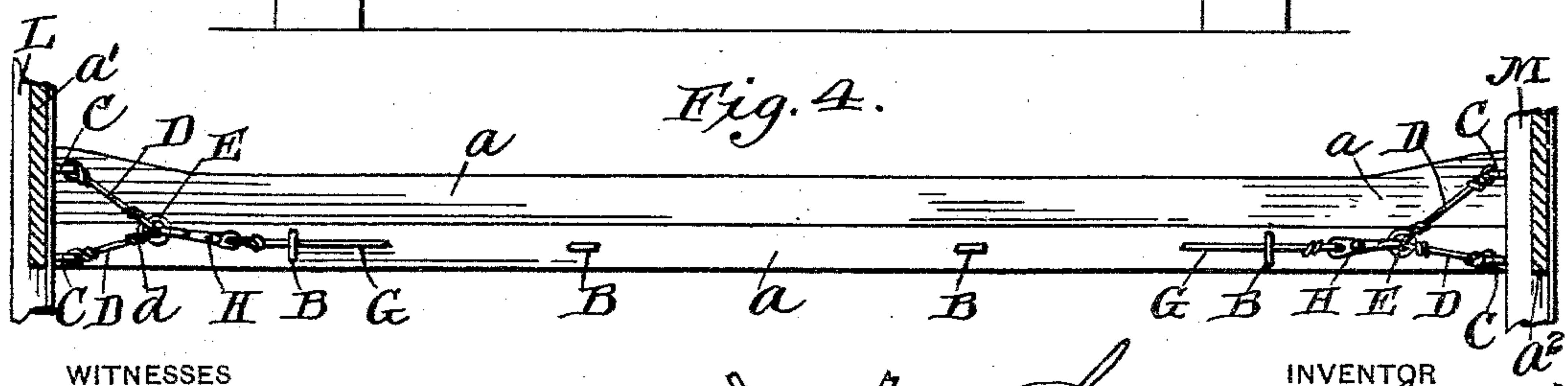
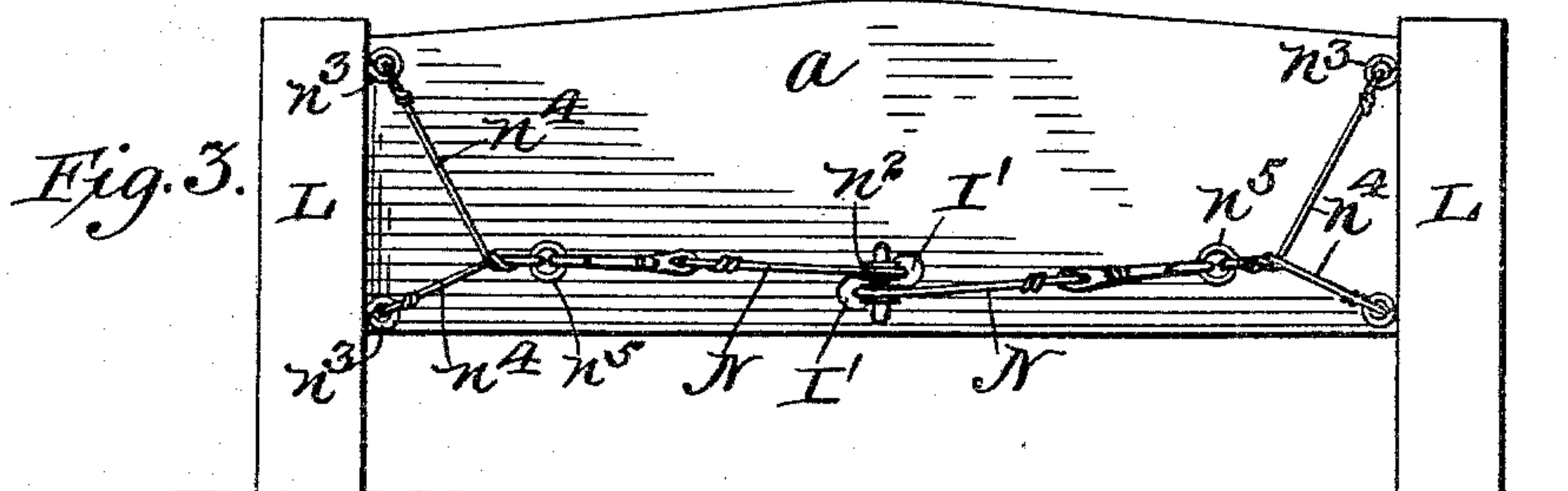
