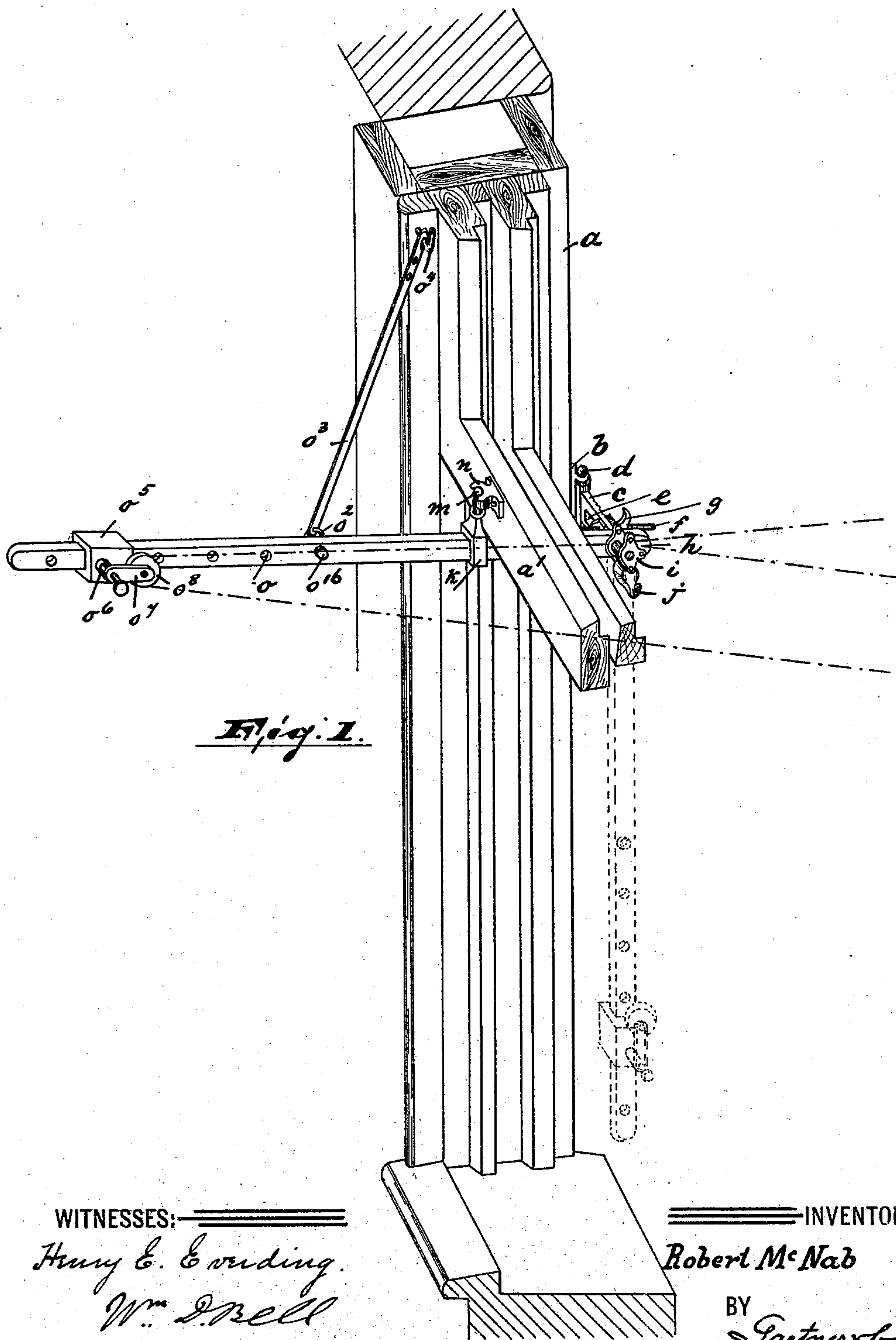


R. McNAB.

ADJUSTABLE SAFETY CLOTHES LINE SUPPORT.

No. 515,355.

Patented Feb. 27, 1894.



WITNESSES:

Henry E. Ewing.
Wm. D. Bell

INVENTOR :

