

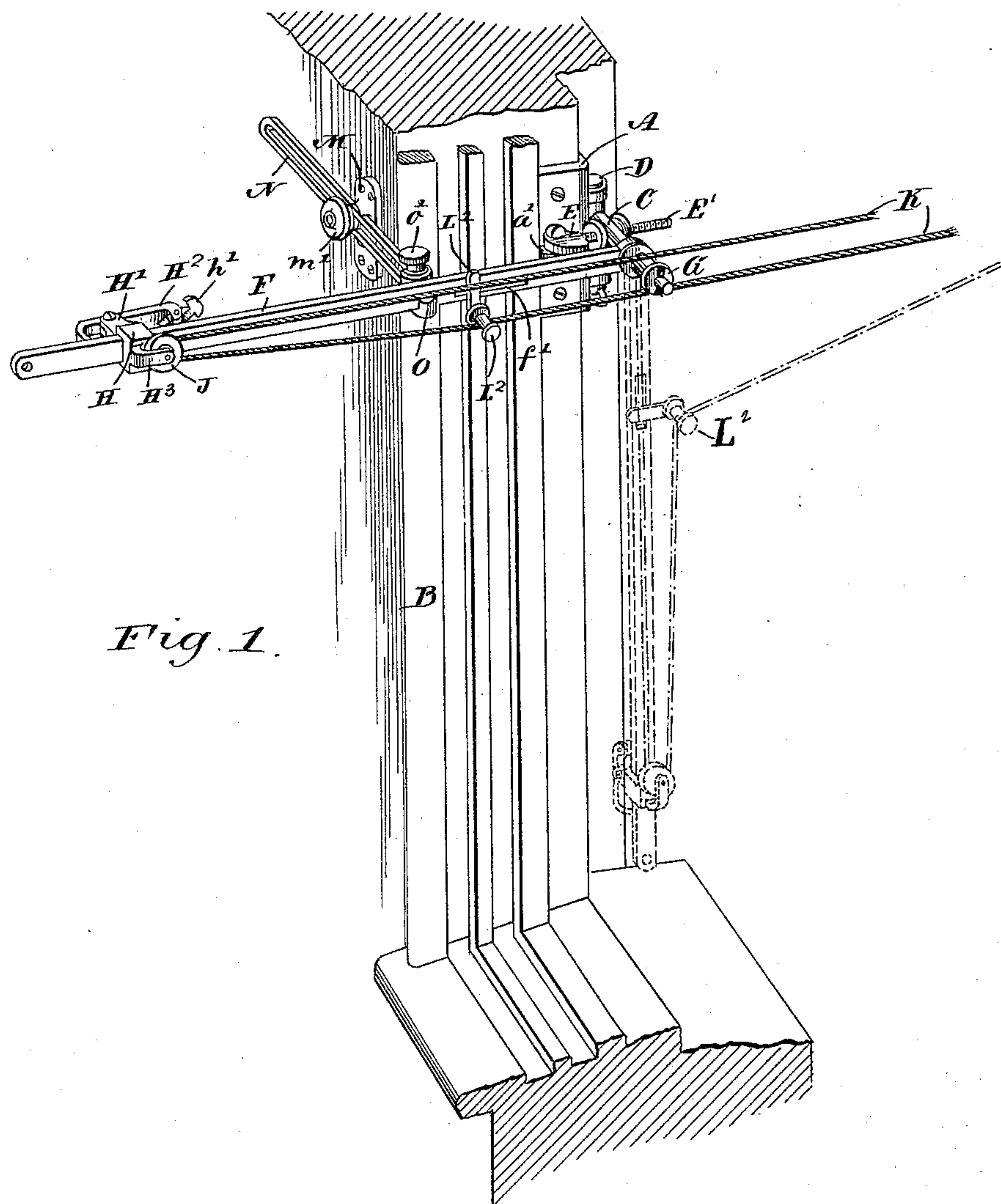
(No Model.)

3 Sheets—Sheet 1.

R. McNAB.  
CLOTHES LINE SUPPORT.

No. 463,163.

Patented Nov. 17, 1891.



*Fig. 1.*

WITNESSES;

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C. Sedgwick

INVENTOR:

R. McNab  
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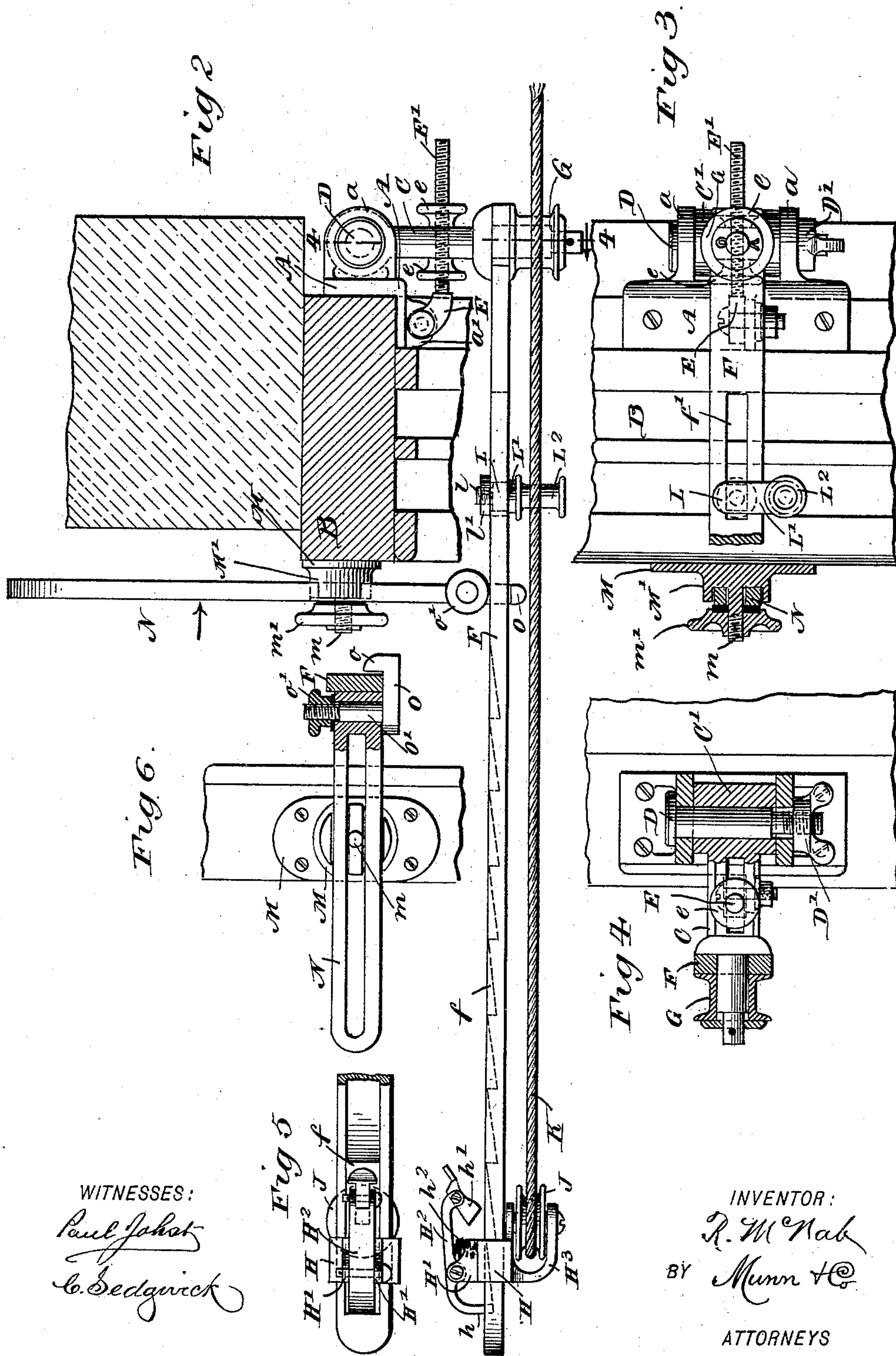
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(No Model.)

3 Sheets—Sheet 3.

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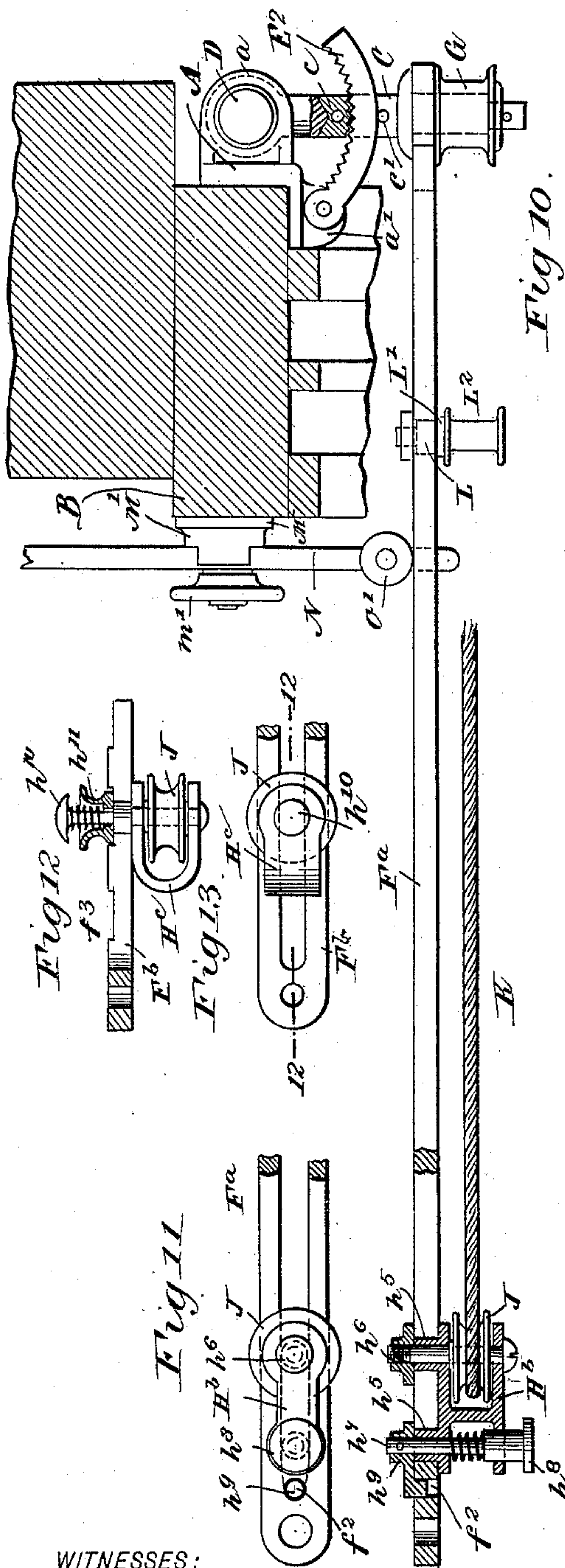


