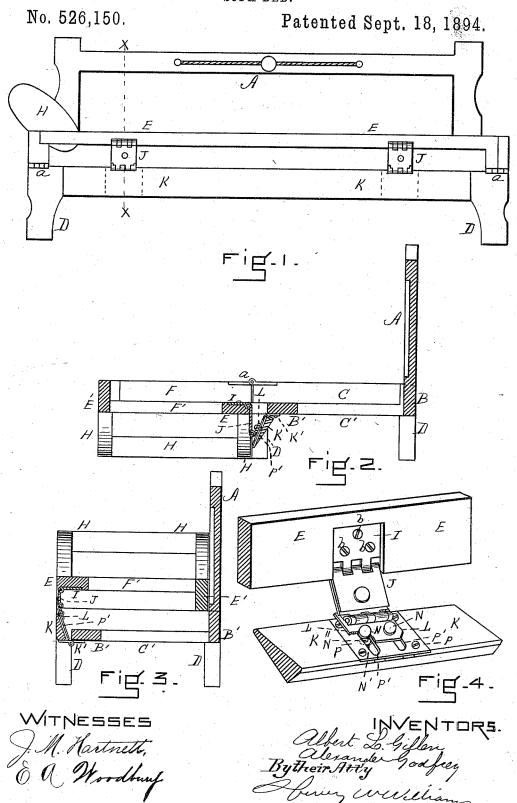
## A. L. GILLEN & A. GODFREY. SOFA BED.



## UNITED STATES PATENT OFFICE.

ALBERT L. GILLEN, OF BRADFORD, AND ALEXANDER GODFREY, OF HAVERHILL, MASSACHUSETTS.

## SOFA-BED.

SPECIFICATION forming part of Letters Patent No. 526,150, dated September 18, 1894.

Application filed May 2, 1894. Serial No. 509,776. (No model.)

To all whom it may concern:

Be it known that we, ALBERT L. GILLEN, of Bradford, in the county of Essex and State of Massachusetts, and Alexander Godfrey, of Haverhill, in said county and State, citizens of the United States, have invented a new and useful Improvement in Sofa-Beds, of which the following is a specification.

This invention relates particularly to that 10 style or class of sofa beds or bed lounges to which belong Letters Patent of the United States numbered 480,190, issued August 2, 1892, to Albert L. Gillen aforesaid; and it consists in a certain new and improved construction and arrangement whereby the front rail, that is, the rail which is in front when the device is in the position to be used as a lounge, and extends up edgewise in such position, is dropped or swung down when the device is in 20 position to be used as a bed so as not to interfere with either portion of the frame, and to provide an uninterrupted level flat surface capable of receiving an ordinary whole mattress or spring bed if desired.

The nature of the invention in detail is fully described below, and illustrated in the accompanying drawings, in which-

Figure 1 is a front elevation of the frame of our improved sofa bed, folded into position 30 to be used as a sofa or lounge. Fig. 2 is a transverse vertical section taken on line x, Fig. 1, with the device in position to be used as a bed. Fig. 3 is a section on the same line, with the device in position to be used as a sofa 35 or lounge. Fig. 4 is an enlarged perspective detail, looking from the inside, showing one of the hinges and parts of the rails connected thereby, constituting our invention.

Similar letters of reference indicate corres-

40 ponding parts.

The stationary frame comprises a back A, rear and front rails B B', end rails C, slats or cross-pieces C', and feet D. The movable frame—that is, that frame which rests upon 45 the floor when the device is to be used as a bed. and when it is to be used as a lounge or sofa is swung up upon the stationary frame, -comprises the inner rail E, outer rail E', end rails F, slats or cross-pieces F', and head H. The 50 swinging frame is hinged at a to the station-

used as a bed, it is in the position shown in Fig. 2, and when it is in a position to be used as a sofa or lounge it is in the position shown in Figs. 1 and 3. All upholstering is omitted 55 from the drawings in order that the operation of the frame may be better understood.

The parts above described are not new in

this invention.

K is a rail hinged at K' to the front rail B' 60 of the stationary frame. This rail is, when the device is in position to be used as a lounge, in an upright or vertical position, as shown in Figs. 1 and 3, and constitutes an important portion of the front of the lounge; but when 65 the device is spread out into a bed, it is desirable that this rail should drop between the frames and below the surfaces thereof so as not to interfere with or project above the unbroken surface of the frames, in order that 70 said surface may be left free for mattresses or spring beds of any kind. This operation is accomplished by the following means: Peculiarly constructed hinges, preferably two in number, connect the swinging or traveling 75 rail K with the rail E of the movable frame, each hinge being constructed as follows: A leaf I of the hinge is secured by suitable screws b to the rail E and is connected by a suitable pintle with the intermediate leaf J 80 whose opposite end is provided with the usual knuckle and is connected by a pintle with the leaf or strap L. This leaf L is provided with doubly headed pins N whose lower heads N' (Fig. 4) lie under the edge of slots P' in the 85 plate P secured to the traveling rail K.

In practice, when the device is unfolded from a lounge or sofa to a bed, the shanks N" of the pins N move in the slots P' toward the inner or thicker edge of the rail K and the rail 90 swings down into the position shown in Fig. 2. When the device is folded into a lounge or sofa, the pins N move in the slots P' back toward the outer edge of the rail K and said rail is lifted into the position illustrated in 95

Figs. 1 and 3.

It will be noticed by reference to the drawings, that the rail K is triangular or wedge shaped in cross section. The rail is formed in this shape for two principal reasons: First, 100 in order that when the device is folded into a ary frame, so that, when the device is to be shape of a sofa, the front surface of the rail

K will be vertical and on a line with and flush with the front surfaces of the ends of the stationary portion of the frame, whereby said rail may be in position to receive the lower edge of the border, which is used in upholstering nearly all bed lounges, and serves for ornamentation when the lounge is closed; second, the wedge shape is essential to the proper movement of the parts, for when the folding section is opened out and turns over to a certain point, it forces the sliding leaf of the hinge up on the thick part of the wedge shaped rail and moves the rail to its proper position when the lounge is in position to be used as a bed.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, isIn a sofa bed or bed lounge of the character described, in combination, the swinging 20 or movable frame, the front or traveling rail K hinged to the front edge of the stationary frame, the stationary hinged leaf I rigidly secured to the inner rail of the movable frame, the intermediate leaf J hinged to said stationary leaf, the sliding leaf L hinged to said intermediate leaf and provided with the sliding pins N, and the plate P rigidly secured to the traveling rail and provided with slots P' for engaging said sliding pins, substantially as 30 and for the purpose set forth.

ALBERT L. GILLEN, ALEXANDER GODFREY.

Winesses:

W. STILLMAN BARTLETT, FRANK P. BURLEIGH.