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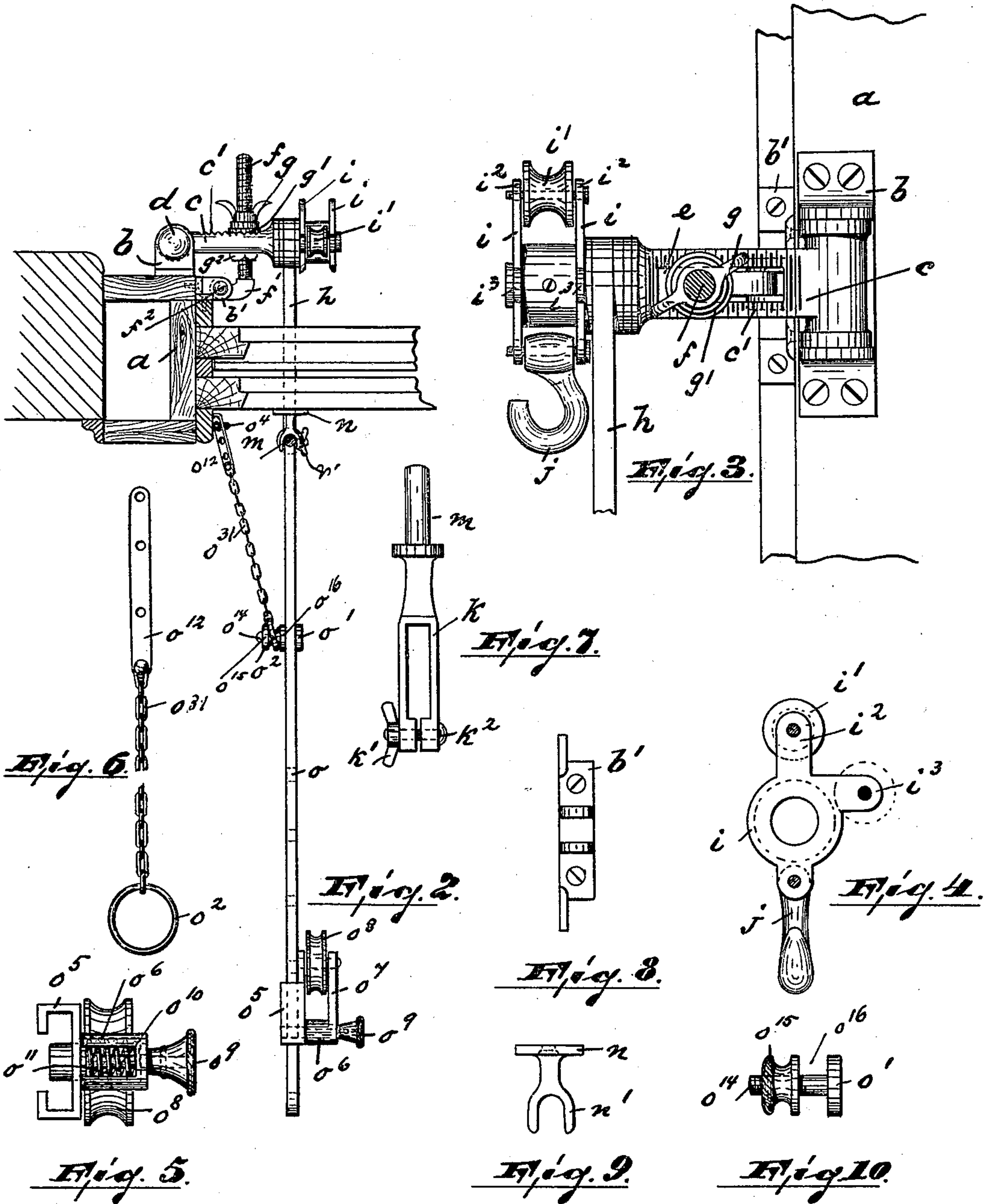
ATTORNEYS

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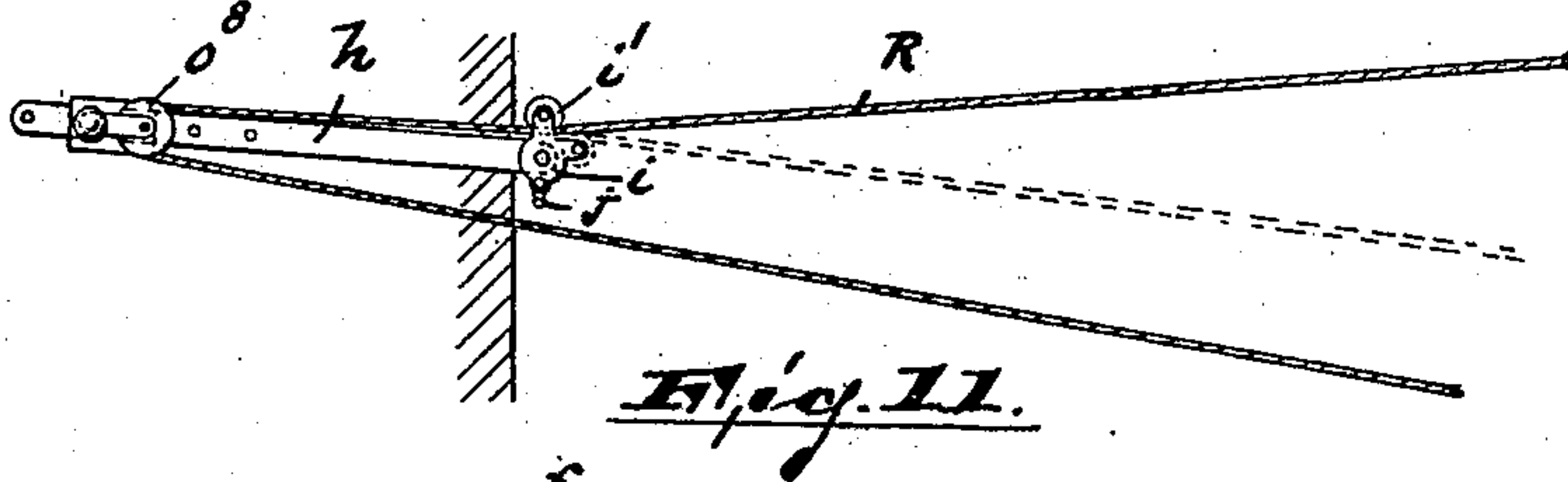


Fig. 11.

