(No Model.)

L. W. FILLEBROWN & F. B. CHANDLER.

INVALID BEDSTEAD

No. 335,218. Patented Feb. 2, 1886.

Fig. 1.

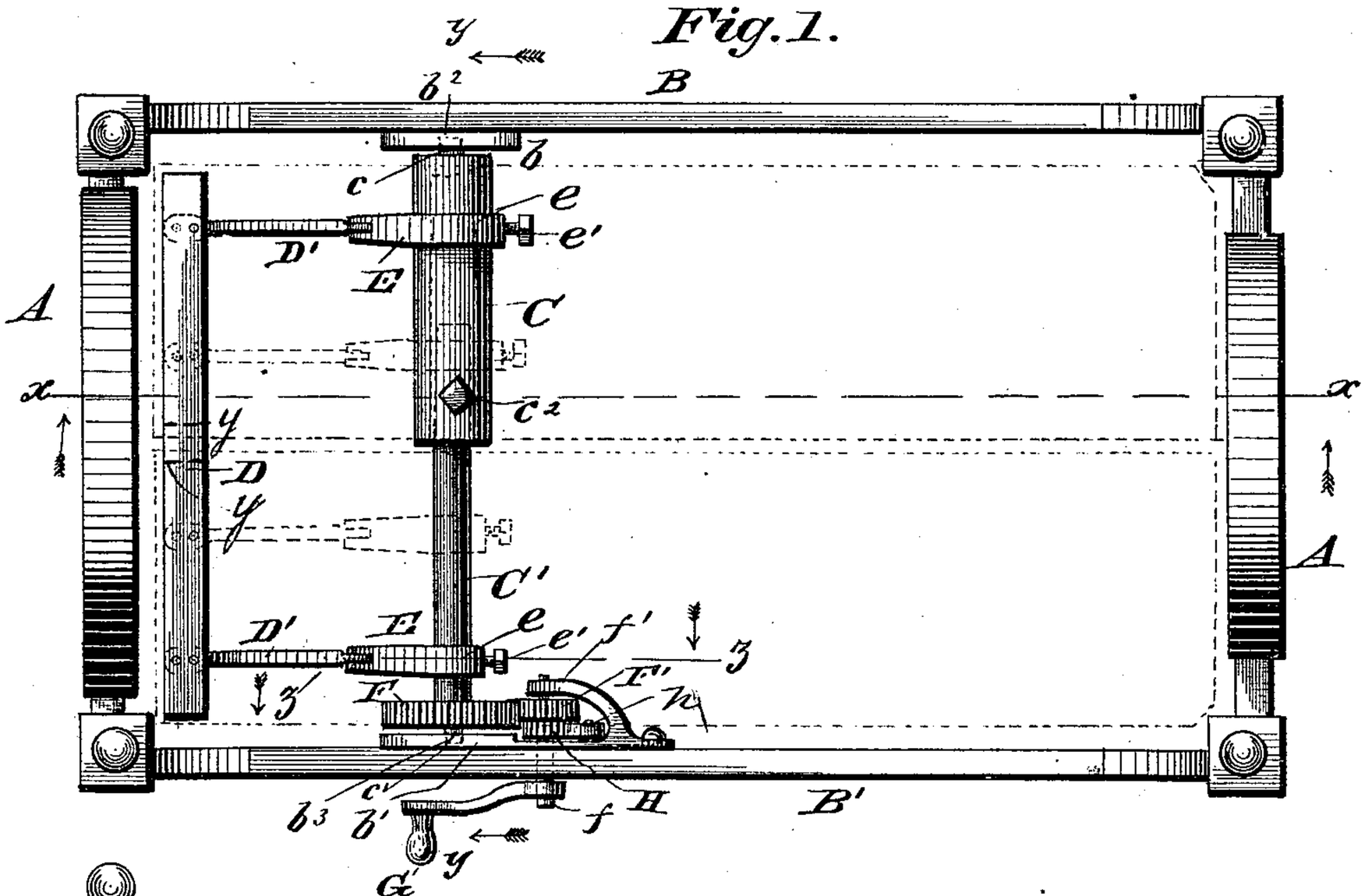


Fig. 2.