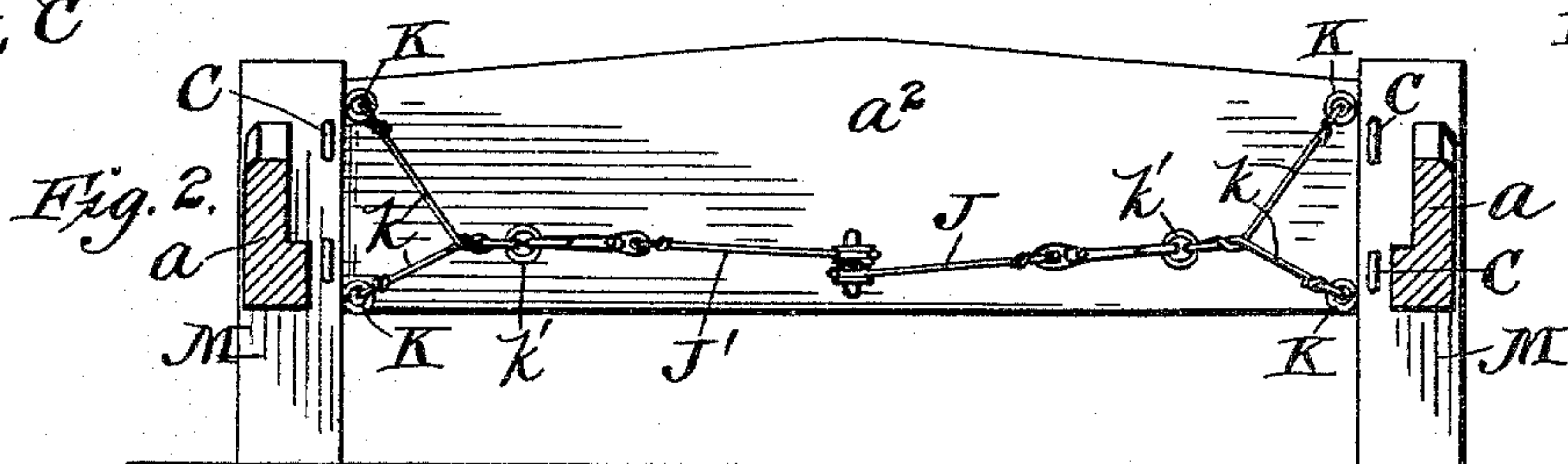
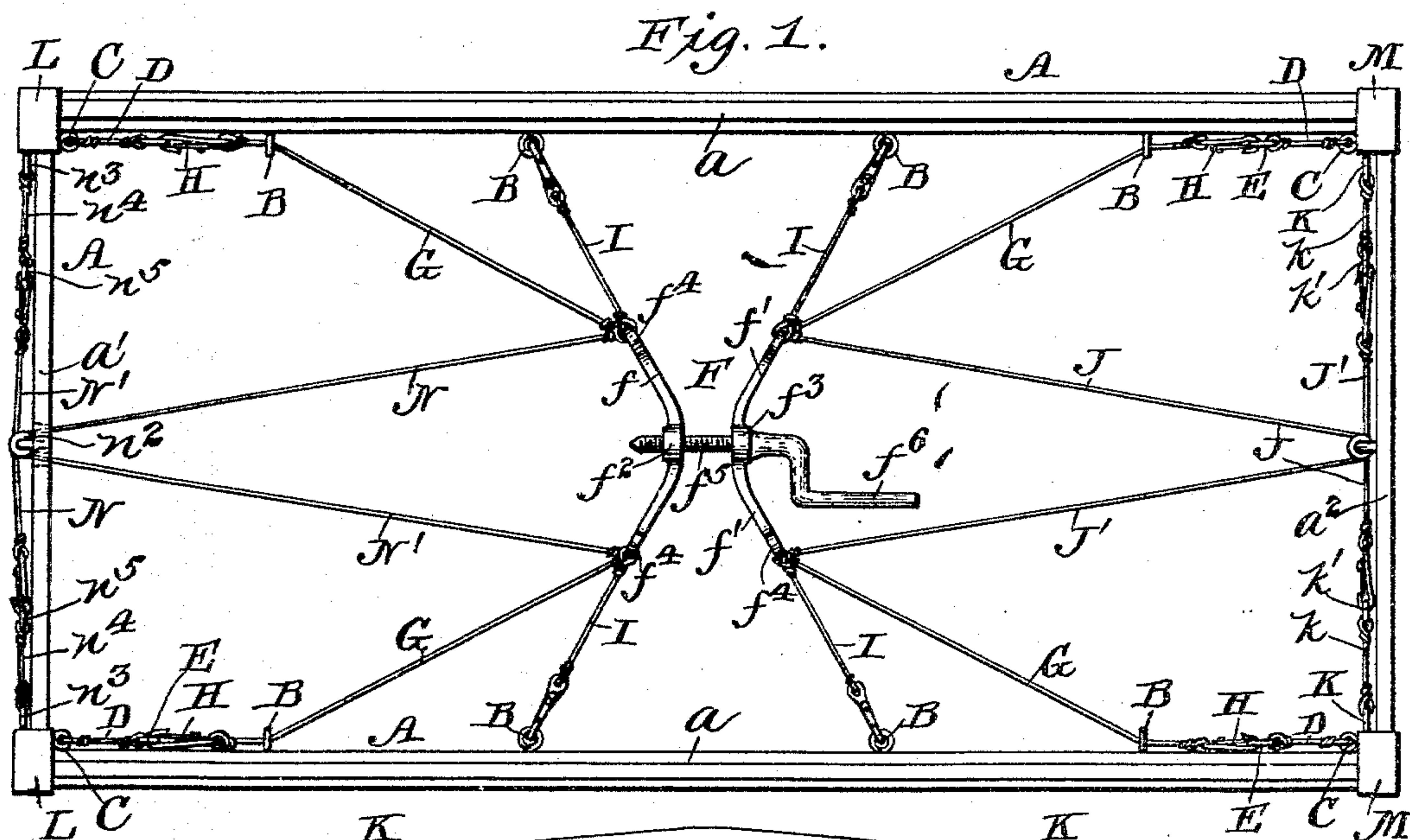