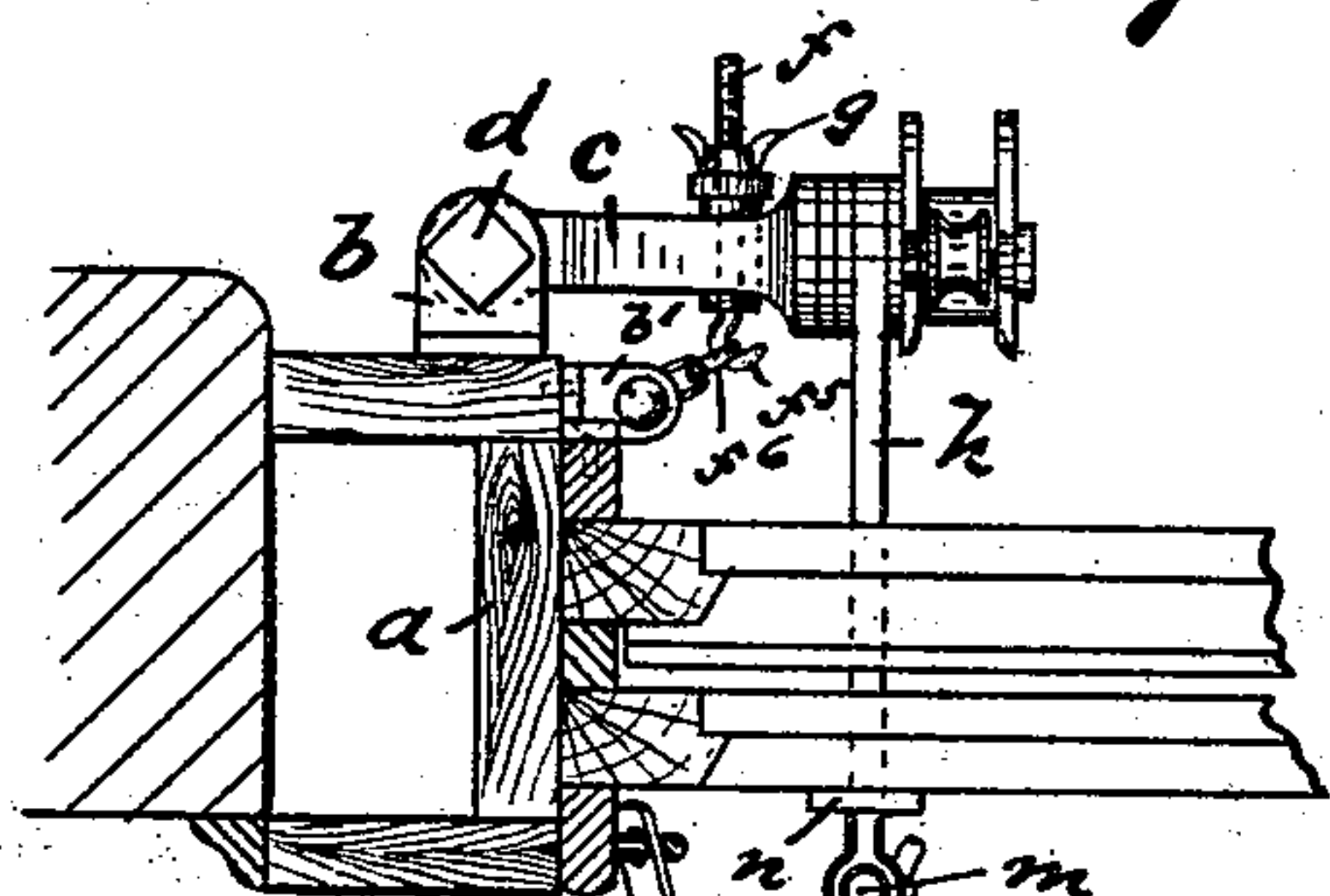


Fig. 13.

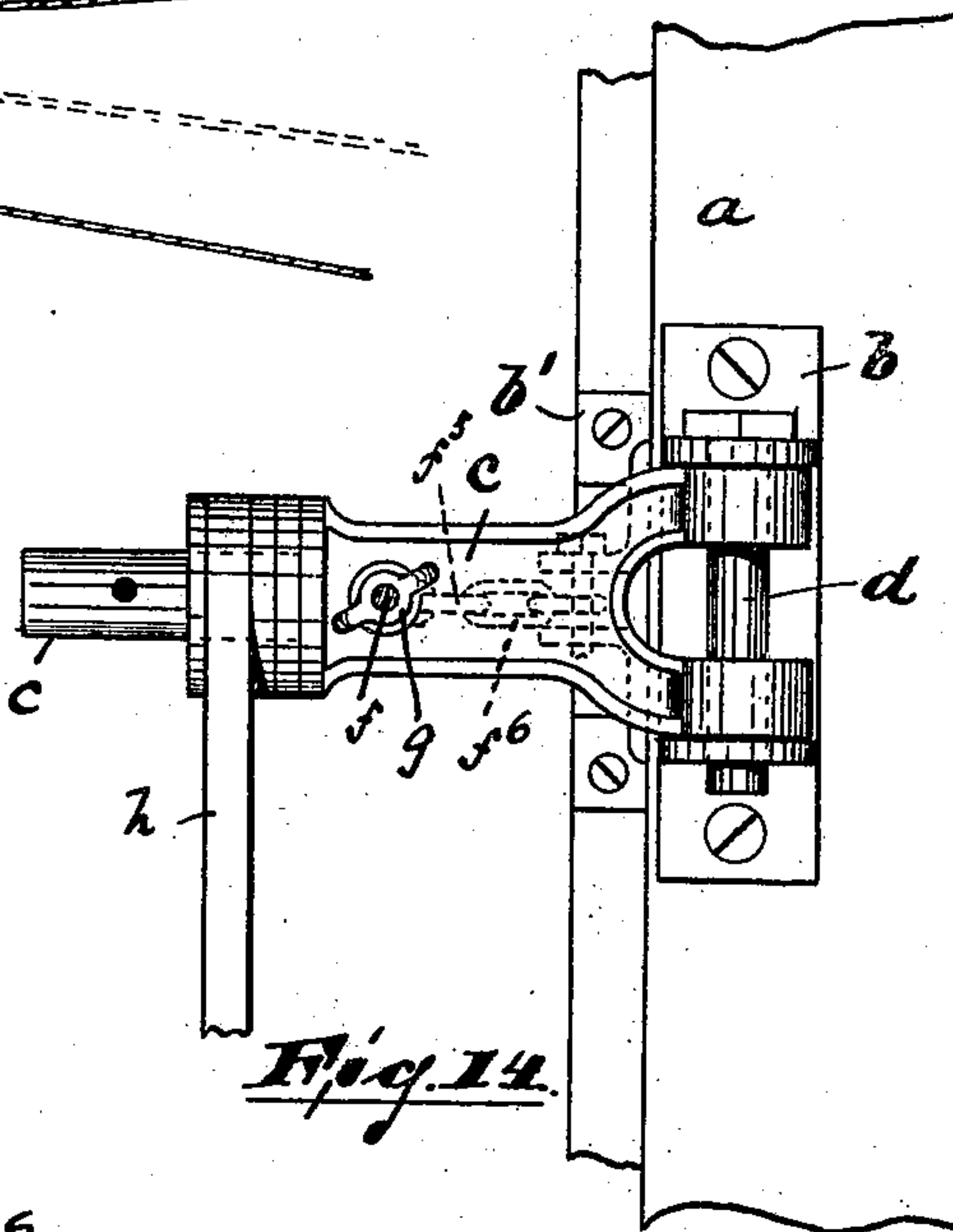


Fig. 14.