Fig 10.

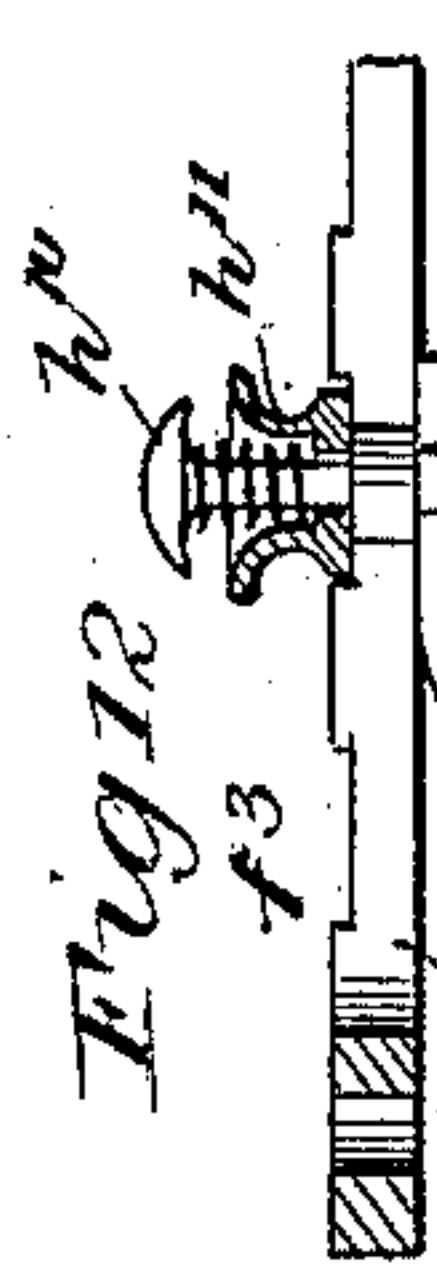


Fig 12.

