No. 803,779. PATENTED NOV. 7, 1905.

H. D. PARLEE.

FOLDING BED.

APPLICATION FILED JUNE 3, 1903.

Fig. 1.

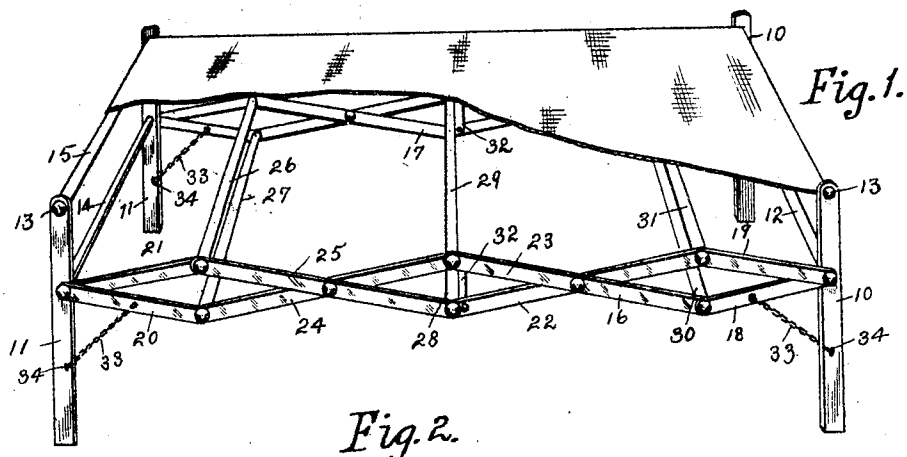


Fig. 2.

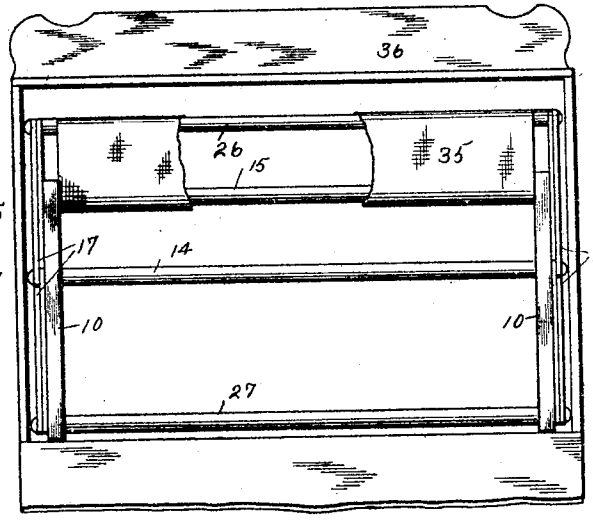


Fig. 5.

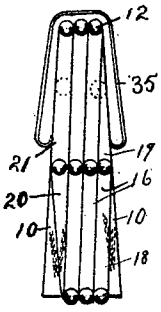


Fig. 4.

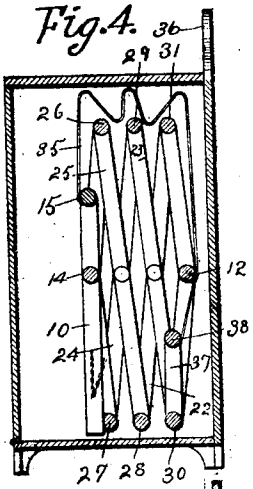
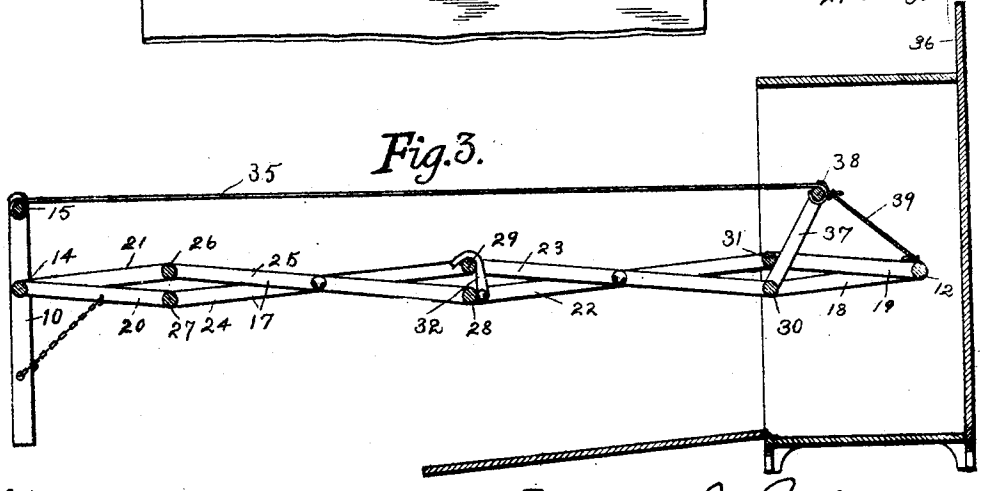


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

HARRY D. PARLEE, OF DES MOINES, IOWA, ASSIGNOR OF ONE-HALF TO E. G. HILTON, OF DES MOINES, IOWA.