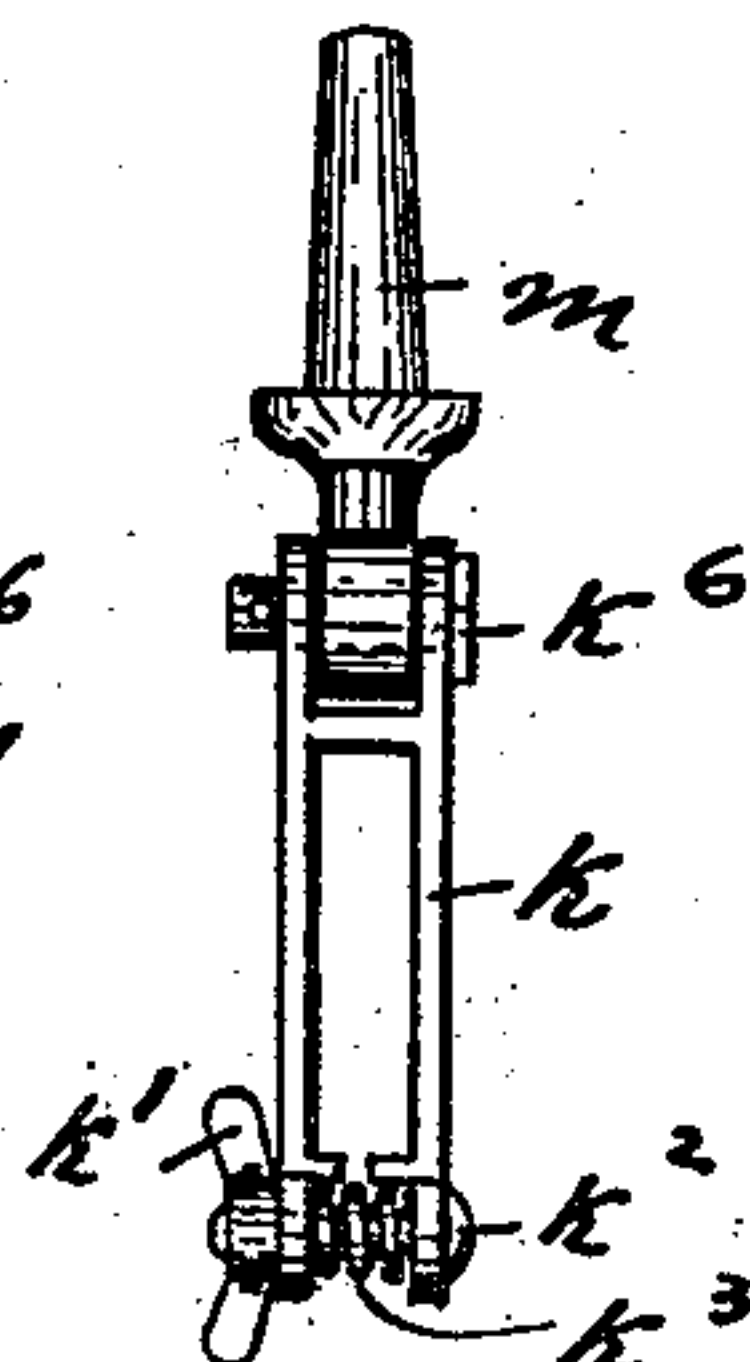


Fig. 15.

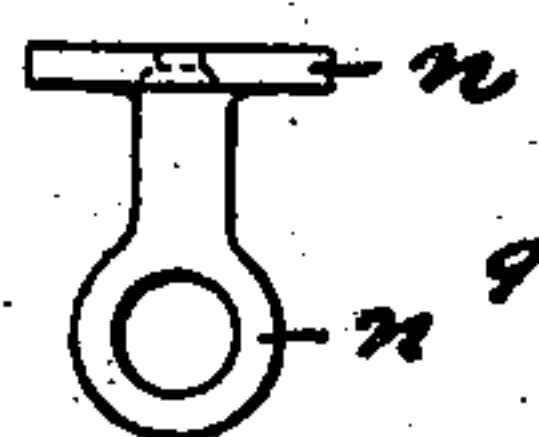


Fig. 17.

