

(No Model.)

G. Q. SEAMAN.
TIME ALARM BED.

No. 516,614.

Patented Mar. 13, 1894.

Fig: 1.

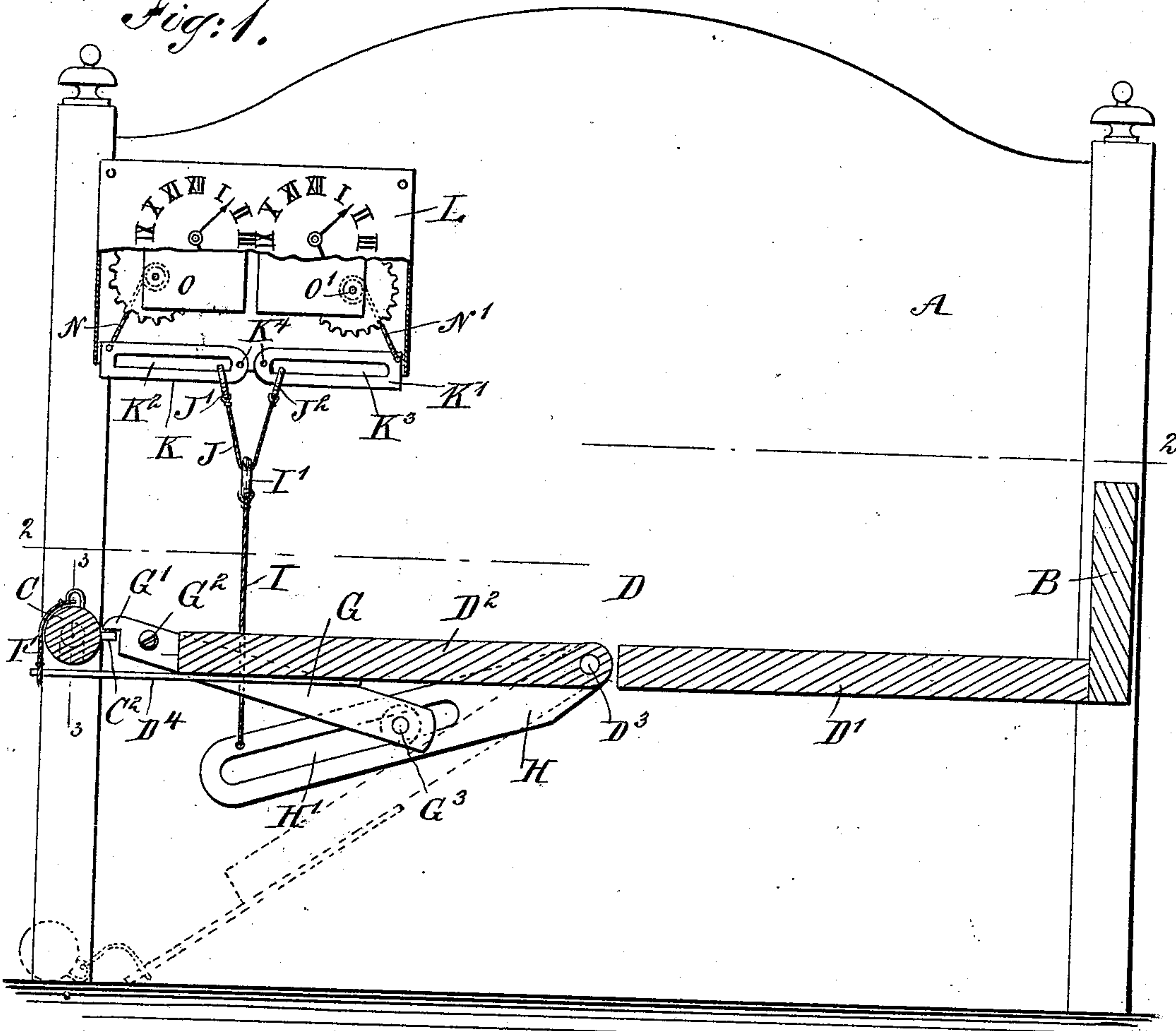
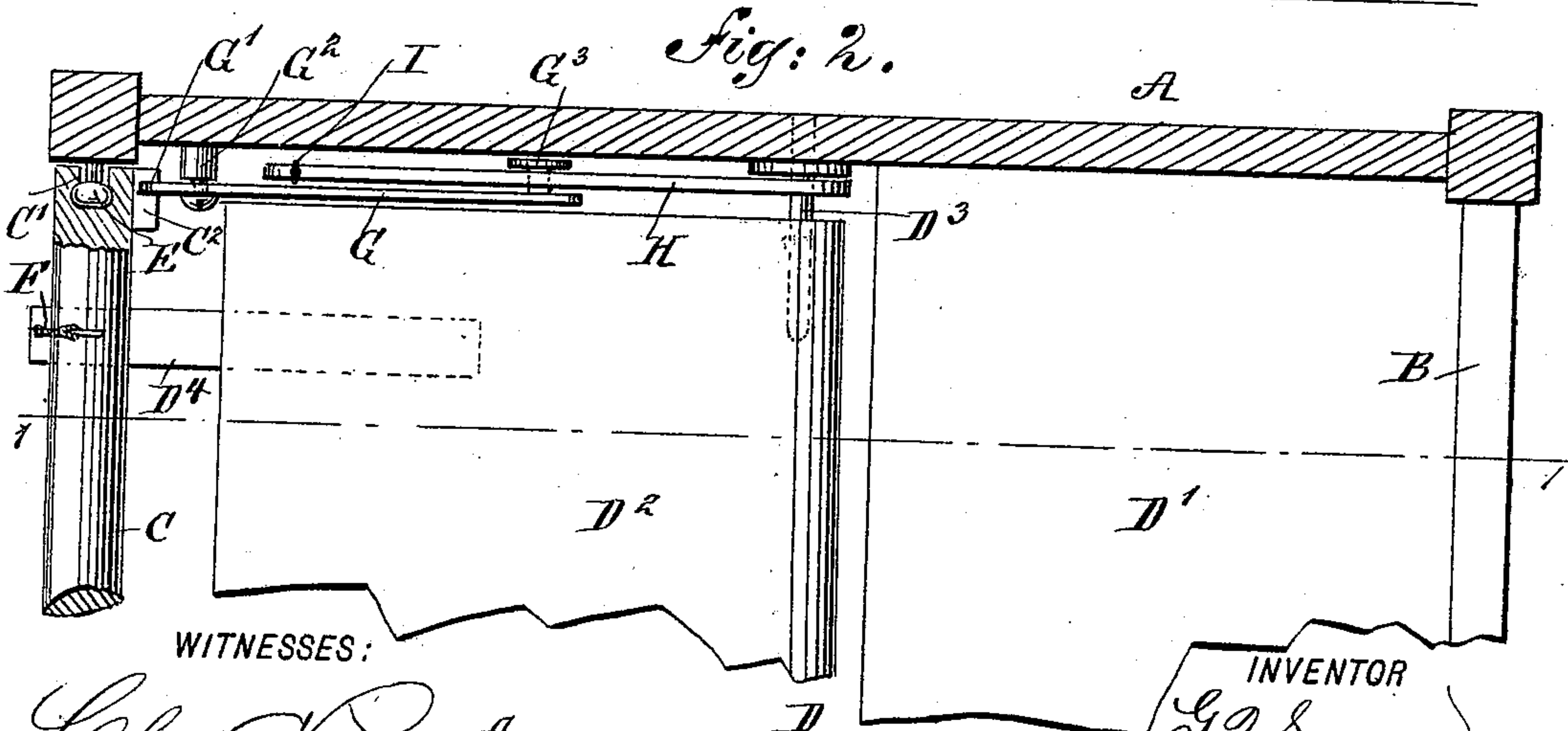