(No Model.)

T. H. SHEPHERD.
BRACE AND CLAMP FOR BEDSTEADS.

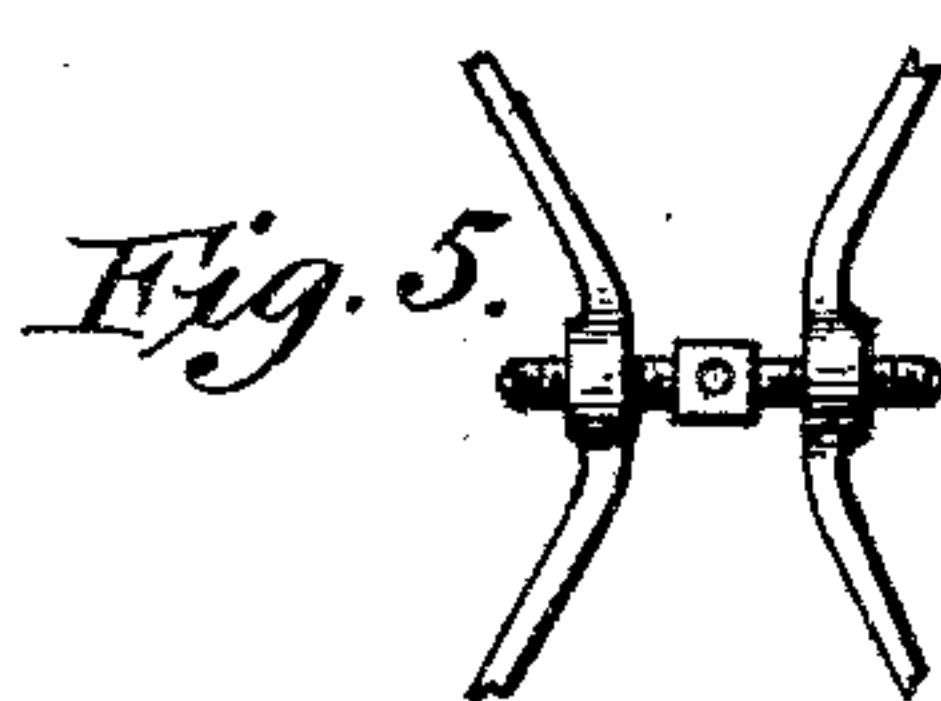
No. 545,383.