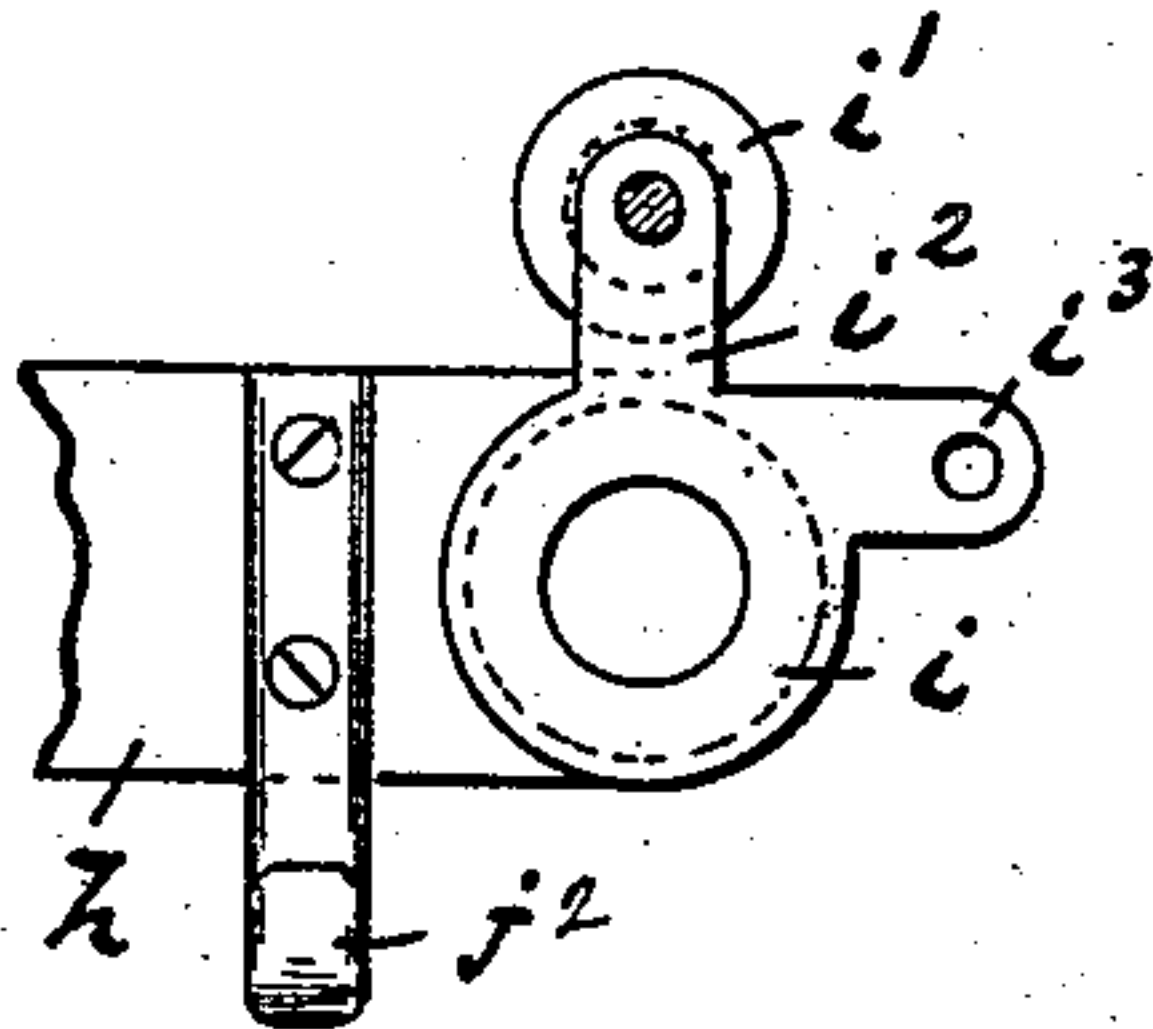


Fig. 14a.

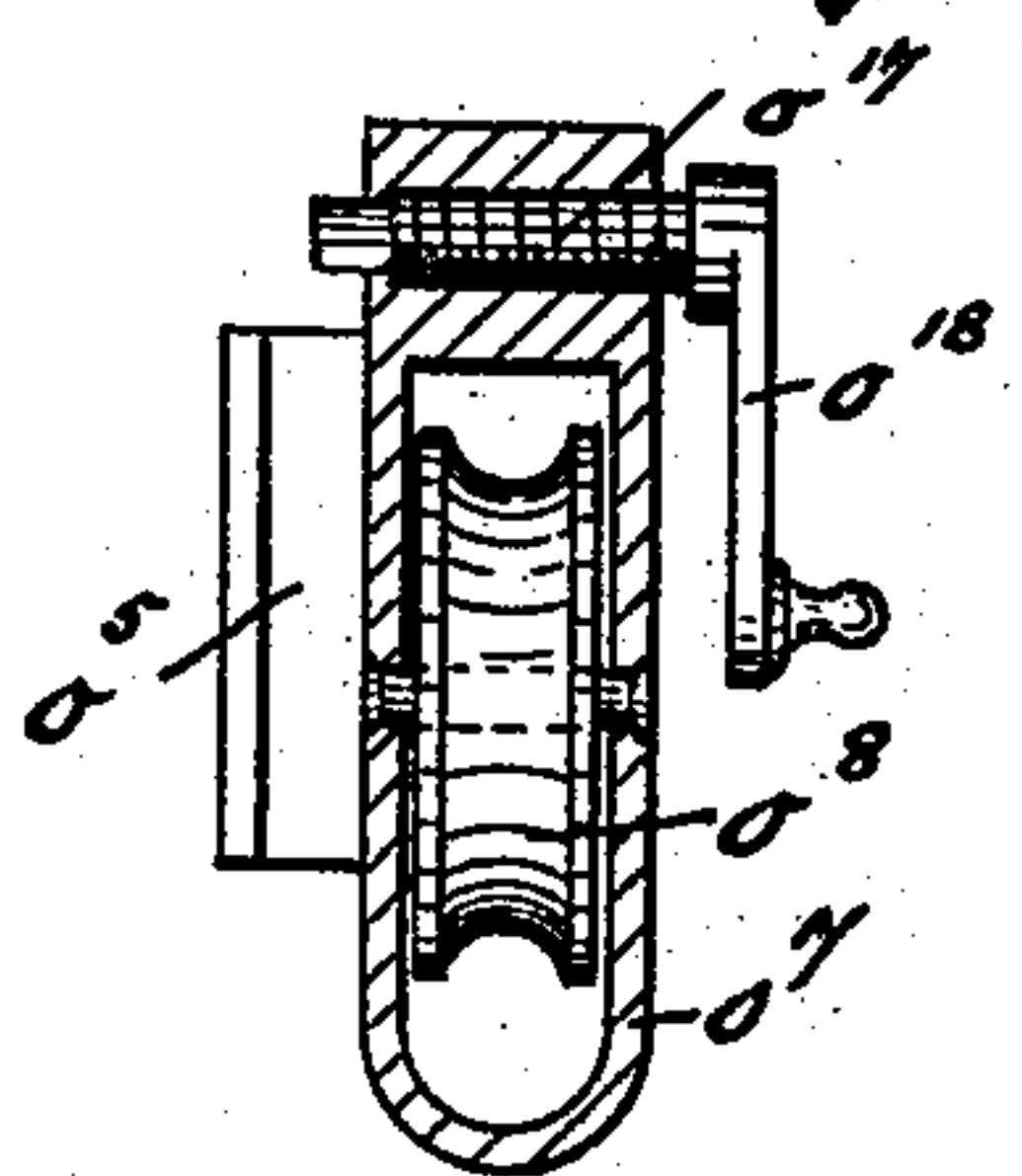


Fig. 16.

