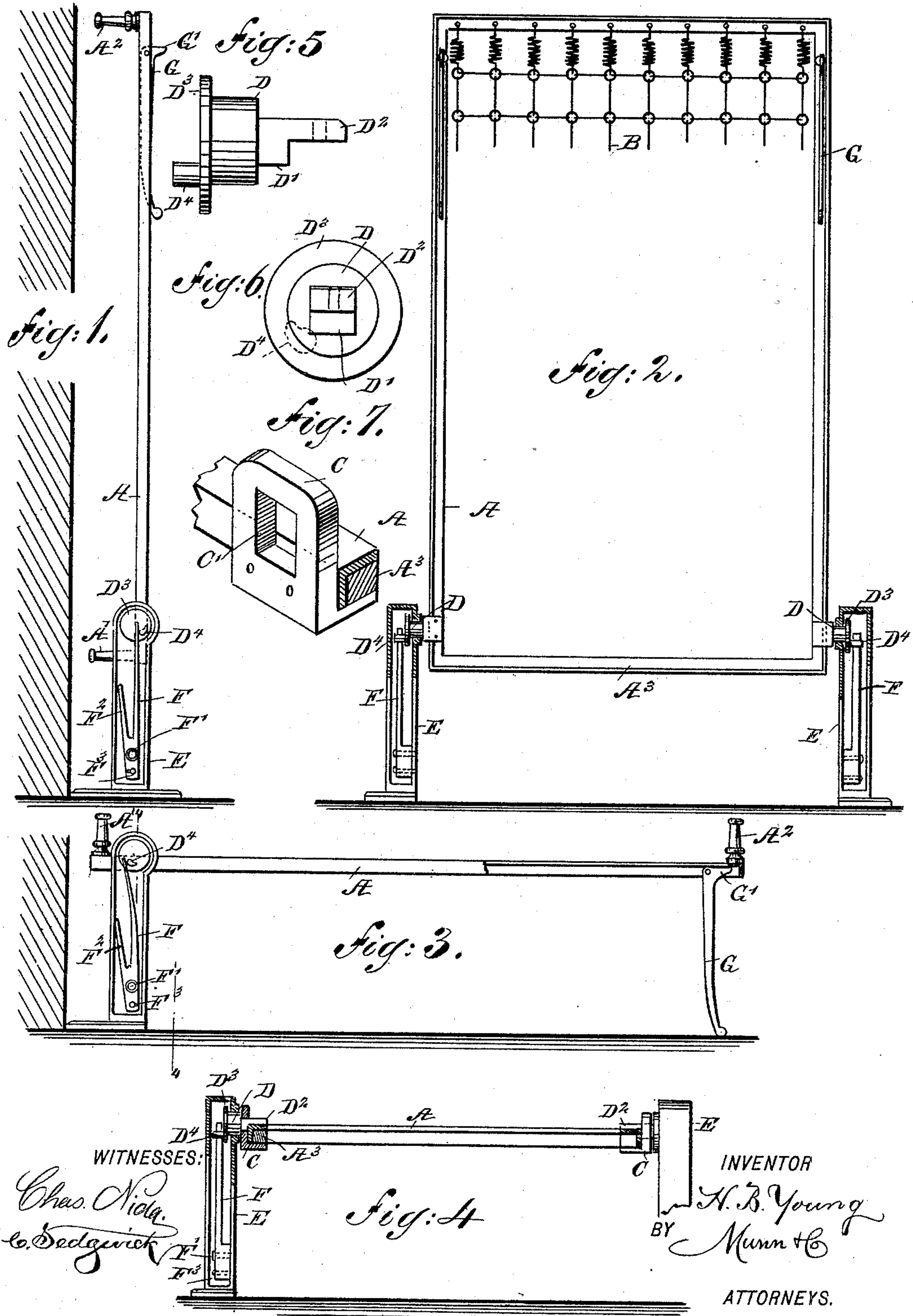


(No Model.)

H. B. YOUNG.  
FOLDING BED.

No. 497,156.

Patented May 9, 1893.





# UNITED STATES PATENT OFFICE.

HENRY B. YOUNG, OF NEW YORK, N. Y.

## FOLDING BED.

SPECIFICATION forming part of Letters Patent No. 497,156, dated May 9, 1893.

Application filed December 9, 1892. Serial No. 454,601. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY B. YOUNG, of the city, county, and State of New York, have invented a new and Improved Folding Bed, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved folding bed, which is simple and durable in construction, readily accessible in all its parts for cleaning and other purposes, and arranged to be conveniently set up, adjusted and counterbalanced for folding or extending the bed, so as to hold it securely in either position.

The invention 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 figures.

Figure 1 is a side elevation of the improvement as folded up. Fig. 2 is an end view of the same with parts in section. Fig. 3 is a side elevation of the improvement with parts in section and as extended. Fig. 4 is a transverse section of the same on the line 4—4 of Fig. 3. Fig. 5 is an enlarged side elevation of one of the crank pivots. Fig. 6 is an end view of the same. Fig. 7 is a perspective view of the keeper for the pivot, with parts of the bed frame in section.