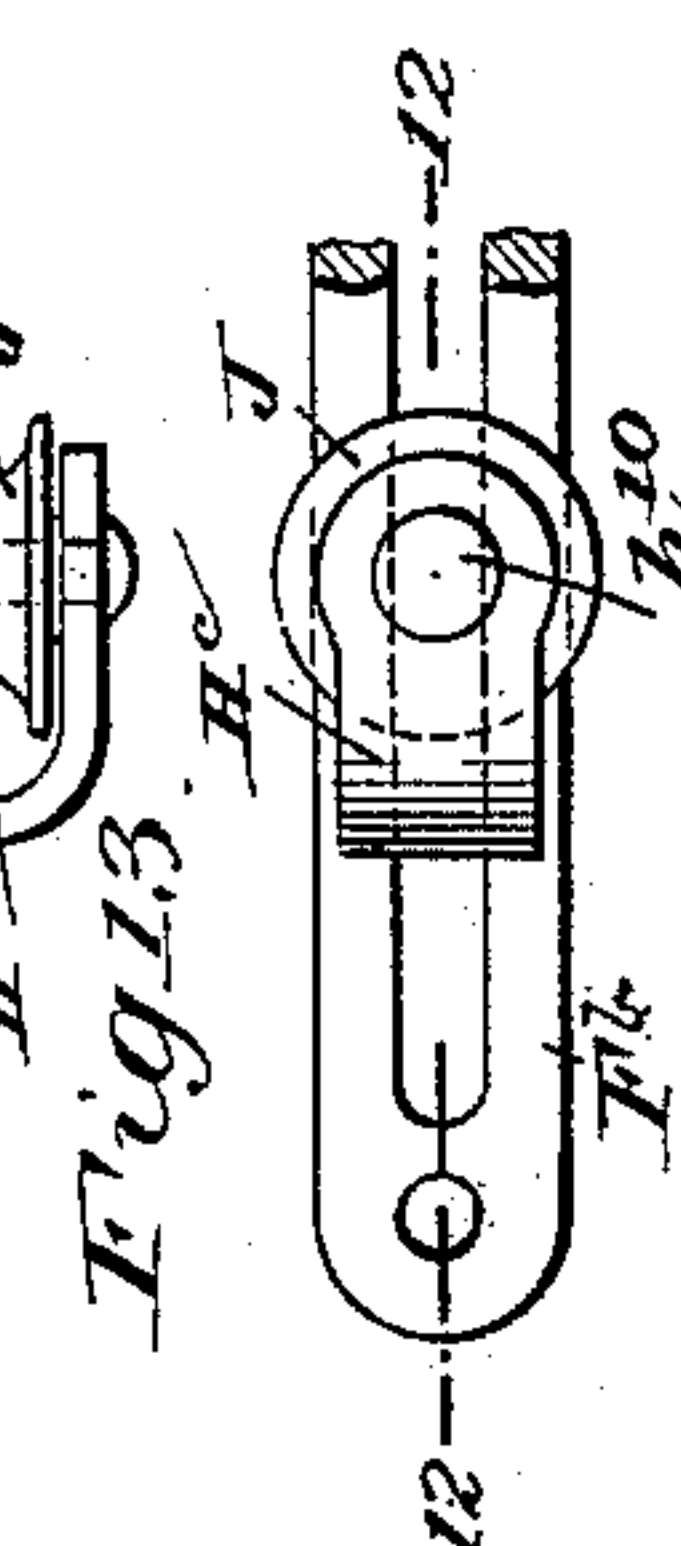


Fig 13.

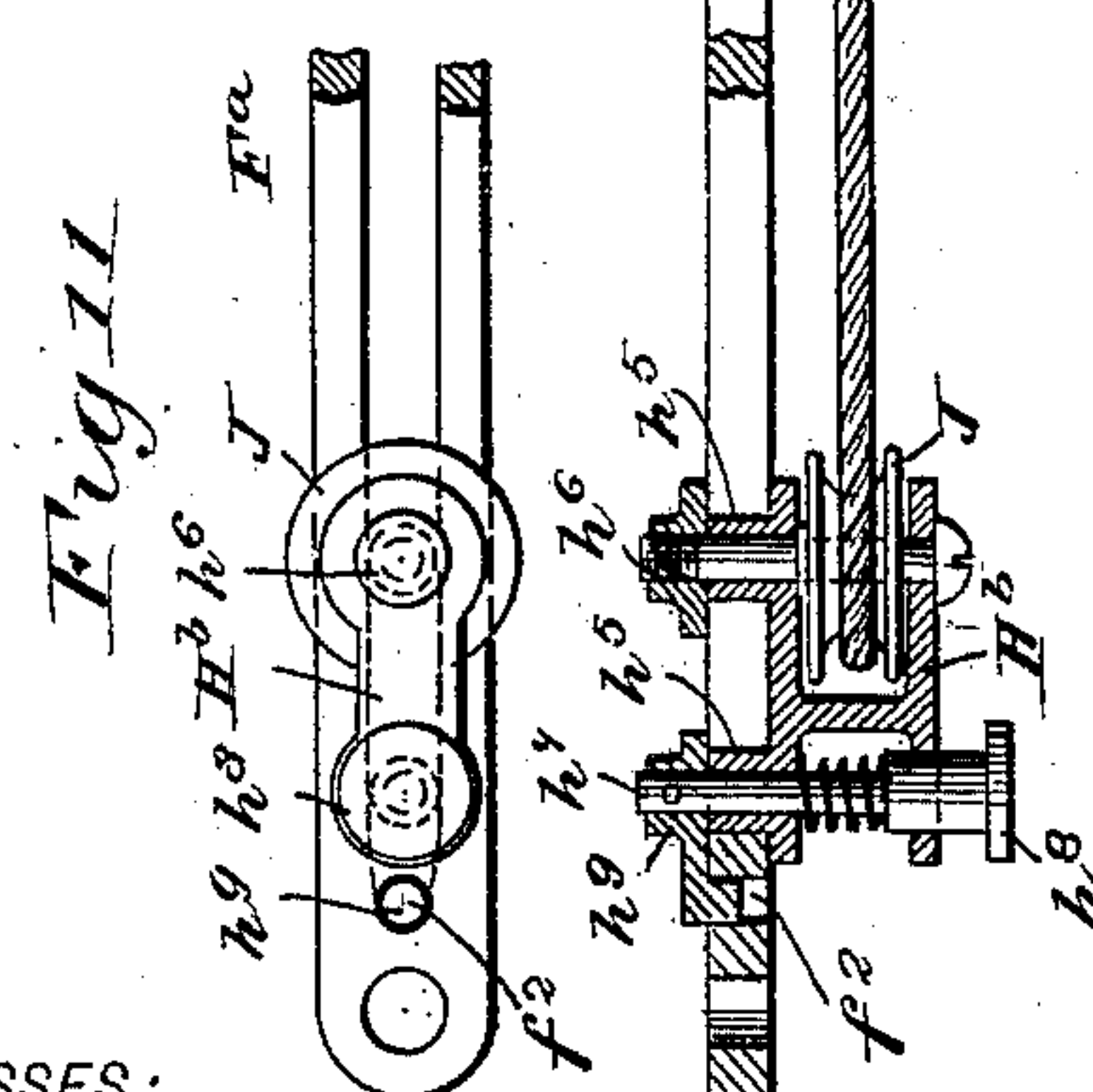


Fig 11.