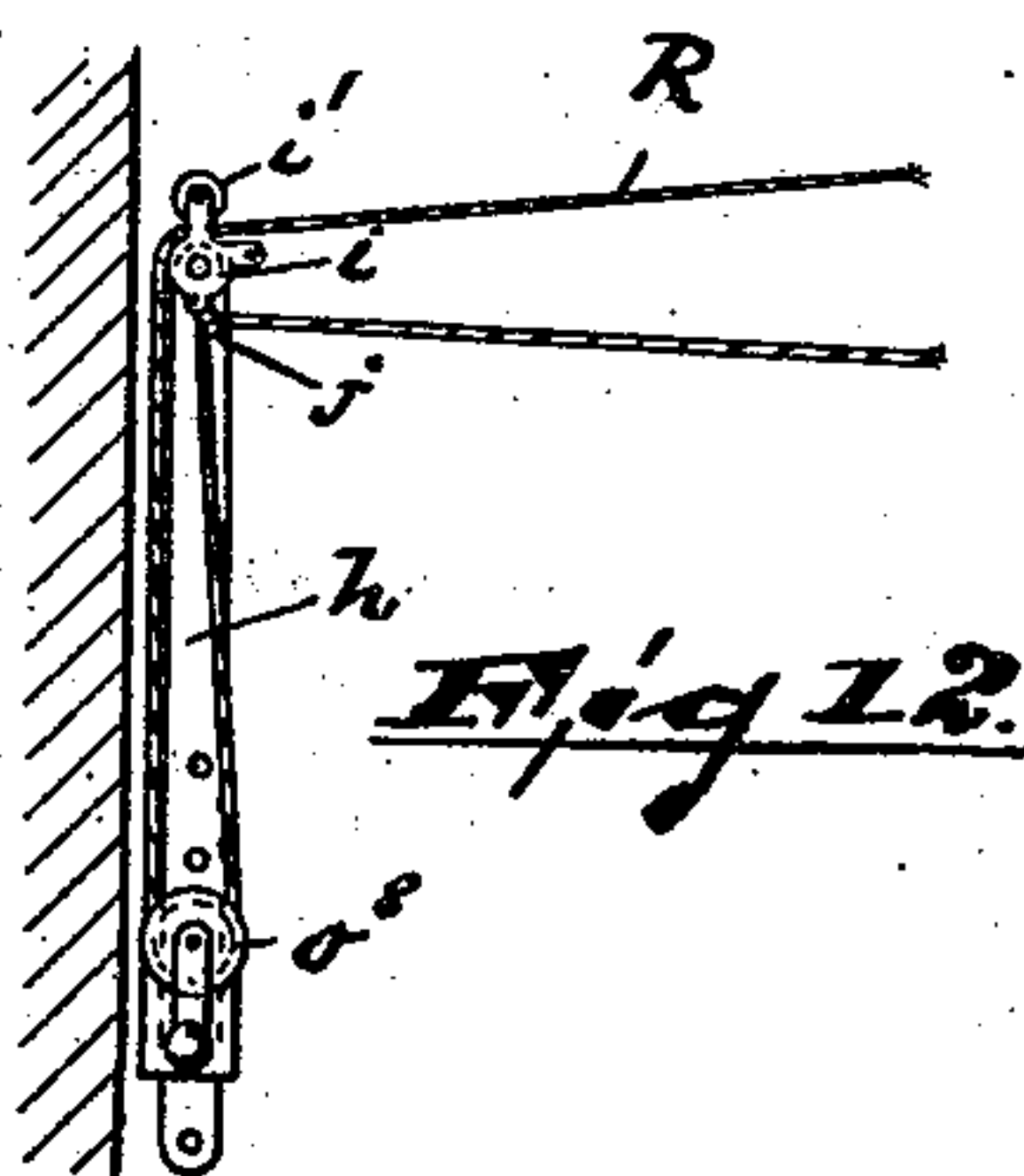


Fig. 12.

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UNITED STATES PATENT OFFICE.

ROBERT McNAB, OF PATERSON, NEW JERSEY.

ADJUSTABLE SAFETY CLOTHES-LINE SUPPORT.

SPECIFICATION forming part of Letters Patent No. 515,355, dated February 27, 1894.

Application filed May 9, 1893. Serial No. 473,511. (No model.)

To all whom it may concern:

Be it known that I, ROBERT McNAB, a citizen of the United States, residing in Paterson, county of Passaic, and State of New Jersey, have invented certain new and useful Improvements in Adjustable Safety Clothes-Line Supports; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to certain new and useful improvements in clothes line supports, particularly that class in which the adjustable safety arm, carrying the line carrying pulley, is secured outside the window and may be extended within the window into the room so that the clothes may be hung upon the line without leaning out of the window.

It consists in the arrangement and combination of parts hereinafter described and claimed.