The improved folding bed is provided with a bed frame A, made in rectangular shape and constructed of angle iron securely fastened together to form a rigid frame, as plainly shown in Fig. 2. The mattress B, is connected at its ends to the top flat part of the angle iron of the bed frame A, so that the mattress is always in the proper position, whether the bed is folded up or extended.

On the sides of the bed frame A and near the upper ends of the same are secured keepers C, arranged opposite each other and each formed with a square opening C', through which passes the correspondingly-shaped shank D' of a pivot D, mounted to turn in suitable bearings arranged in the standards E, secured on the floor and preferably of an open construction so as to be readily accessible in all their parts for cleaning purposes.

From the shank D' of each pivot D extends a short arm D<sup>2</sup>, passing over the top part of the frame A and riveted or otherwise secured thereto, so as to fasten the pivot securely in place on the frame A.

Each keeper C is preferably made L-shaped as shown in Fig. 7, the lower arm passing under the frame A while the vertical part is riveted to the side of the angle iron, as indicated in the said figure. Each of the pivots D is formed at its front end with a flange D<sup>3</sup>, made in the shape of a disk and abutting against the inside of the bearing for the pivot, so as to securely hold the latter in place in the respective standard. On the front face of each flange D<sup>3</sup> is secured a wrist or crank pin D<sup>4</sup>, engaging with a spring F, held in the respective standard and serving to hold the bed frame A either in a folded position, as illustrated in Fig. 1, or in an extended position, as shown in Fig. 3.

As illustrated in Figs. 1, 2, 3 and 4, each spring F is made in the shape of a flat spring attached at F', to the lower end of the standard E, the said spring being provided with an extension F<sup>2</sup>, resting against one side of the standard, as plainly illustrated in Figs. 1 and 3. The spring F is somewhat extended beyond the fastening joint F' and this extension part is slotted and engaged by a pin F<sup>3</sup>, held on the standard, so that the spring is free to swing slightly at the time the upper free end of the spring is pressed on by the crank pin D<sup>4</sup> when the frame A is swung downward into an extended position.

It is understood that when the frame A is swung downward, a turning motion is given to the pivots D so that each of the same presses with its wrist pin against the spring F, thus compressing the same, the wrist pin then passing into a lowermost position as shown in Fig. 3, and holding the spring compressed until the frame A is again swung upward.

As illustrated in Fig. 1, on the lower end of the bed frame A and on each side thereof, is pivoted a foot G, provided near its pivot end with a short extension G', adapted to rest flat against the under side of the top part of the angle iron for the bed frame A, so as to hold the foot G in the proper position, thereby relieving the pivot of the strain. When the



frame A is swung upward, each foot G folds into the side bar of the bed frame A, as plainly illustrated in Figs. 1 and 2.

On the upper end of the bed frame A is secured a head A' made in the shape of short posts or other suitable form and similar posts A<sup>2</sup> are secured on the lower end of the frame A to serve as an extension above the bed frame to hold the bedding in place.

In order to properly counterbalance the bed frame A and the parts supported thereon, I provide a weight A<sup>3</sup>, made in the shape of a bar fitted into the angle iron above the pivots D, as plainly indicated in Figs. 2 and 7. Thus the upper end of the bed frame A is weighted heavily to counterbalance the lower part of the bed frame and its contents. Each standard E is preferably provided with a foot extended on one side a suitable distance to abut against the wall near which the bed is to be located so that the bed is always held the proper distance from the wall to prevent the bed frame from striking the wall when folded up, as shown in Fig. 1.

It will be seen that a folding bed constructed in this manner is very simple, is accessible in all its parts for cleaning and adjusting purposes, and is arranged to permit of conveniently swinging the bed into a folded or an extended position.

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

1. A folding bed, comprising standards formed with pivot bearings, a bed frame carrying the mattress and made of angle iron, pivots secured near the head of the said bed frame and mounted to turn in the bearings of the said standards, wrist pins secured to the said pivot pins, and a flat spring secured in

each standard and pressing with its free end on the said wrist pin of the corresponding pivot, each spring being provided with an extension resting on one side of the standard, substantially as shown and described.

2. A folding bed, comprising standards formed with pivot bearings, a bed frame carrying the mattress and made of angle iron, pivots secured near the head of the said bed frame and mounted to turn in the bearings of the said standards, wrist pins secured to the said pivot pins, a flat spring secured in each standard and pressing with its free end on the said wrist pin of the corresponding pivot, each spring being provided with an extension resting on one side of the standard, and pivoted feet arranged on the lower end of the said bed frame and provided with short arms or extensions, substantially as shown and described.

3. A folding bed, comprising standards formed with pivot bearings, a bed frame made of angle iron, a counterbalancing bar secured to said frame, a mattress secured at its ends to the angle iron of the bed frame, pivots secured near the head of the said bed frame and mounted to turn in the bearings of the said standards, wrist pins secured to the said pivot pins, a flat spring secured in each standard and pressing with its free end on the said wrist pin of the corresponding pivot, each spring being provided with an extension resting on one side of the standard, and pivoted feet arranged on the lower end of the said bed frame and provided with short arms or extensions, substantially as shown and described.

HENRY B. YOUNG.

Witnesses:

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C. SEDGWICK.