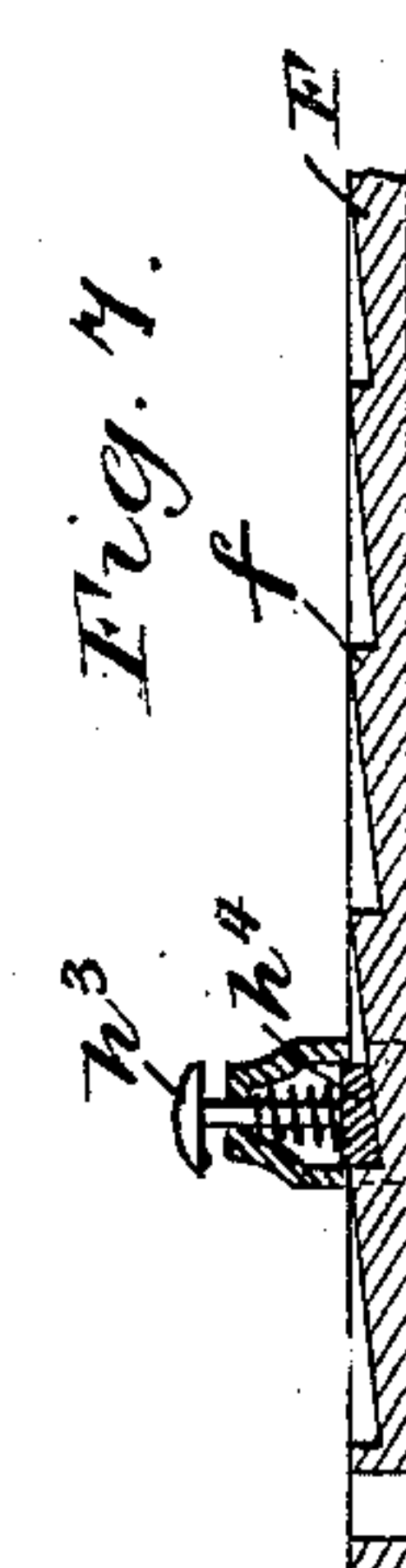


Fig. 4.

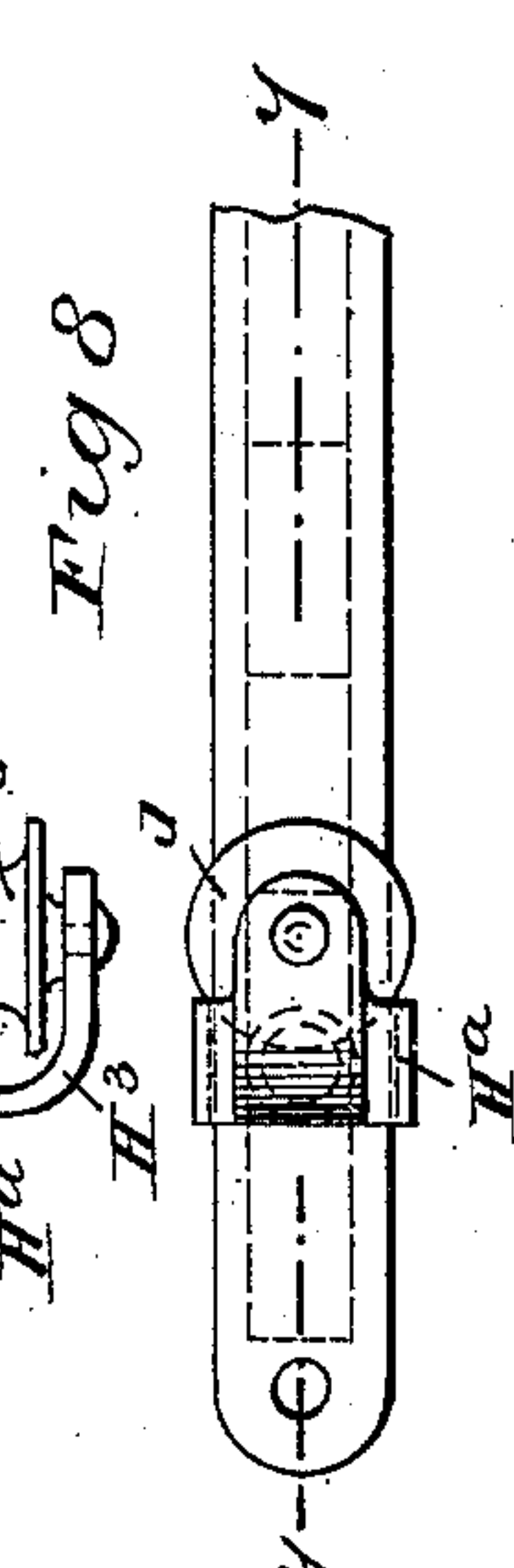


Fig 8.

