

No. 778,539.

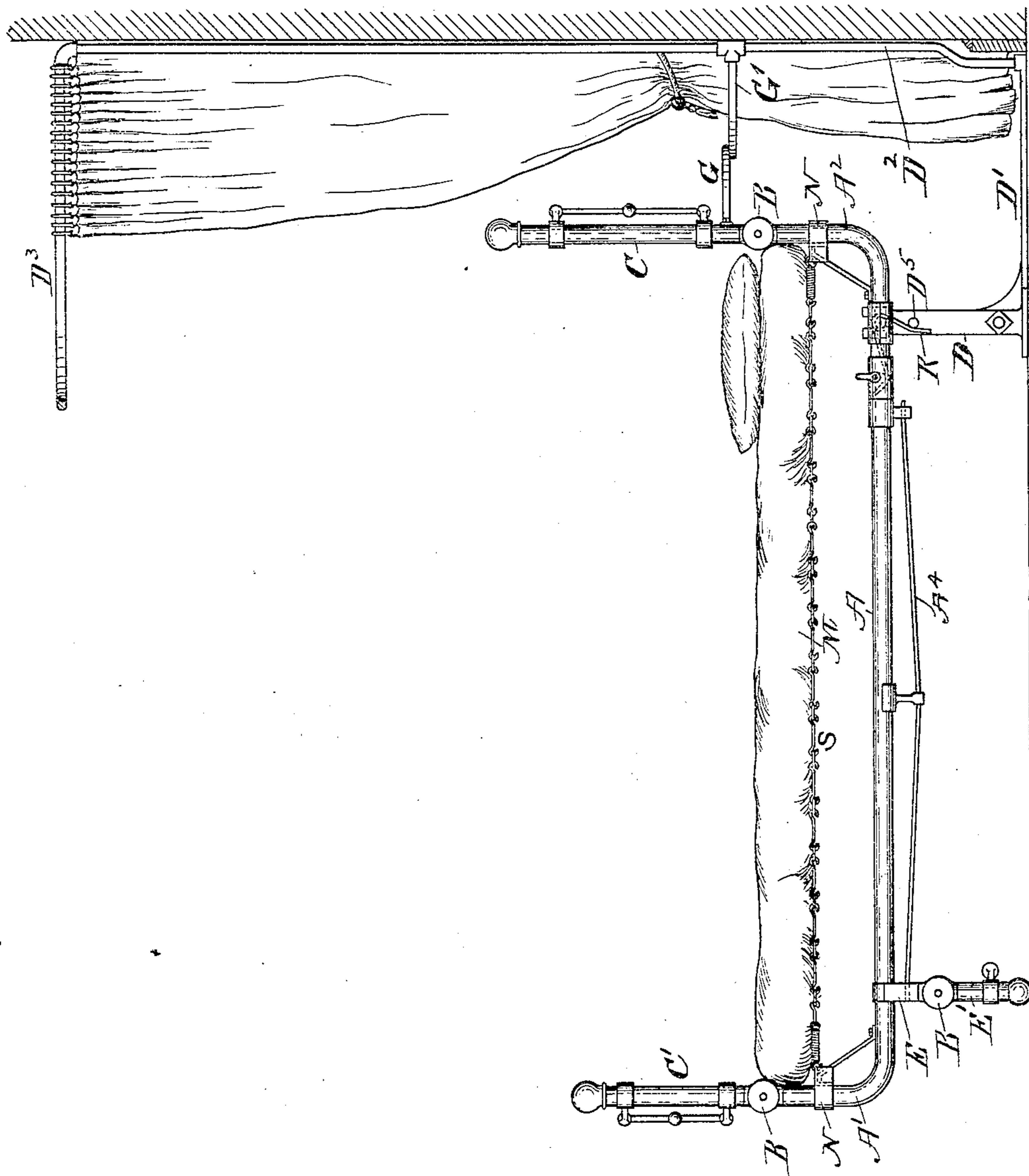
PATENTED DEC. 27, 1904.

C. M. HAMILTON.

FOLDING BED.

APPLICATION FILED MAY 2, 1904.