My improvement is illustrated in the accompanying drawings in which—

Figure 1 is a perspective view of a device embodying my invention, showing the same secured to the outside of the casing of the window and the safety arm extending within the room. Fig. 2 is an enlarged top plan view of the same. Fig. 3 is an enlarged side view of the device, certain portions thereof being broken away. Fig. 4 is a side view of a bracket carrying a detachable pulley and a pivoted hook, which pulley and hook are designed to guide the clothes line and, when the arm is dropped from its elevated position to prevent it from swinging inward against the window pane. Fig. 5, is an end view of the bracket carrying the line carrying pulley and of the spring pin adapted to secure said bracket to the adjustable arm. Fig. 6 is a side view of a chain and ring adapted to hold the adjustable arm upward. Fig. 7 is an end view of the stay pin and its bracket which are adjustable on the adjustable arm. Fig. 8 is an end view of a bracket in which a threaded bolt is pivoted, which bolt is adapted to secure the arm pivoted to the outside of the window casing and prevent its swinging.

Fig. 9, is a top plan view of the bracket secured to the window sash, and adapted to receive the stay pin on the adjustable arm. Fig. 10 is a side view of the bolt and annularly grooved nut secured to the adjustable arm. Figs. 11 and 12 are diagrammatic views illustrating certain portions of the clothes line when the safety arm is respectively in use and not in use. Fig. 13 is a top plan view of a modification of the device; Fig. 14 a side view of the same certain portions thereof being broken away. Fig. 14^a is a side view of a modified form of detachable pulley bracket in which the hook is rigidly fastened to the arm near the pulley bracket. Fig. 15 is an end view of a modified form of stay pin and bracket, in which the stay pin is pivotally secured to its bracket. Fig. 16 is a top plan view, partly sectional, of a modification of the line carrying pulley bracket and of the pin securing the same to the adjustable arm, and Fig. 17 is a plan view of a modified form of the bracket secured to the window sash and designed to receive the stay pin.

In said drawings *a* represents the window casing, to the outside of which a bracket or frame *b* is secured at a height sufficient to allow the adjustable arm hereinafter described to clear (when lowered) the sill of the window. To this frame *b* a supporting arm *c* is pivoted by a pin *d*, so as to swing horizontally in said bracket *b*. This supporting arm *c* has a central recess or slot *e* and is provided on its outer face with a series of notches or teeth *c'*. Through this slot *e* extends the threaded bolt *f* terminating at one end in the elbow *f'*, which is pivoted as at *f''* to a bracket *b'*, secured to the window casing at right angles to the bracket *b* substantially as shown. (Figs. 2 and 8.) Upon this threaded bolt *f* and outside of the notched face *c'* of the arm *c* is placed a thumb nut *g* and washer *g'* and inside of the arm *c* is placed a nut *g''*, all arranged so that said arm *c* may be clamped between the washer *g'* and nut *g''* by thumb nut *g* to said bolt *f*. Pivoted near the end of the supporting arm *c* at right angles thereto and approximately parallel to the window casing *a* is the adjustable arm *h*, constituting the adjustable support for the line carrying pulley. Attached to the end of said supporting arm *c* is a bracket *i*, carrying a detach-

able pulley i' adapted to be secured within said bracket i either at i^2 or i^3 (see Figs. 3 and 4). At the lower end of said bracket i is also pivotally secured a hook j . Arranged on the adjustable arm h is a slide bracket k carrying at its upper end a stay pin m and adapted to be clamped at its lower end by means of thumb nut k' and bolt k^2 to the adjustable arm h (see Fig. 7). The stay pin m of this bracket k is adapted when the adjustable arm h is raised to enter the recess n' of a bracket n secured to the window sash a' (see Figs. 1 and 9). The adjustable arm h is also provided with a series of perforations o , one of which is adapted to receive a bolt o^{16} , which consists of a shank o^{14} , and base o' (see Fig. 10). The bolt is provided with the annularly grooved nut o^{15} . On the adjustable arm h is also placed the sliding bracket o^5 , adapted to be secured to said arm h by a spring pin o^9 , adapted to normally enter a hole or perforation o (see Figs. 1 and 5). This sliding bracket o^5 is provided with the projections or pulley bracket o^7 , within which a pulley o^8 is secured. This pulley o^8 carries the clothes line R (see Figs. 11 and 12).

The spring pin o^9 is surrounded by a case o^6 , slotted as at o^{11} , to expose the spring o^{10} , so that ice, dirt, &c., may be removed from the spring to prevent clogging, as will be manifest. (See Fig. 5.)

The arm h as shown in Fig. 1 is held in its raised position by means of a strap o^3 provided at its lower end with a ring o^2 , adapted to slip over the nut o^{15} of the bolt o^{16} , and furnished with a perforated end adapted to slip on or over a hook o^4 attached to the inside of the window casing a .

Instead of the strap o^3 I may use a chain o^{31} furnished at its upper end with a perforated plate o^{12} adapted to slip on the hook o^4 and having a ring o^2 adapted to slip over the nut o^{15} , of bolt o^{16} , as shown at Figs. 2, 6 and 13.

In Figs. 13 to 17 I have illustrated a device embodying a modified form of my invention. In this device the parts are substantially the same as those described above with the following exceptions: The bracket b' is connected to a hook shaped end f^5 of the threaded bolt f by a chain f^6 instead of as previously described through an elbow pivoted to said bracket b' . The arm c to which this threaded bolt is secured is not slotted. The sliding bracket k on the arm h has the stay pin m pivoted as at k^6 to the upper end of said bracket instead of integral therewith as heretofore described. There is also a spring k^3 placed around the bolt k^2 , all as shown in Fig. 15. The bracket n is provided with an eye n^9 (instead of a recess) to receive the pivoted stay pin m (see Figs. 13 and 17). The sliding bracket o^5 carrying the line pulley o^8 is secured in the modified form, to the adjustable arm h by a screw pin o^{17} furnished at its head with a crank o^{18} , as shown in Fig. 16. The hook j^2 is attached directly to the arm h instead of to the pulley bracket i . (Fig.

14^a.) When the pulley i' is attached to the bracket projections i^3 , the upper projections i^2 act as a guide for the rope to confine it to the surface of said pulley i' .