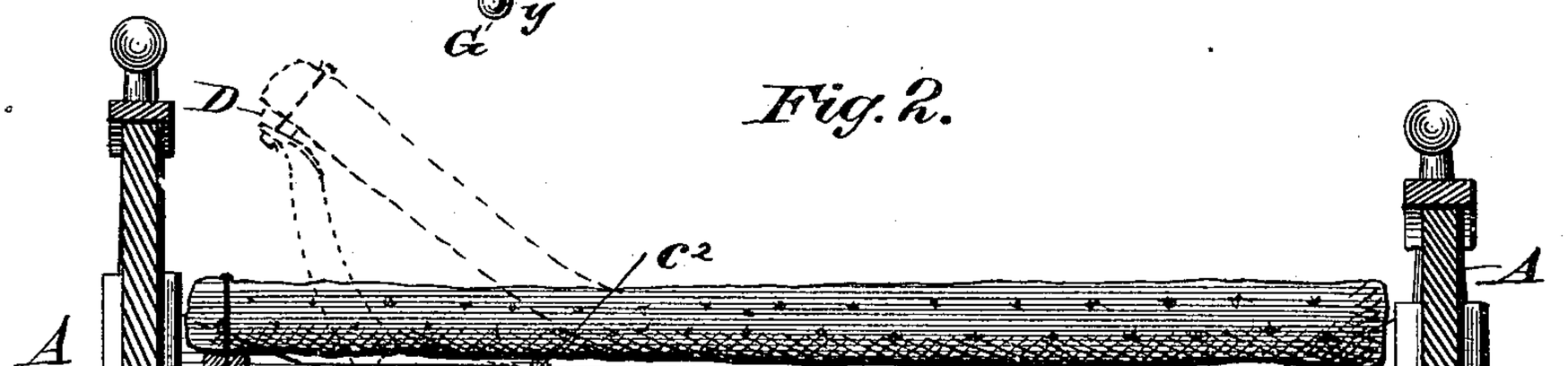


Fig. 3.

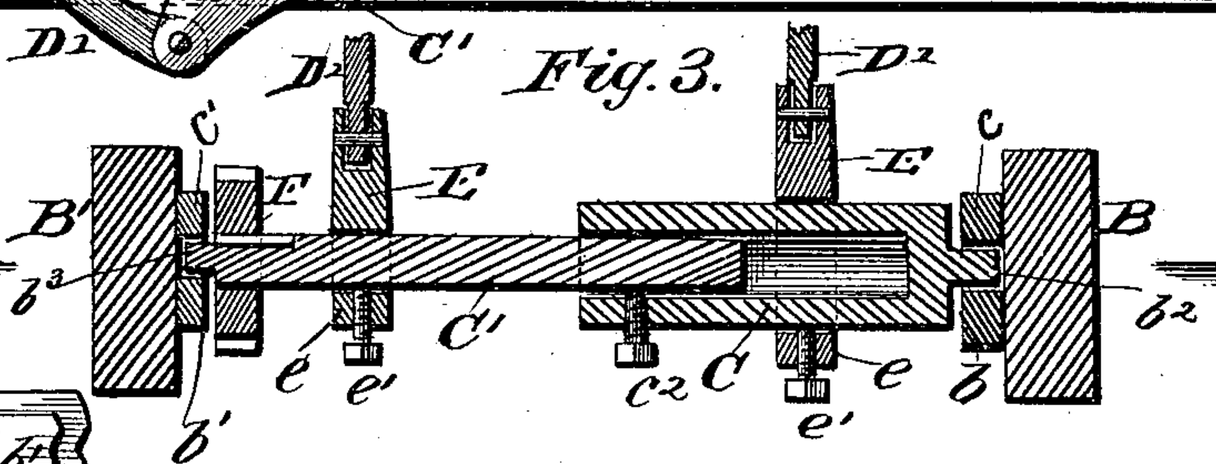
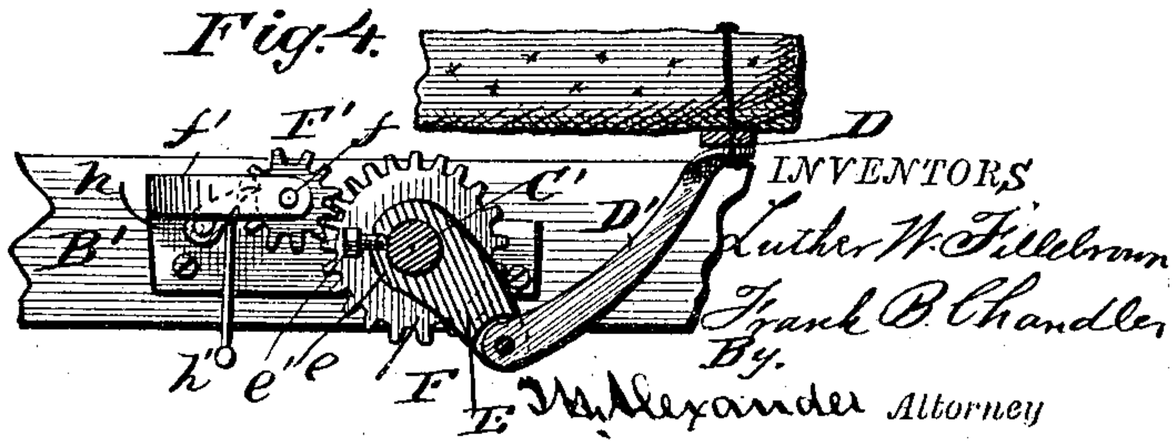


Fig. 5.

Fig. 4.



WITNESSES

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INVALID-BEDSTEAD.

SPECIFICATION forming part of Letters Patent No. 335,218, dated February 2, 1886.