3 SHEETS—SHEET 1.



WITNESSES.

John Brewster,
William L. Parry

INVENTOR_

Clayton M. Hamilton
By Frank G. Parker atty.

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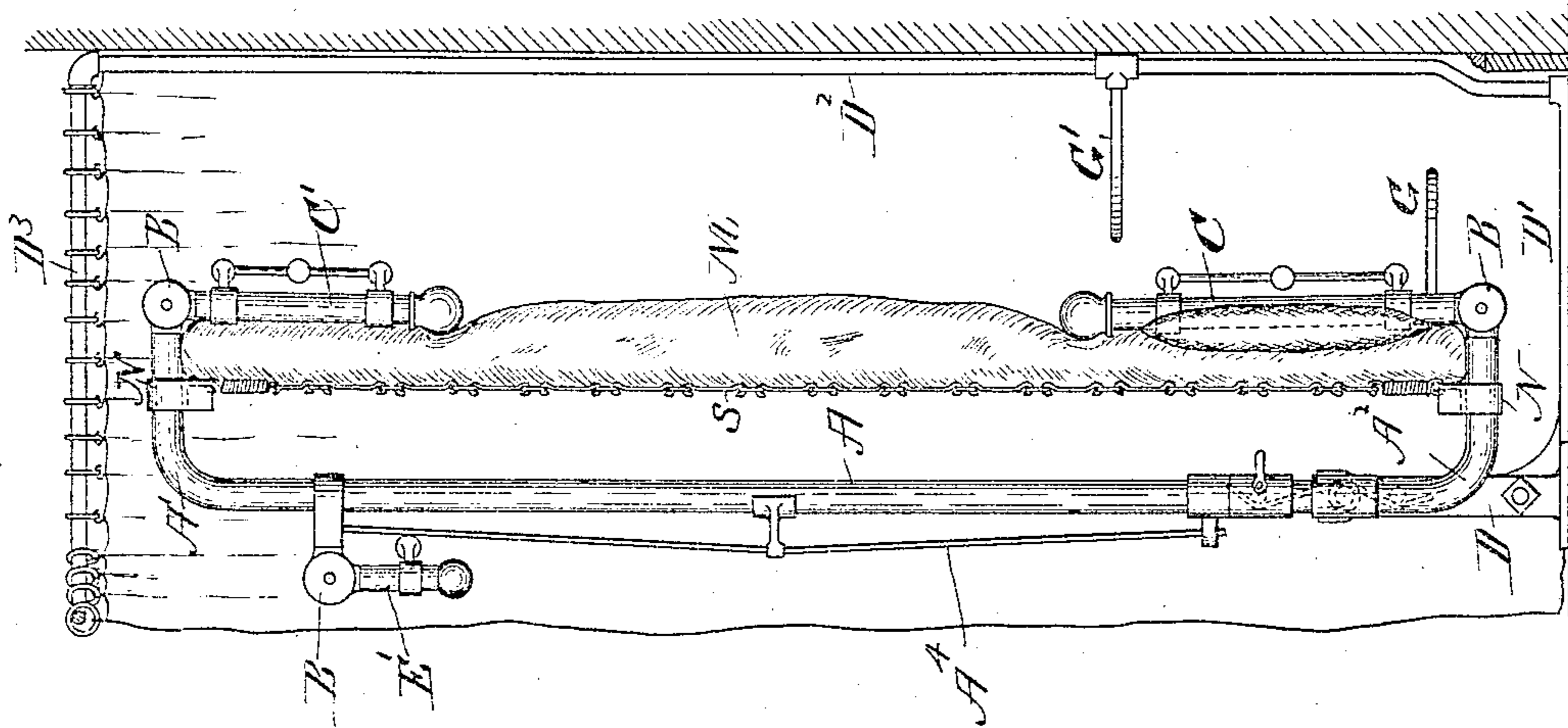
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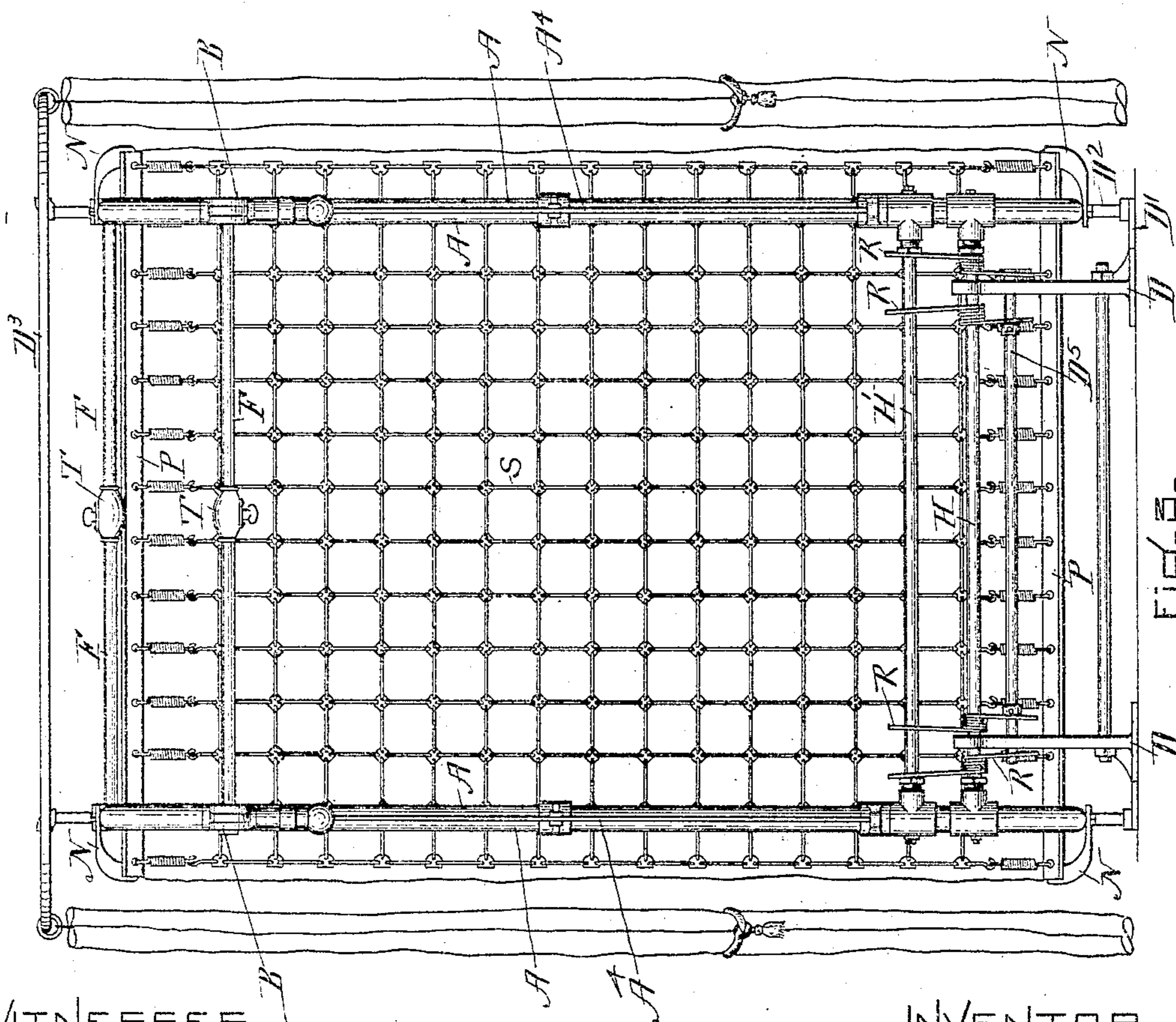
FOLDING BED.