The operation is as follows: It is to be understood that the clothes line passes over a pulley attached to a pole in the yard or to any support outside the window of the house. After passing over this pulley the line passes into the house through the window and over the pulley o^8 secured to the end of arm h . It next passes under the pulley i' secured to the end of the arm c and from thence to the outside pulley. The clothes are hung on the lower strand of the rope, that is to say, the strand below the arm h (see Fig. 11). The desired object in a clothes line support is that the pulleys o^8 , i' and the outside pulley be arranged in the same plane. This is to allow the line to run freely and not bind on the edges of the pulleys and at the same time carries the strain of the line longitudinally with the arm. By my present invention I can align the pulleys very simply so that they will be in the same plane. The direction of the pulleys i' and o^8 is regulated by the support c and will align with the outdoor pulley by turning the arm h and support c around the pivot d in the bracket b , and then by screwing up the nuts on the bolt f the support c will be secured in a fixed position, and the alignment of the pulleys remain permanent. The bracket n may be secured by screws or otherwise to the bottom rail of the window sash so that it will align with the pulleys i' and o^8 and to accommodate the opening or recess in said bracket n , the sliding bracket k may be moved backward or forward on the arm h until the stay pin m engages the bracket n as above described. The arm h , when the clothes are to be attached to the rope R , is elevated, turning about the support c until it reaches its highest position being stopped when the stay pin m enters the bracket n on the window sash. The arm h is held in its elevated position by slipping the ring o^2 of the strap o^3 or chain o^{31} over the nut o^{15} , the other end of said strap being held by the hook o^4 secured to the window casing a . When the lower strand is removed from the hook j the line is ready for use. Should the rope stretch or sag the pulley o^8 and its bracket may be moved along the arm h until the rope is sufficiently taut. When the clothes are all hung upon the rope or are removed therefrom, the lower strand of the rope should be placed over the hook j and the arm dropped into a vertical position so that the window may be closed if desired. When not in use the pulley bracket is slid up one or more holes on the arm h and this will instantly slacken the rope and prevent it from breaking in wet weather. While in its normal vertical position it is unnecessary to fasten the free end of the arm h as the contracting strain of the rope over the hook and pulleys is such that the arm cannot swing and

strike the window but will remain stationary. When the line extends upward from the window to the outer support the detachable wheel should be placed in the upper projections so that the line will pass under it in order that it may not come in contact with the window sash. Where the line extends downward from the window to the outer support the wheel should be placed between the lower projections so that the line will run over it and the upper projection serve as a guide to keep the line in its place, it will thus be seen that in either case the wheel helps the line to run freely and that it acts as a guide to keep the rope where it belongs and helps to align the rope with the outside pulley.

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

1. The combination of a bracket secured to the outside of the window casing, a supporting arm pivoted in said bracket and adapted to swing horizontally therein, a main arm carrying the line carrying pulley and pivoted to the end of said supporting arm, a pulley bracket secured to the free end of said supporting arm and provided with separate lugs designed to receive a detachable pulley wheel, with a hook pivoted at the lower end of said pulley bracket and depending therefrom, all arranged so that said pulley wheel may be detached from one series of lugs and placed in the other to align the line carrying pulley of the main arm with the outside pulley, and said hook is adapted to receive the clothes line when the main arm is dropped to prevent the arm from being thrown inward by the line against the window, substantially as described.

2. The combination of a main arm adapted to support an adjustable clothes line pulley, a bracket secured to the outside of the window casing, a supporting arm pivoted in said bracket and adapted to swing horizontally therein, said main arm being pivotally secured to the end of said supporting arm, with a stay pin and bracket adjustably secured to said main arm, and sliding thereon, a bolt and nut secured to said main arm and with a hook secured to the inside of the window casing, a flexible support extending from said hook to said bolt and adapted to hold said main arm in an elevated position and with a bracket secured to the window sash and adapted to receive the stay pin to steady the free end of

the main arm from side movement, substantially as described.

3. The combination of the bracket *b*, a supporting arm *c* pivoted to swing horizontally therein and having an outer notched face *c'*, a bracket *b'* arranged at right angles to said bracket *b*, a threaded bolt *f* pivoted to said bracket *b'* and means for clamping said supporting arm *c* to said bolt *f*, a perforated arm *h* pivoted to the free end of said supporting arm *c* and adapted to swing at right angles thereto, a sliding bracket *o*⁵ carrying the line pulley *o*⁸ sliding on said arm *h* and adapted to be secured thereto by a pin entering the perforations of said arm *h*, a nut *o*¹⁵ secured to said arm, a sliding bracket *k* adapted to be secured on said arm *h* and carrying a stay pin *m*, a bracket *n* secured to the inside window sash and adapted to receive the stay pin *m*, and a strap for securing said arm *h*, through nut *o*¹⁵, in its horizontal position, to the inside of a window casing, substantially as described.

4. The combination of the bracket *b*, a supporting arm *c* pivoted to swing horizontally therein and having an outer notched face *c'*, a bracket *b'* arranged at right angles to the bracket *b*, a threaded bolt *f* pivoted to said bracket *b'* and means for clamping said bolt *f* to said supporting arm *c*, a perforated arm *h* pivoted to the free end of said supporting arm *c* and adapted to swing at right angles thereto, a sliding bracket *o*⁵ carrying the line carrying pulley *o*⁸, sliding on said arm *h* and adapted to be secured thereto by a pin, carried by said bracket, which enters the perforations of said arm *h*, a nut *o*¹⁵, secured to said arm *h*, a sliding bracket *k* adapted to be secured on said arm *h* and carrying the stay pin *m*, a bracket *n* secured to the window sash and adapted to receive the stay pin *m*, with a strap for securing said arm *h*, through nut, *o*¹⁵, to the window casing in a horizontal position and a pulley bracket *i* carrying a detachable pulley *i'* and hook *j*, secured to the end of the supporting arm *c*, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this the 26th day of April, 1893.

ROBT. McNAB.

Witnesses:

WM. D. BELL,
HENRY E. EVERDING.