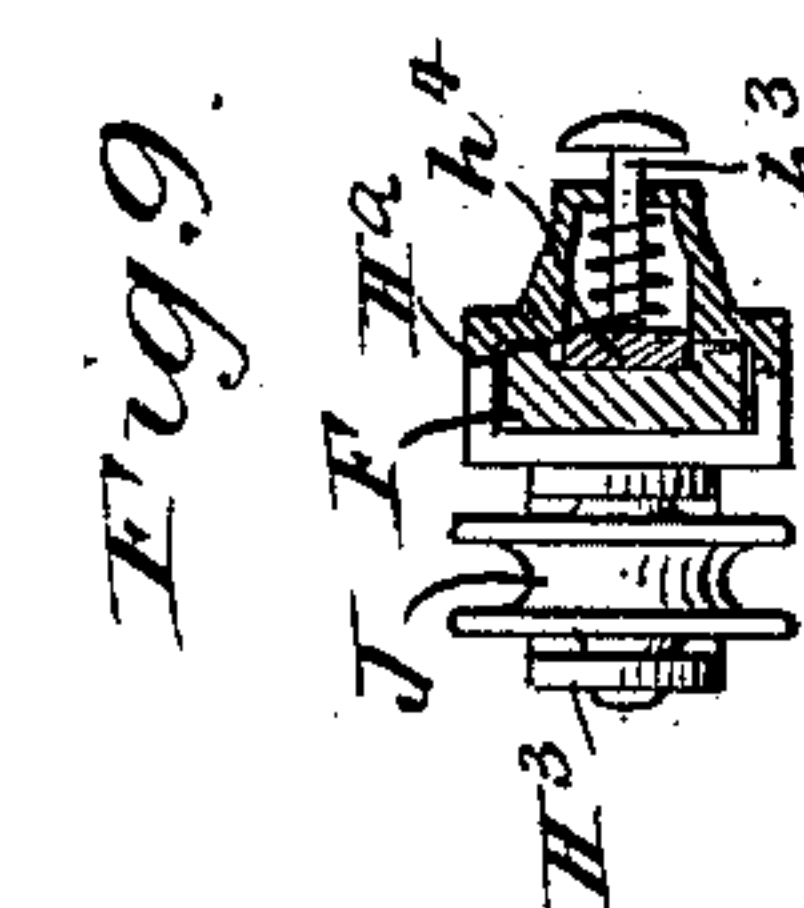


Fig. 9.

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# UNITED STATES PATENT OFFICE.

ROBERT McNAB, OF PATERSON, NEW JERSEY.

## CLOTHES-LINE SUPPORT.

SPECIFICATION forming part of Letters Patent No. 463,163, dated November 17, 1891.

Application filed February 6, 1891. Serial No. 380,479. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT McNAB, of Paterson, in the county of Passaic and State of New Jersey, have invented a new and Improved Clothes-Line Support, of which the following is a full, clear, and exact description.

My invention relates to improvements in that class of clothes-line supports which are adapted to be secured in a window of a building and to hold one end of a line, the opposite end being held upon suitable outdoor supports.

The object of my invention is to produce a convenient and durable support which may be quickly and easily brought to a desired position, which may be easily adjusted, so that the arm carrying the main-line roller may be made to align with any outdoor support, and which is also adapted to automatically adjust itself to any decrease in the length of the line.

To this end my invention consists in certain features of construction and combinations of parts, which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a broken perspective view showing the support secured in the window. Fig. 2 is a plan view of the same. Fig. 3 is a side elevation, partly in section, showing in detail the outer and inner supports for the main swinging arm. Fig. 4 is an end view, partly in section, on the line 4 4 of Fig. 2. Fig. 5 is a broken side elevation of the pulley-head which carries the clothes-line. Fig. 6 is a broken detail view of the cross-arm for supporting the main swinging arm, the view being taken looking in the direction of the arrow in Fig. 2. Fig. 7 is a sectional view on the line 7 7 of Fig. 8, showing a modified form of pulley-head. Fig. 8 is a side elevation of the same. Fig. 9 is a cross-section showing in detail the form of pulley-head illustrated in Figs. 7 and 8. Fig. 10 is a broken plan view, partly in section, showing a modified form of the main arm and showing also a modified form of pulley-head and a modified means for adjusting the main-arm support. Fig.

11 is a broken detail side elevation of the free end of the arm shown in Fig. 10 and the pulley-head secured thereon. Fig. 12 is a longitudinal section on the line 12 12 in Fig. 13, showing a modified form of pulley-head and main arm; and Fig. 13 is a side elevation of the same.

A corner-bracket A is secured to the outside of a window-frame B high enough to provide for the swinging movement of the main arm, as described below, and on the outside of the corner-bracket are projecting horizontal lugs a, which vertically align and between which is pivoted a horizontal support C, which is slotted longitudinally through the center and which is held in position between the lugs by means of a pin D, which extends downward through the lugs and through the thickened end C' of the support, the lower end of said pin being screw-threaded and provided with a thumb-nut D', by means of which it is held in place. On the inner side of the corner-bracket A is a lug a', on which is pivoted to swing horizontally an arm E, the outer portion of which is formed into a screw E', and made to extend through the slot in the support C, and mounted on the screw on each side of the support is a nut e, and by means of these nuts the support C may be held in a definite position.