APPLICATION FILED MAY 2, 1904.

3 SHEETS—SHEET 2.



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WITNESSES.

John Buckler.
William L. Parry

INVENTOR-

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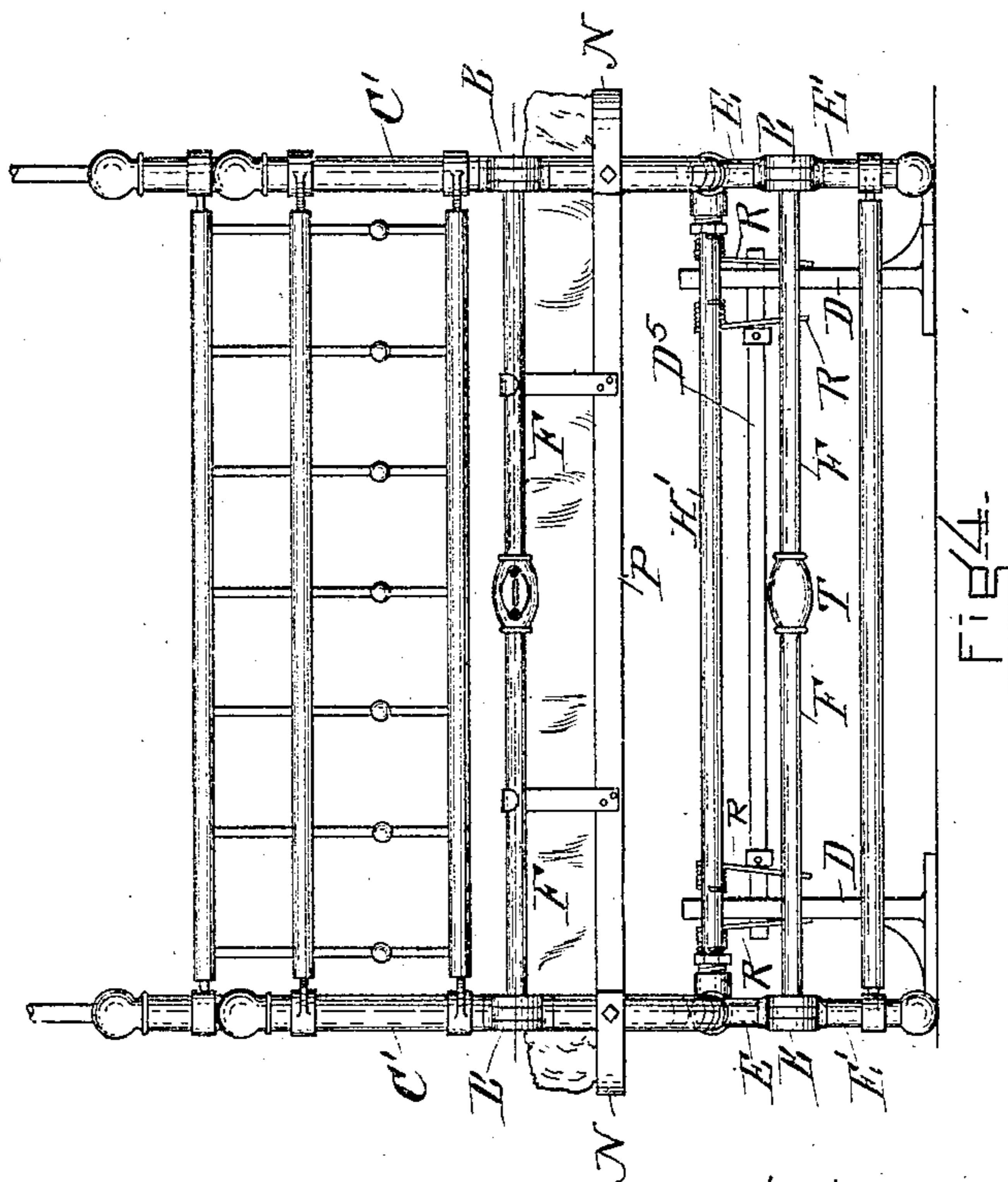
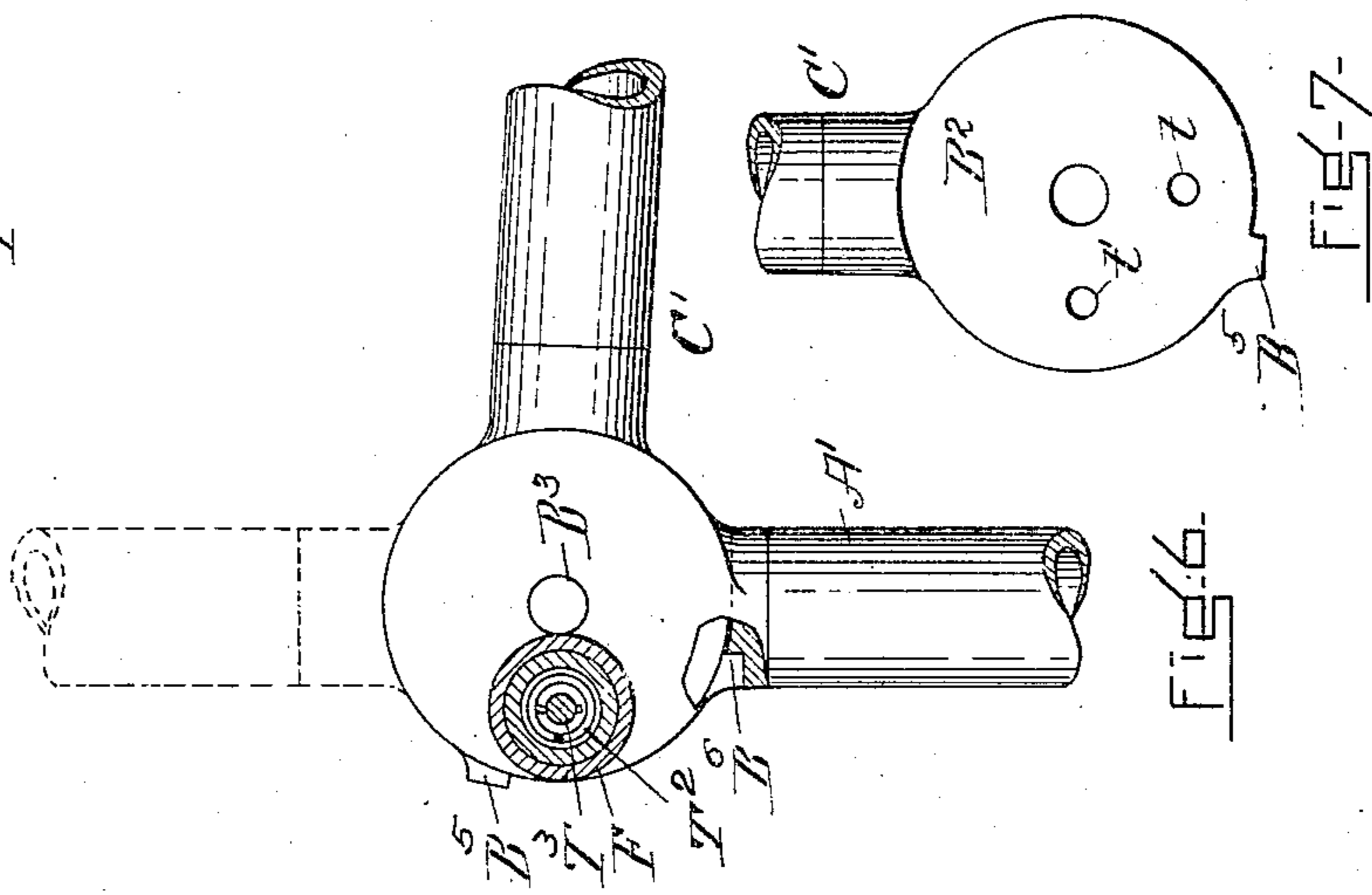
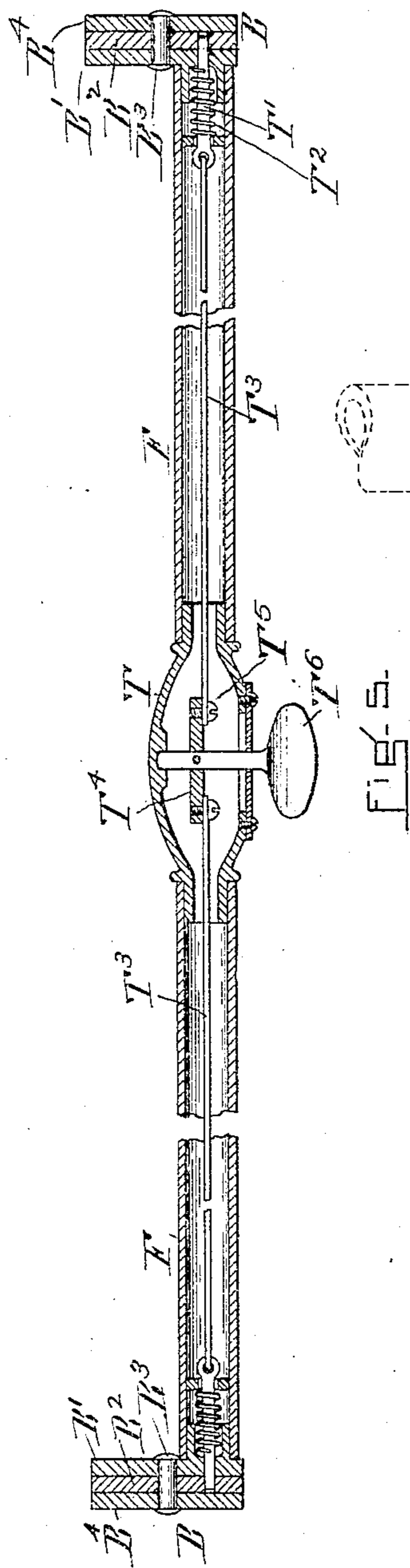
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C. M. HAMILTON.