FOLDING BED.

No. 803,779. Specification of Letters Patent. Patented Nov. 7, 1905.

Application filed June 3, 1903. Serial No. 159,866.

To all whom it may concern:

Be it known that I, HARRY D. PARLEE, a citizen of the United States, residing at Des Moines, in the county of Polk and State of Iowa, have invented certain new and useful Improvements in Folding Beds, of which the following is a specification.

The objects of my invention are to provide a folding bed of simple, durable, and inexpensive construction in which the foot portion of the bed can be moved in a horizontal plane toward and away from the head of the bed, and, further, I have provided means for maintaining the position of the footboard at its extreme limit of movement away from the head of the bed by a simple locking device.

A further object is to provide a bed or cot which can be folded into a minimum amount of space and which is different from the ordinary folding cot or bed in that when in the folded position the bed is more compact than that of the folding bed ordinarily in use.

My device is particularly advantageous for use in folding cots, in that on account of the small amount of space into which the cot can be folded it is much more desirable to use in carrying from place to place than that of the ordinary cot, where the length of the sides of the cot determine the length of the cot in its folded position, where in my device the width of the cot determines the length of it in its folded position.

A further object is to provide a device for holding the legs which form a portion of the head and the foot of the cot or bed into a position where the springs or cloth forming the portion upon which the mattress is to be laid will be stretched longitudinally of the device and constantly kept in a stretched position. I accomplish this result by adjustable means, which are attached to the sides of the bed and to the adjacent legs.

A further object is to provide a cot or bed of the class described which can be folded into a box or chiffonnier of much less height than is used ordinarily with the folding beds.

My invention consists in certain details in the construction, arrangement, and combination of the various parts of the device whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 shows in perspective a view of the cot and the portion of the cot forming the upper portion of the cot cut away to show the mechanism beneath it. Fig. 2 is a front elevation of the bed in its folded position, and on the interior of the chiffonnier a portion of the cloth is cut away to show the relative position of the parts when folded. Fig. 3 is a longitudinal sectional view of the bed and the containing-box or chiffonnier with this bed in its folded position. Fig. 4 is a vertical sectional view of the chiffonnier or containing-box and of the cot, showing it in a folded position; and Fig. 5 is a side elevation of the cot shown in Fig. 1 when it is in its folded position.

Referring to the accompanying drawings, I have used the reference-numeral 10 to indicate the head-posts of the cot-frame and the reference-numeral 11 to indicate the foot-posts of the frame. Connecting the posts 10 are the rods 12 and 13. Between the posts 11 are the rods 14 and 15, corresponding exactly to the rods 12 and 13 at the head of the bed. Pivotally attached to the rods 12 and 14 are the lazy-tongs 16 and 17, constructed in the ordinary manner of lazy-tongs, the lazy-tongs 16 being on one side of the bed and the lazy-tongs 17 being on the opposite side of the bed. Each of the lazy-tongs comprises the following parts: Two short levers 18 and 19 near the head of the bed, which are attached to each end of the rod 12 and outside of the posts 10, are pivotally attached to the posts 11 and extended toward the posts 10. In each of the lazy-tongs are two other short levers 20 and 21. Pivotally attached to the free ends of the levers 18 and 19 are the long levers 22 and 23, which in turn are pivotally attached to each other at their central portion. Pivotally attached to the free ends of the levers 20 and 21 are the long levers 24 and 25, which are pivotally attached to each other at their central portion and are also attached pivotally to the levers 23 and 22, respectively. As both these levers 16 and 17 are exactly alike in construction, to describe one of them is to describe both, and therefore the above description is deemed sufficient to cover the construction of these levers.

Connecting the lazy-tongs 16 and 17 and between the points where the levers 21 are attached to the levers 24 is a short rod 26, which extends transversely of the cot or bed. Extending transversely of the bed and con-

necting the lazy-tongs at the points where the levers 24 are attached to the levers 20 is the connecting-rod 27. Extending transversely of the bed and connecting the points where the levers 25 are pivotally attached to the levers 22 is the connecting-rod 28. Extending transversely of the bed and connecting the points where the levers 23 are pivotally attached to the levers 24 is the connecting-rod 29. Extending transversely of the cot and between the points where the levers 18 are pivotally connected to the levers 16 is the connecting-rod 30. Extending transversely of the bed and connected with the point where the levers 19 are pivotally attached to the levers 22 is the connecting-rod 31. These rods 26, 27, 28, 29, 30, and 31 are designed to hold the lazy-tongs to operate uniformly as the foot of the bed is moved toward the head of the bed or away from it, and they are also designed to perform the function of allowing the means to be applied to the device whereby the foot of the bed may be locked in position and hold it away from the head of the bed. This is accomplished by means of the hooks 32, which are pivotally attached to the lever 22 and which are designed to pass over the rod 29 and hold the rod 29 in position against the rod 28, the rod 30 against the rod 31, and the rod 26 against the rod 27, thus locking the head and foot of the bed in position away from each other.