On the outer end of the support C is journaled the main arm F, said arm being secured at one end to the support, so that it may swing freely thereon, and the arm is provided on one side and throughout a greater portion of its length with ratchet-teeth f. It has also near the central part a slot f', in which the line-tightener is held, as described below.

Journaled on the outer end of the support C is a pulley G, which serves as a guide for the clothes-line. A pulley head H is held to slide on the arm F, the head having on the side adjacent to the ratchet-teeth parallel lugs H', between which is pivoted a pawl H<sup>2</sup>, one end h of which is bent inward, so as to engage the ratchet-teeth and the opposite end of which is bent slightly and provided with a latch h', which latch is pivoted in the end of the pawl and the length of which is such that by turning it at right angles to the pawl it may be made to press upon the ratchet-teeth, and thus prevent the pawl and head from



slipping. The pawl is held normally in engagement with the teeth by a spring  $h^2$ , which is secured between it and the body of the pulley-head.

5 On the opposite side of the pulley-head from that which carries the pawl is a bent arm  $H^3$ , which serves as a support for the pulley J, which carries the clothes-line K. A device for tightening and guiding the line is  
10 secured in the slot  $f'$  of the main arm, which device comprises a rectangular block L, as indicated by dotted lines in Fig. 3, which block slides in the slot, and secured to the block by means of a bolt  $l$  and nut  $l'$  is a de-  
15 pending arm  $L'$ , which carries a horizontal spool or guide  $L^2$ , under which the clothes-line runs, and by sliding the block in the slot  $f'$  the guide may be brought into a desired position, so as to tighten the line, as herein-  
20 after described, and, as the block is rectangular, it cannot turn in the slot  $f'$ , and the pressure comes upon the spool or guide in such a way that it will not slide the block in the slot. The roller  $L^2$  holds the line taut by pressing  
25 downward upon it, and if the line is too tight it may be removed from the roller.

The main arm F will normally hang in a perpendicular position, as indicated by dotted lines in Fig. 1; but when it is used to sup-  
30 port a line while the clothes are being put on it is held in a horizontal position by means of the following mechanism: A plate M is secured to the inner side of the window-frame, so as to align horizontally with the outer cor-  
35 ner-bracket A, and the plate has centrally thereon a boss  $M'$ , which has slots extending horizontally through it to receive, support, and guide the cross-arm N, which arm is slot-  
40 ted so that it may slide easily in the parallel slots of the boss. The plate M has also a screw  $m$ , which extends outward between the members of the slotted cross-arm N, and the screw is provided on the outer side with a thumb-nut  $m'$ , which is provided on the inner  
45 side with a washer, as shown in Fig. 3, and by tightening the nut upon the screw the washer will impinge upon the cross arm and prevent it from slipping.

The cross-arm N has journaled to the end  
50 next the window a swinging plate O, the bearing  $O'$  of which extends vertically through the cross-arm, the pin forming said bearing being screw-threaded at the top and provided with a nut  $o'$ , which may be tightened so as  
55 to hold the plate and pin in a fixed position. The outer end of the plate O is turned up to form a flange  $o$ , and the plate is adapted to support the main arm F, as shown in Fig. 1, when clothes are suspended from the line.

60 In Figs. 7, 8, and 9 I have shown a modified form of pulley-head, the head  $H^a$  having on one side the arm  $H^3$  and pulley J, as already described, but having on the opposite side a spring-pressed pin  $h^3$ , which carries at its in-  
65 ner end a block  $h^4$ , adapted to engage the teeth of the main arm.

In Figs. 10 and 11 is shown another form of

pulley-head  $H^b$ , which carries the pulley J in a manner similar to the heads already de-  
scribed, and which is mounted to slide on a  
70 main arm  $F^a$ , which is supported in the same manner as the arm F, described above, but which is slotted throughout nearly its entire length and has a perforation  $f^2$  near the ex-  
treme free end. The pulley-head  $H^b$  has a  
75 pair of rectangular lugs  $h^5$ , which are adapted to slide in the slot of the main arm, and extending through one of these lugs and through the pulley-head is a screw  $h^6$ , which is pro-  
vided on one side with a nut and which serves  
80 to hold the head in place and also forms the pivot for the pulley J. Extending through one of the lugs  $h^5$  is a spring-pressed pin  $h^7$ , which at one end is formed into a head  $h^8$   
and which at the other end carries an arm  $h^9$ ,  
85 which is bent inward at the end, so as to engage the perforation  $f^2$  of the arm and thus hold the pulley-head in place.

In Figs. 12 and 13 I have shown another  
modification of the main arm and another  
90 form of pulley-head, the arm  $F^b$  having a series of notches  $f^3$  in one side, and the pulley-head consisting, chiefly, of a U-shaped frame  $H^c$ , which is held to slide on one side of the  
arm and which is mounted on a pin  $h^{10}$ , which  
95 carries the clothes-line pulley J, and which extends through the slot in the center of the arm, and on the pin is mounted a spring-pressed button  $h^{11}$ , which is shaped to fit in the notches  
 $f^3$  and which normally prevents the pulley-  
100 head from sliding; but by pulling outward on the button it may be released from the notches and the pulley-head may be moved to any desired position.