Patented Aug. 27, 1895.



WITNESSES

Geverance.
W. Harry Muzzy.



INVENTOR

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by his Attys
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UNITED STATES PATENT OFFICE.

THOMAS H. SHEPHERD, OF KELLIS' STORE, MISSISSIPPI.

BRACE AND CLAMP FOR BEDSTEADS.

SPECIFICATION forming part of Letters Patent No. 545,383, dated August 27, 1895.

Application filed April 16, 1895. Serial No. 545,914. (No model.)

To all whom it may concern:

Be it known that I, THOMAS H. SHEPHERD, a citizen of the United States, residing at Kellis' Store, in the county of Kemper and State of Mississippi, have invented certain new and useful Improvements in Braces and Clamps for Bedsteads &c.; 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.

My invention relates to braces and clamps for bedsteads, cradles, gates, fences, tables, and any frames having four sides which it is desired to hold rigidly together against strains, and it has for its object to produce an effective brace which will consist of but few parts, and those very simple in construction and operation, and the invention consists of the parts and combination of parts hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a top plan view of a bedstead having my improved brace and clamp applied to the same. Fig. 2 is a transverse section through the bedstead, showing the foot portion in elevation. Fig. 3 is a front elevation of the outer face of the head portion. Fig. 4 is a detail front elevation of the inner face of one of the side rails of the bedstead with my invention applied to the same, and Fig. 5 is a top plan view of another form of clamp.

A in the drawings represents a bedstead of ordinary construction, having side rails a a and head and foot portions a' a^2 , respectively, and F represents a clamp. Screw-eyes B B, preferably four in number, are secured on the inner face of the respective side rails, as shown, and screw-eyes C C are secured in the head and foot posts L and M, respectively, above and below the locks which secure the side rails to the said posts. Short wires D D are secured in the eyes C C and are formed at their outer ends with loops d d , which are united together by a ring E. Wires G are connected to the outer ends of the clamp and passed through the end screw-eyes on the side rails and provided at their outer ends with snap-hooks H, which engage the rings E.

The clamp F consists of two outwardly-flaring bars or arms f f' , which are provided with central apertures f^2 f^3 , and at their outer ends

with loops f^4 f^4 . A screw-threaded crank-shaft f^5 extends through the central apertures f^2 f^3 , and is provided with a suitable handle f^6 . The central aperture f^3 has a plane bore, while the bore of the aperture f^2 is screw-threaded. It is obvious that by revolving the handle the rods or arms will be drawn toward or moved away from each other, according to the direction in which the crank-shaft is revolved, and that the wires connected to the arms of the clamp will be accordingly drawn taut or slackened. Wires I I are connected to the end loops of the clamp and the outer ends of the wires are provided at their outer ends with snap-hooks, which engage the intermediate screw-eyes on the side rails. Wires J J' are also secured to the outer looped ends of the arm f of the clamp and are passed around a double sheave secured centrally of the width of the inner face of the foot-board, the wire J passing around the sheave in one direction and provided at its outer end with a snap-hook, and the wire J' passing around a sheave in an opposite direction, and also provided at its outer end with a snap-hook. Screw-eyes K K are secured in the foot-posts M M, to which are connected short wires k k , said wires being united at their outer ends by rings k' k' , said rings being engaged by the snap-hooks on the ends of the wires J J'. Wires N N' are connected to the outer ends of the arm f' of the clamp and are passed through apertures II, provided in the head of the bed about centrally of its width, and are passed over a double sheave n^2 , secured on the outer face of the head intermediate of the side apertures, the wire n passing around the sheave in one direction and provided at its outer end with a snap-hook, and the wire n' passed around the sheave in the opposite direction, and also provided at its outer end with a snap-hook. Screw-eyes n^3 are secured on the inner faces of the head-posts, to which a short wires n^4 are connected, the wires being joined at their outer ends by rings n^5 , which are engaged by the snap-hooks on the ends of the wires n n' .