Application filed November 14, 1885. Serial No. 182,796. (No model.)

To all whom it may concern:

Be it known that we, LUTHER W. FILLEBROWN, of Piqua, Miami county, Ohio, and FRANK B. CHANDLER, of Wayne, in the county of Kennebec and State of Maine, have invented certain new and useful Improvements in Invalid-Bedsteads; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification, in which—

Figure 1 is a plan view of a bed-frame having our invention attached. Fig. 2 is a vertical longitudinal section of the same on line *x x* of Fig. 1. Fig. 3 is a transverse section, on line *y y*, of the same. Fig. 4 is a detail transverse section on line *z z* of Fig. 1, showing the arrangement of the gearing; and Fig. 5 is a detail section of the ratchet-and-pawl mechanism.

The invention is an improvement in invalid bedsteads; and it consists in the construction and novel arrangement of parts, hereinafter described, and pointed out in the appended claims.

Referring to the accompanying drawings by letter, A designates the bed-frame, upon the inner surface of the side rails, B B′, of which are bolted the transversely-opposite journal-plates *b b′*, respectively, having the bearings b^2 b^3, as shown in Fig. 1.

C is a transverse hollow shaft having the journal *c*, which rests and turns in the bearings b^2 of the plate *b*, and C′ is a shaft which has its inner end inserted and turning freely in the bore of the shaft C, and provided on its outer end with the journal *c′*, which turns in the bearing b^3 of the journal-plate *b′*. The shaft C extends to about the central longitudinal line of the bed-frame, and has the set-screw c^2, passing through a threaded opening near its inner end and securing the two shafts together, when desired, so that they will turn as one.

D is a transverse bar having the outer ends of the curved arms or bars D′ secured to its under surface, as shown in Fig. 2. The bar D is secured to the under surface of the mattress by any desirable means, one method being shown in Fig. 2. The inner or lower ends of said bars are pivoted to the crank-arms E, each of which has a hub, *e*. There may be one or more crank-arms on each of the shafts C and C′, the bore of said hubs being of proper size to fit well over and turn easily on the shaft upon which they are hung.

e′ e′ are set-screws, by means of which the crank-arms may be so secured to their shafts as to turn therewith.

F is a gear-wheel on the outer end of the shaft C′, inside of the bearing of the same and gearing with the pinion F′, the shaft *f* of which turns in bearings in the side rail, B′, and in the arm of the bracket *f′*, secured to the inner surface of said rail. The outer end of the shaft *f* passes through the side rail, B′, and is squared to receive the crank-handle G, or a wrench.

H is a ratchet-wheel on the shaft *f*, outside of the pinion F′ and adjacent to the side rail, B′. The said ratchet-wheel is commanded by the pawl *h*, pivoted on the inner side of said rail. *h′* is a rod depending from said pawl and drawing the same down by gravity. The pawl may be lifted by means of said rod when it is desired to lower the mattress.

When the attachment is secured, either to the head or foot of the bed-frame, the set-screw c^2 may be turned so as to make the shafts C C′ turn together. In that case the bar D is made in one piece, and there is only one crank-arm E secured on each of the shafts. This arrangement is especially adapted for single beds. In double beds there are two crank-arms E on each of the shafts C C′. Two mattresses of equal size are placed on the bed-frame and the bar D is replaced by two bars of equal length, one secured to each mattress, their meeting ends being over the central longitudinal line of the frame, as shown by the dotted lines *y y* of Fig. 1. One of the bars is secured to the crank-arms of the shaft C, and the other to the similar arms of the shaft C′. Two persons can then recline on the bed, and each can have his position changed, independently of the other, in the following manner: Unloose the set-screws *e′* of the shaft C′, and tighten those of the shaft C, securing the shafts together by the set-screw c^2. Then by turning the crank-handle G the crank-arms and attached bar D, con-

nected with the shaft C, will be raised, while the shaft C′ will turn in its crank-arms and not raise the same. By unloosing the set-screw c^2 the shaft C′ may be turned independently of the shaft C, so as to raise the adjacent mattress.

The shaft C′ enters the bore of the shaft C, and the set-screw c^2 may engage any part of the shaft C′, so that the device may have its length extended or shortened and be applicable to bed-frames of varying width.

Having described our invention, we claim—

1. The combination of the bed-frame, the journal-plates secured to the inner surface of the side rails thereof, the shafts C C′, having their journals in the bearings of said plates, the adjustable crank-arms connected with said shafts, the rail D, secured to the under surface of the mattress, the connecting-arms D′, and means, substantially as described, for rotating the shafts.

2. The combination of the bed-frame having the journal-plates *b b′* secured to their side rails, shafts C C′, crank-arms E, adjustably connected with said shafts, and connecting-arms D′, and the rail D, secured to the ends of said crank-arms, substantially as described.

In testimony that we claim the foregoing as our own we affix our signatures in presence of witnesses.

LUTHER W. FILLEBROWN.
FRANK B. CHANDLER.

Witnesses as to Fillebrown:
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