Instead of using the screw-arm for adjust-  
105 ing the support C, the support may be slotted and provided with a notched block  $c$ , arranged in one end of the slot, as shown in Fig. 10, and a notched curved arm  $E^2$  may be pivoted  
on the lug  $a'$ , so as to extend through the slot  
110 and engage the notches on the block  $c$ . The arm may be held in engagement with the notched block by means of a pin  $c'$ , and it will thus be seen that the support C may be  
115 held in any desired position.

The support is used and operated as fol-  
lows: The line K is passed around the pulley  
J and the opposite end around a suitable pul-  
ley out-of-doors, in the ordinary way, and  
120 when clothes are to be dried upon the line the arm F is swung into a horizontal position, the support C is swung so as to make the pulley-head H align with the outdoor-pulley, and the plate of the cross-arm N is adjusted be-  
neath the main arm F, so as to support the  
125 same, the plate O being swiveled in a proper position and prevented from turning by tightening the nut  $o'$ . The main arm will thus be held in a fixed position, and it will be readily  
seen that it may be made to align with any  
130 out-of-door support. The clothes are run out on the line in the usual manner. The line is placed upon the pulley G and the main arm is dropped into a vertical position, so that the



window may be closed. The line may be  
 slackened by removing one or both members  
 of it from the pulley G, and, if desired, it may  
 be placed upon the pulley L<sup>2</sup>, and in this case  
 5 the pulley may be adjusted by means of its  
 sliding bearing, and, as the strain comes angu-  
 larly upon the bearing, the bearing will not  
 slip, which may be moved toward the free end  
 of the arm and will be held in place by the  
 10 pawl H<sup>2</sup> and the latch h'. The spring beneath  
 the pawl H<sup>2</sup> should press outward hard enough  
 to hold the pulley-head in place under ordi-  
 nary circumstances without using the latch h',  
 and then, if under the influence of moisture  
 15 the clothes-line shrinks, when the tension be-  
 comes very great the pulley-head will be  
 slipped up a distance of one or more teeth on  
 the main arm, thus preventing the line from  
 being broken. When the arm F is to be  
 20 dropped, it is raised from the plate O and the  
 plate is swung from beneath it, or the cross-  
 arm N is pushed inward, and the main arm  
 will then drop of its own weight into a per-  
 pendicular position.

25 I do not herein claim the combination, with  
 a swinging main arm pivoted at the outer  
 side of the window, of a laterally-adjustable  
 cross-arm supported on the inner side of the  
 window-frame, and a swinging plate secured  
 30 to the cross-arm and adapted to support the  
 main arm, as this construction is claimed by  
 me in another application, Serial No. 397,689,  
 filed June 27, 1891.

Having thus described my invention, I claim  
 35 as new and desire to secure by Letters Pat-  
 ent—

1. A clothes-line support comprising a slot-  
 ted support secured to the outer side of a  
 window-frame and held to swing horizontally,  
 40 an arm pivoted on the window-frame and ex-  
 tending through the support, means for se-  
 curing the arm and support in a fixed posi-  
 tion, a main arm journaled on the support  
 and adapted to swing vertically, a pulley-  
 45 head carried by the main arm, and an ad-

justable cross-arm held on the inner side of  
 the window-frame and adapted to support the  
 main arm, substantially as described.

2. In a clothes-line support, the combina-  
 tion, with the horizontally-swinging support, of 50  
 a main arm journaled thereon and provided  
 on one side with teeth, a pulley-head held to  
 slide on the arm and provided with a pawl to  
 engage the teeth, and an inside support for  
 the arm, substantially as described. 55

3. In a clothes-line support, the combina-  
 tion, with the main swinging toothed arm, of  
 a pulley-head held to slide thereon, a spring-  
 pressed pawl mounted in the head and  
 adapted to engage the teeth, and a latch piv- 60  
 oted in one end of the pawl, substantially as  
 described.

4. In a clothes-line support, the combina-  
 tion, with the swinging arm having a slot  
 therein and a pulley-head thereon, of a spool 65  
 or guide having a bearing which is held to  
 slide in the slot, substantially as set forth.

5. In a clothes-line support, the combina-  
 tion, with the swinging main arm adapted to  
 support a clothes-line, of a cross-arm secured 70  
 to the window-frame adjacent to the main  
 arm, a swinging plate mounted in the end of  
 the cross-arm and adapted to extend beneath  
 the swinging arm, and means for tightening  
 the plate in place, substantially as described. 75

6. In a clothes-line support, the combina-  
 tion, with the swinging arm adapted to sup-  
 port a line, of a plate secured to the window-  
 frame and provided with parallel horizontal  
 slots, a cross-arm held to slide in the slots of 80  
 the plate, means for tightening the arm upon  
 the plate, and a swinging plate secured to the  
 end of the cross-arm and adapted to extend  
 beneath the main arm, substantially as de-  
 scribed.

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Witnesses:

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