From the foregoing description it will be seen that the wires J J' and the wires N N' draw the head and foot posts toward each other laterally in a parallel direction at points above and below the fastenings which unite

the side rails to the posts, and also have a tendency to draw the head and foot boards toward each other; that the wires G draw the foot board and posts toward the head board and posts at points above and below the fastenings in an approximately parallel direction, and that the wires H draw the side rails toward each other at points along their length. It will be observed that by constructing the clamp in the manner I have and providing it with an operating handle that a person can tighten the bedstead by hand without the necessity of using a wrench or other tool for operating the same, which is a very desirable feature of my invention. By the use of snap-hooks the wires can be very conveniently applied to the rings when placing my device on a bedstead and can be conveniently taken off when it is desired to remove the brace or replace a broken wire; but I do not limit my invention to the use of such snap-hooks, as the ends of the wires might be passed through the rings and held in place by twisting, but it would not be so convenient and desirable a construction as the snap-hooks.

I have shown and described a double sheave located on the foot and head boards; but it is obvious that any suitable guiding device might be employed. I have also described screw-eyes, as they are the most convenient, but staples might be employed.

I have shown my invention applied to a bedstead, but, as stated heretofore, it can be conveniently applied on a gate, fence, or any frame having four sides which it is desired to have firmly held together.

In Fig. 5 I have shown another style of clamp. This clamp is in the form of a turn-buckle, and consists of a rod having a right-hand screw-thread on one of its ends and a left-hand screw-thread on its other end, and two outwardly-flaring arms having a central passage through which the rod passes. The central portion of the rod is made square, so that it can be firmly grasped by a wrench and turned to operate the arms inward or outward. The square portion may also be provided with a passage in which a bar may be inserted for turning the same. Cords or wires are attached to the outer ends of the arm, and the sides of a rectangular frame, to which the other ends of the cords are secured, can be drawn together by operating the rod. It is obvious that this clamp, as well as the other form of clamp shown and described, can be applied to the head board or foot board of a bedstead as well as in the center of the bedstead.

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

1. The combination with a four-sided frame, of a centrally arranged adjusting clamp, two wires connected to the clamp, one of said wires passed around a guiding device located

on the foot board about centrally of its width and attached to one of the foot posts at points above and below the rail fastening; two other wires connected to the clamp, one of said wires passed through a guiding device located on the head board about centrally of its width and connected to one of the head posts above and below the rail fastening and the other wire passed through the guiding device and connected to the other head post above and below the rail fastening; two wires connected to the clamp and passed through guiding devices located on the side rails and connected to the foot posts at points above and below the rail fastening and two wires connected to the clamp and passed through guiding devices on the side rails and connected to the head posts at points above and below the rail fastening; and two wires connected to the clamp and secured at their outer ends to one of the side rails, and two other wires connected to the clamp and secured at their ends to the other side rail, substantially as described.

2. The combination with a four-sided frame, of a centrally arranged adjusting clamp, wires connected to the respective ends of said clamp and passing first to the foot and head boards and then to the corner posts, and wires also connected to said clamp and passing first to the sides and then to the corner posts; the construction being such that the frame is bound firmly together in both lateral and longitudinal directions, substantially as described.

3. In a bedstead clamp and brace, the combination of a centrally arranged adjusting clamp, two wires connected to the clamp, one of said wires passed through a guiding device located on the foot board and connected to one of the foot posts in a parallel lateral direction and the other wire passed through the guiding device and secured to the other foot post in a parallel lateral direction; two wires connected to the clamp each of which is passed through guides on the respective side rails and attached to the foot posts in a longitudinal parallel direction; two wires connected to the clamp, one of said wires passed through a guiding device on the head board and connected to one of the head posts in a lateral parallel direction, and the other wire passed through the guiding device and connected to the other head post in a parallel lateral direction; two wires connected to the clamp and pass respectively through guides on the side rails and are connected to the head posts in a parallel longitudinal direction, and two sets of rails connected to the clamp and secured at their outer ends to the side rails, substantially as described.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

THOS. H. SHEPHERD.

Witnesses:

Z. O. BELL,
C. H. HULL.