Connected with the levers 18 and 20 on each side of the bed are the chains or other adjustable mechanism 33. I have provided hooks 34 on all of the legs 10 and 11, and these hooks are designed to admit the links of the chain and to hold the bed in position, as hereinafter described. When the bed or cot is in its folded position, the chains will hang loosely by the side of the bed; but when the cot is in its extended position the free ends of the levers 18 and 20 will move away from the lower portions of the legs of the cot and the chain will be drawn tightly, which will tend to draw the flexible bed-bottom 35, which is preferably of cloth, longitudinally of the cot and stretch it and hold it in a stretched position, as shown in Fig. 1 of the drawings, so that when the hook 32 is in position to lock the lazy-tongs at their extreme outer limit of movement away from each other the cloth or spring, as either may be used, will be held in an extended and stretched position. It will be seen that by making the chains 33 shorter or longer the cloth can be made more or less taut.

By the use of the mechanism described it will be seen that my device is capable of folding into a very small amount of space on account of the foot portion being allowed to be moved toward the head portion of the bed or cot, and as the lazy-tongs when in a folded position occupy a very small amount of space the cot as folded will not be as bulky as the ordinary cot when folded. I desire it to be understood in this connection that I do not limit myself to any particular length of levers in the lazy-tongs or to any particular form of adjustable means for holding the parts in position relative to each other, but that these parts may be arranged in any manner which will accomplish the result of allowing the foot portion to be moved toward the head portion of the cot or the head portion toward the foot portion thereof and maintained in a closed position or to allow the head and foot portions to be moved away from each other and held normally in that position, and also any means may be used for holding the spring or cloth taut and tight when the head and foot portions are away from each other.

By my particular way of attaching the cloth to the rods which connect the posts in the head and foot portions it will be seen that the cloth will be allowed to sag considerably when a person is lying on said cloth and by having this cloth maintained a considerable distance above the rods which connect the lazy-tong levers I have provided a cot-bed which will be as comfortable as one which is supported from side rails, and at the same time a very strong and durable bed is provided. By attaching the cloth 35 to the rods at the top of the head and foot portions the lazy-tong levers can be maintained at the extreme extended positions constantly, and the cloth 35 can be stretched more or less tight at the pleasure of the operator by simply adjusting the chain or other mechanism provided for this adjustment.

In Figs. 2, 3, and 4 I have shown a chiffonnier 36, the front of which can be opened and closed, so that the cot or bed can be on the interior of it, as shown in Fig. 4. In Fig. 3 I have shown a slight modification at the head of the bed which I use in place of the chains 33, which are at the head of the cot. Either device, however, may be used. This modification is constructed as follows: The rod 12 in the cot extends into the ends of the chiffonnier, and to the rod 30 I have pivotally mounted two braces 37, one at each end of the rod 30. Connecting the upper portions of the braces 37 is the rod 38. The brace 37 is designed to rest against the rod 31 in order to support the spring or cloth 35 when the bed or cot is in its opened position. I then connect the rod 38 to the rod 12 by means of the ropes 39, in order to make the device more firm. This modification I do not confine myself to in the manufacture of the device and simply show by this construction that it may be made in several different ways.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States therefor, is—

1. A folding bed comprising head and foot members provided with upright side portions,

lazy-tong side members pivotally secured to said upright side portions intermediate of the ends of the latter, a flexible mattress having its ends connected with said head and foot members, and adjustable tightening devices extending from the lower end or ends of one or more of said upright side portions to said lazy-tong members, whereby said mattress is held taut.

2. A folding bed comprising head and foot members provided with upright side portions, lazy-tong side members pivotally secured to said upright side portions intermediate of the ends of the latter, parallel bars uniting said lazy-tong members, a hook pivoted adjacent one of said bars and adapted to engage the adjacent bar, a flexible mattress having its ends connected with said head and foot members, and adjustable tightening devices extending from the lower end or ends of one or more of said upright side portions to said lazy-tong members, whereby said mattress is held taut.

3. A folding bed comprising lazy-tong side members, head and foot members to which said side members are pivoted, said head and foot members being provided with upright sides, a brace pivoted to said lazy-tong members adjacent said head member and connected with the head member, a flexible mattress uniting said brace and the upper end of said foot member, and flexible tightening devices extending from said lazy-tong members to said brace and foot members respectively.

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