FOLDING BED.

APPLICATION FILED MAY 2, 1904.

3 SHEETS—SHEET 3.



WITNESSES.

John Ruelker,
William L. Perry

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UNITED STATES PATENT OFFICE.

CLAYTON M. HAMILTON, OF BOSTON, MASSACHUSETTS.

FOLDING BED.

SPECIFICATION forming part of Letters Patent No. 778,539, dated December 27, 1904.

Application filed May 2, 1904. Serial No. 206,067.

To all whom it may concern:

Be it known that I, CLAYTON M. HAMILTON, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Folding Beds, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to that class of folding beds that are so constructed as to admit of the head and foot boards being folded over onto the mattress and then to turn the entire bed up against the wall of the room; and it consists in the construction and combination of parts, which may be best understood by reference to the specification, as illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of one of the beds standing in its normal position. Fig. 2 is a side elevation of the bed as it appears when turned up. Fig. 3 is an elevation showing the under side of the bed as it appears when turned up. Fig. 4 is an elevation showing the foot end of the bed as it appears when in its normal position. Fig. 5 shows in longitudinal section details of the joint-locking device; Figs. 6 and 7, details of joint.

The side bars or rails A A of bedstead are preferably made of tubing and are turned upward at the ends A' A², as shown in Fig. 2. The headboard C and the footboard C' are pivotally joined to the ends of the side rail A A by joints B, the details of which are shown in Figs. 5, 6, and 7. The folding legs E' at the foot of the bed are joined to their bracket-pieces E (see Fig. 1) by joint B, in all respects like the joint illustrated in Figs. 5, 6, and 7. The joints B are in pairs—that is, the headboard C has a pair, the footboard C has a pair, and the foot-legs E' have a pair—and each pair of said joints are simultaneously operated by a device like the one shown in longitudinal section in Fig. 5, which I will now describe. This device consists of a tube F F, having a hollow center piece T. At each end of this tube a joint B is connected. The joint consists of two outside pieces B' B⁴, which are attached to the part A' (see also Fig. 1) for the footboard, or to A² for the headboard, or to the brackets E for the foot-legs. The above-

