4. A chock-releasing device for boats, comprising an overhead support for the boat and normally in an inactive position, movable keel-blocks for engaging the keel to support and hold the boat in position, and comprising a bottom keel-block and side keel-blocks, the bottom keel-block and one of the side keel-blocks being arranged to move vertically, and the other side keel-block being hinged to swing transversely relatively to the boat, eccentrics for supporting the vertically-movable keel-blocks, means for locking the swinging keel-block in position, and means for releasing the locking device for the swinging keel-block and for turning the eccentrics to release the vertically-movable keel-blocks, as set forth.



5. A chock-releasing device for boats, comprising an overhead support for the boat and normally in an inactive position, a keel-support for the boat, comprising sets of keel-blocks, each set consisting of a vertically-movable keel-block for the bottom of the keel, a vertically-movable keel-block for engaging one side of the keel, and a swinging keel-block for engaging the other side of the keel, means under the control of the operator for moving the keel-blocks from engagement with the boat to allow the latter to hang suspended from the overhead support, and means for holding the boat from upward movement on the keel-blocks, as set forth.

6. A chock-releasing device for boats, comprising an overhead support for the boat and normally in an inactive position, a keel-support for the boat and normally supporting the boat, said keel-support being movable and under the control of the operator, to move the keel-support from under the boat and allow the latter to hang suspended from the overhead support, chains independent of the boat and arranged for attachment at their upper end thereto, supports forked at their upper ends, pins arranged to slide in the members of the forks and engage the lower ends of the chains, levers fulcrumed on the supports and carrying the pins, the said levers each having a pivoted clip at its upper end, shafts mounted to turn and provided with arms adapted to be engaged by the clips at the ends of the levers, and means for turning the said shafts whereby the arms impart a swinging motion to the levers to withdraw the pins and release the chains, as set forth.

7. A chock-releasing device for boats, comprising an overhead support for the boat and normally in an inactive position, a keel-support for the boat, and normally supporting the boat, said keel-support being movable and under the control of the operator to move the keel-support from its supporting position, chains independent of the boat and adapted to be attached thereto, levers provided with pins for locking said chains to a fixed support to hold the boat from upward movement, shafts mounted to turn and provided with arms, a link under the control of the operator and connecting said arms, to turn the shafts in unison, and means actuated by the movement of said shafts, for releasing the keel-supports and the locking-levers for the chains, as set forth.

8. In a chock-releasing device for boats, a set of movable keel-blocks for engaging the keel of the boat to support and hold the boat in position, and comprising a vertically-movable keel-block for the bottom of the boat-keel, a vertically-movable keel-block for engaging one side of the boat-keel, and a swinging keel-block for engaging the other side of the boat-keel.

9. In a chock-releasing device for boats, a set of movable keel-blocks for engaging the keel of the boat to support and hold the boat

in position, and comprising a vertically-movable keel-block for the bottom of the boat-keel, a vertically-movable keel-block for engaging one side of the boat-keel, and a swinging keel-block for engaging the other side of the boat-keel, means for holding the keel-blocks in engagement with the keel, and an actuating device for said means to release the keel-blocks from the boat.

10. In a chock-releasing device for boats, a set of movable keel-blocks for engaging the keel to support and hold the boat in position, and comprising a vertically-movable keel-block for the bottom of the keel, a vertically-movable keel-block for engaging one side of the keel, and a swinging keel-block for engaging the other side of the keel, eccentrics for holding the vertically-movable keel-blocks in engagement with the boat-keel, means for locking the swinging keel-block in an uppermost position, and means for releasing the swinging keel-block and actuating the eccentrics, for the purpose set forth.

11. A chock-releasing device for boats, consisting of sets of movable keel-blocks, each set comprising a keel-block for the bottom of the boat-keel, and side keel-blocks for engaging the sides of the boat-keel, the bottom keel-block and one of the side keel-blocks of each set being arranged to move vertically, and the other side keel-block of each set being hinged to swing transversely relatively to the boat, eccentrics mounted to turn and on which the vertically-movable keel-blocks rest, levers for holding the said swinging keel-blocks in engagement with the boat, means for locking the levers, and means for turning the eccentrics and releasing the levers, to actuate the said keel-blocks to release the boat as set forth.

12. A chock-releasing device for boats, comprising sets of movable keel-blocks, each set comprising a center keel-block and two side keel-blocks on opposite sides of the center keel-block, one of the side keel-blocks being mounted to swing and formed with an extension for engaging one side of the boat, levers pivotally connected with each other and connected respectively with the extension of the said swinging keel-block and with a fixed support, a link pivotally connected with the levers, a locking device for the link to hold the said swinging keel-block in an uppermost position, and means for releasing the locking device to disengage the swinging keel-block from the boat, as set forth.

13. A chock-releasing device for boats comprising sets of movable keel-blocks, each set comprising a center keel-block and two side keel-blocks on opposite sides of the center keel-block, one of the side keel-blocks being mounted to swing and formed with an extension for engaging one side of the boat, levers connected with the swinging keel-blocks, a link connected with the levers, shafts mounted to turn and each having an arm provided with a pin adapted to engage an aperture in the corresponding link to lock the swinging



keel-block in engagement with the boat, and means for turning the said shafts in unison, whereby the pins on said arms are withdrawn from the links, to release the said swinging keel-blocks, substantially as set forth.

14. A chock-releasing device for boats comprising sets of movable keel-blocks, each set comprising a center keel-block and two side keel-blocks, the center keel-block and one of the side keel-blocks being mounted to slide vertically and the other side keel-block being mounted to swing, shafts mounted to turn and provided with eccentrics for supporting the vertically-movable keel-blocks in their uppermost position, arms on the said shaft, a link arranged to connect the said arms and under the control of the operator to turn the shafts in unison to move the eccentrics downward to allow the vertically-movable keel-blocks to move out of engagement with the keel of the boat, means for locking the swinging keel-block in the uppermost position, means actuated by the movement of the shafts for releasing the swinging keel-block, means for holding the boat from upward movement on the keel-blocks, and releasing devices for said means and actuated from the said shafts, as set forth.

15. In a chock-releasing device for boats, a support, a keel-block mounted to swing on said support and adapted to engage one side of the boat-keel, the said keel-block having an extension arranged to engage the side of the boat, levers pivotally connected with each other at one end, the other ends of said levers being connected respectively with the extension of the swinging keel-block and said support, a link connected at one end with the levers at their pivotal connection, a locking de-

vice for the free end of said link to fasten it to said support to hold the swinging keel-block in engagement with the boat, and means for releasing the said locking device, as set forth.

16. In a chock-releasing device for boats, an overhead support for the boat, a movable keel or bottom support for the boat and arranged to release the boat-keel and thereby suspend the boat from the overhead support, a shaft mounted to turn and under the control of the operator, means for actuating the keel-support from the said shaft to release the boat, mechanism for holding the boat from upward movement on the keel-support, and a releasing device for said mechanism also actuated from the said shaft, as set forth.

17. A chock-releasing device for boats, comprising an overhead support for the boat and normally in an inactive position, a keel-support for the boat and normally supporting the boat, means for holding the boat from upward movement on the keel-support, locking devices for said means, shafts mounted to turn and provided with means for releasing said locking devices, shafts under the control of the operator, and arranged when turned to release the keel-support for the boat, the said shafts being provided with arms connected by links with arms on the first-mentioned shafts, as set forth.

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

ERICK WOLFGANG.

Witnesses:

THEO. G. HOSTER,  
EVERARD BOLTON MARSHALL.