Fig: 2.



WITNESSES:

Chas. Nida.
C. Sedgwick

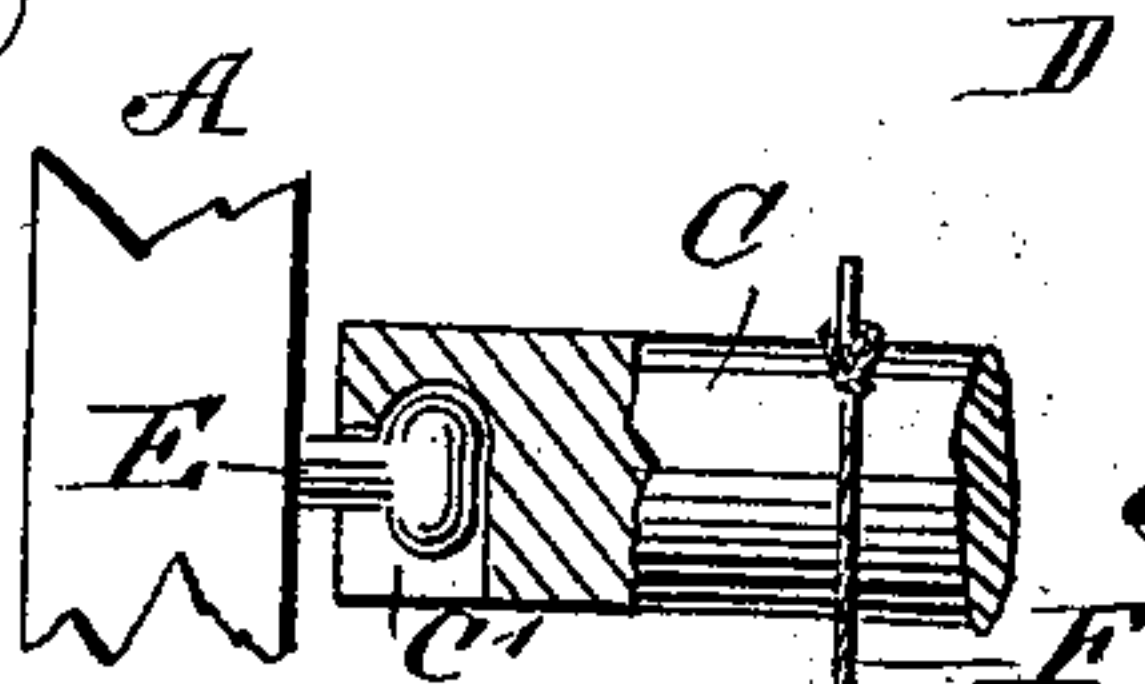


Fig: 3.

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TIME-ALARM BED.

SPECIFICATION forming part of Letters Patent No. 516,614, dated March 13, 1894.

Application filed August 22, 1893. Serial No. 483,740. (No model.)

To all whom it may concern:

Be it known that I, GEORGE Q. SEAMAN, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Time-Alarm Bed, of which the following is a full, clear, and exact description.

The invention relates to time alarm beds, such as shown and described in the Letters Patent of the United States, No. 479,307, granted to me on the date of July 19, 1892.

The object of the present invention is to provide a new and improved still alarm bed, which is simple and durable in construction and arranged to cause the occupant to roll out of the bed at a predetermined time.

The invention consists of a pivoted bed bottom, connected at its free end by ropes with a drum removably journaled in the ends of bed, the said drum forming a side for the bed.

The invention also consists of certain parts and details and combinations of the same, as will be hereinafter described and then pointed out in the claims.

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 views.

Figure 1 is a cross section of the improvement as arranged for a double bed, on the line 1—1 of Fig. 2. Fig. 2 is a sectional plan view of the same on the line 2—2 of Fig. 1; and Fig. 3 is a sectional side elevation of part of the drum and its support.

The bedstead is provided with the usual head A, connected by the sides B and C with the foot, the side B being fixed, while the side C is made in the form of a drum and arranged to drop out of its supports in the head and foot, as hereinafter more fully described. The bottom D of the bedstead, when arranged for a double bed, is made of the fixed part D' and the swinging part D² hinged at its inner end at D³ to the head and foot, near the middle thereof, as illustrated in the drawings.

When the improvement is applied to a single bedstead, then the entire bottom D is hinged near the side B, so that the hinged portion forms the complete bottom for the bed. The hinged bottom part D² extends with its free end to within a short distance of the side C, as plainly shown in the drawings. The side C is provided at its ends with re-

cesses C', adapted to engage pivot pins E secured in the head A and foot of the bed the said recesses being arranged in such a manner that when the side C is in a normal position, as illustrated in the drawings, then the side C is supported on the pivot pins, and when the side C makes a half revolution it automatically drops from the said pivot pins E, as the said recesses C' extend to the bottom of the side C, as shown in Fig. 3.