mentioned pieces B' B⁴, Fig. 5, constitute the outside members of the joint and embrace the center piece B². All the parts are held together by the pivot-bolt B³. The center pieces B² are connected, respectively, to the headboard-posts C C, the footboard-posts C' C', and to the foot-legs E' E'. To hold the said posts and legs in position, I have a locking device consisting of a sliding bolt T', Fig. 5, which is constructed to pass through a hole made in the joint-piece B and into holes t t', made for it in the center joint-piece B². When the sliding bolt T' enters the hole t', Fig. 7, then the post C is locked in its upright position, as indicated by dotted lines, Fig. 6, and in full lines in Figs. 1 and 4. When the sliding bolt T' is in the hole t, then the post C is in its "turned-down" position, as indicated in Figs. 2 and 6. A spiral spring T² serves to throw the sliding bolt T' inward or to its locking position. To withdraw the sliding bolts T' from their locking positions, I have rods T³ within the tubes F. These rods are connected at one end to the sliding bolt and at the other end to the tumbler T⁴ by screws T⁵, so that by turning the tumbler T⁴ by the handle T⁶ the sliding bolts T' may be withdrawn and the joints B unlocked. To prevent the posts or legs from being turned past the normal vertical line, a projection B⁵ is made on the joint-piece B², which will engage with the stop B⁶. (See Fig. 6.)

The head part of the bedstead is supported by fixed standards D D, Figs. 1 and 3. These standards form a part of the fixed framework D' D² D³, to which the curtain is connected. The bedstead is pivoted and supported in part upon these standards D D.

H, Fig. 3, is a cross-rod which forms a part of the bedstead-frame and serves as a pivot, turning in the standards D, for the bed to turn upon when raised or lowered.

An arm G' (see Figs. 1 and 2) projects from the upright D² and serves to act as a stop for the arm G, which projects from the head part of the bed. This device prevents the bed from being turned up accidentally or inadvertently, as it cannot be turned up unless the headboard is first unlocked at the joint B, so as to

admit of turning it (the headboard) down, as shown in Fig. 2.

The weight of the bed and bedstead is balanced, or nearly so, by the springs R R, Fig. 3, which are coiled about the cross-bar H, and each have arms, one of which rests upon the fixed cross-bar D⁵ as a buttress and the other upon the cross-arm H', attached to the frame of the bedstead. The tendency of these springs R R is to lift the bed and bedstead.

By turning the head and foot boards down, as shown in Fig. 2, and locking them they serve to hold the bedding in place when the bedstead is turned up, as in Fig. 2.

The mattress-support S is attached to the cross-bars P P, which support it by the ends, as shown in Fig. 1. The ends of the side rails A are bent to form the uprights A' A², and the cross-bars P P, which are preferably made of angle-iron, are attached to them, as shown in Fig. 1, so that the mattress M is held suspended at such a distance above the side rails A that no amount of weight upon the said mattress will force it down to the said side rails. Thus I have the result that is obtained with a hammock.

To strengthen the side rails and to prevent them from bending from the strain caused by the weight on the mattress transmitted to the upright A' A² by the mattress-spring S acting upon the angle-iron bars P, I attach a truss A⁴, as shown in Fig. 1. A piece N (see Fig. 3) is attached to each corner of the bedstead to cover the ends of the bars P P, and

thus prevent accidents to persons coming in contact with the said ends.

I claim—

1. In a folding bed, locking-joints, acting as pivotal connections between the fixed parts and the folding part, and consisting of two outside disks attached to the fixed parts, a central disk placed between the said outside disks, and attached to a folding part, a bolt holding the said disks together and acting as a pivot; a locking-bolt constructed to lock the said central disk; and means for operating said locking-bolts, substantially as and for the purpose set forth.

2. In a folding bed, locking-joints, consisting of outside disks attached to the fixed parts, a central disk placed between said outside disks and attached to a folding part, a bolt holding the said disks together and acting as a pivot; a locking-bolt constructed to lock the said central disk; a spring constructed to throw the said locking-bolt into its locking position; a rod adapted to withdraw said locking-bolt and means for operating said rod substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 29th day of April, A. D. 1904.

CLAYTON M. HAMILTON.

Witnesses:

FRANK G. PARKER,
JOHN BUCKLER.