On the side C and near each end thereof, is secured a rope or chain F, extending around part of the said side to connect at its lower end with an arm D⁴ attached to the bed bottom part D². On the end of the side C next to the head A is arranged a lug C² engaged by the hook end G' of a lever G fulcrumed at G² to the head A of the bedstead. The inner end of the said lever G is provided with a pin G³ engaging a longitudinally extending slot H' formed in an arm H fulcrumed loosely on the pivot D³ for the bottom D². The free end of the arm H is connected with an upwardly-extending rope or chain I, carrying at its upper end a ring I', through which passes a second rope J, provided at its ends with rings J' and J². The rings J' and J² engage longitudinally-extending slots K² and K³ respectively of the arms K and K' respectively, pivoted at K⁴ to the casing of a double clock L of any approved construction and attached preferably to the head A of the bedstead, as shown in Fig. 1. The free ends of the pivoted arms K and K' are connected by chains N and N' respectively, with drums O and O' respectively, forming part of the double clock and adapted to be actuated by the same at a predetermined time. The mechanism for releasing the drums O and O' at the same time, is of the construction usually found in ordinary alarm clocks, so that a further description of the same is not deemed necessary.

The operation is as follows:—When the several parts are in the position illustrated in Fig. 1, then the hinged bed bottom part D² extends horizontally, as the rope F is wound on the drum side C, and the latter is locked in place by the hook G' engaging the lug C². The free end of the lever G engages, with its pin G³, the inner end of the slot H' of the arm H, which latter is held in nearly a horizontal

position by the rope I supported on the rope J, engaging with its rings the now horizontally extending pivoted arms K and K', held in this position by the chains N and N' being wound up on the clock drums O and O'. Now, when either of the clocks, or both, indicate the time on which the mechanism is to operate, then the drums O and O' are released, whereby the chains N and N' unwind and permit the arms K and K' to swing downward, so that the rings J and J' slide toward the free end of the said arms, thus permitting the rope I to drop and the arm H to swing downward. The movement of the latter causes the lever G to swing downward at the end carrying the pin G³, as the latter is carried along by the said arm H. The hook end G' of the said lever G disengages, by this swinging movement of the lever, the lug C² so that the drum side C is unlocked and is free to revolve on its pins E, the weight of the occupant on the bottom D² causing a rapid turning of the drum and unwinding of the ropes F, until the said drum side has made one-half revolution when it will drop from its supporting pivot pins E.

It will be seen that when the drum side C is released and commences to turn, the bed bottom part D² commences to swing downward, and when finally the drum side C drops from the pins E, then the bottom part D² will swing completely downward into the position shown in dotted lines in Fig. 1, that is, until the arms D⁴ rest upon the floor. The occupant of the bed bottom part D² will roll down the inclined bottom part and be thus awakened without disturbing the occupant on the fixed bed bottom part D'.

I prefer to make a clock L having double drums, so that in case one fails, the other will act to accomplish the result as above described, that is, to trip the lever G so as to release the drum side C. It is, however, understood that a single clock directly connected by one arm K with the ring I' will fully answer the purpose.

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

1. A still time alarm bed, comprising a piv-

oted bed bottom, a drum removably journaled in the ends of the bedstead and forming a side for the bedstead, the said drum being connected with the free end of the said bed bottom, and a locking mechanism, substantially as described, for holding the said drum side in place, as set forth.

2. A still time alarm bed, comprising a pivoted bed bottom, a drum removably journaled in the ends of the bedstead and forming a side for the same, the said drum being connected with the free end of the said bed bottom, a lever for locking the said drum in place, and a mechanism, substantially as described, controlled from a clock, for releasing the said lever to permit the drum to revolve and drop from its supports, as set forth.

3. A still time alarm bed, provided with pivot pins at its head and foot, and with a side having end recesses adapted to engage said pivot pins, and arranged to drop from said pins, substantially as shown and described.

4. A still time alarm bed, provided with a clock having a drum held normally in a locked position, a chain adapted to wind on the said drum, and a slotted arm pivoted on the clock casing and connected at its free end with the said chain, substantially as shown and described.

5. A still time alarm bed, comprising a pivoted bed bottom, ropes connected with the free end of the said bed bottom, a drum connected with the said ropes and provided at its ends with recesses, pivot pins engaging the said recesses to permit the drum to turn, a lug on the said drum, a lever engaging the said lug for holding the drum in a locked position, a slotted arm engaging a pin on the free end of the said lever, a rope connected with the said arm, a pivoted slotted arm for supporting the said rope, and a chain connected with the said pivoted slotted arm and adapted to wind on a drum controlled by a time mechanism, substantially as shown and described.

GEORGE Q. SEAMAN.

Witnesses:

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C. SEDGWICK.