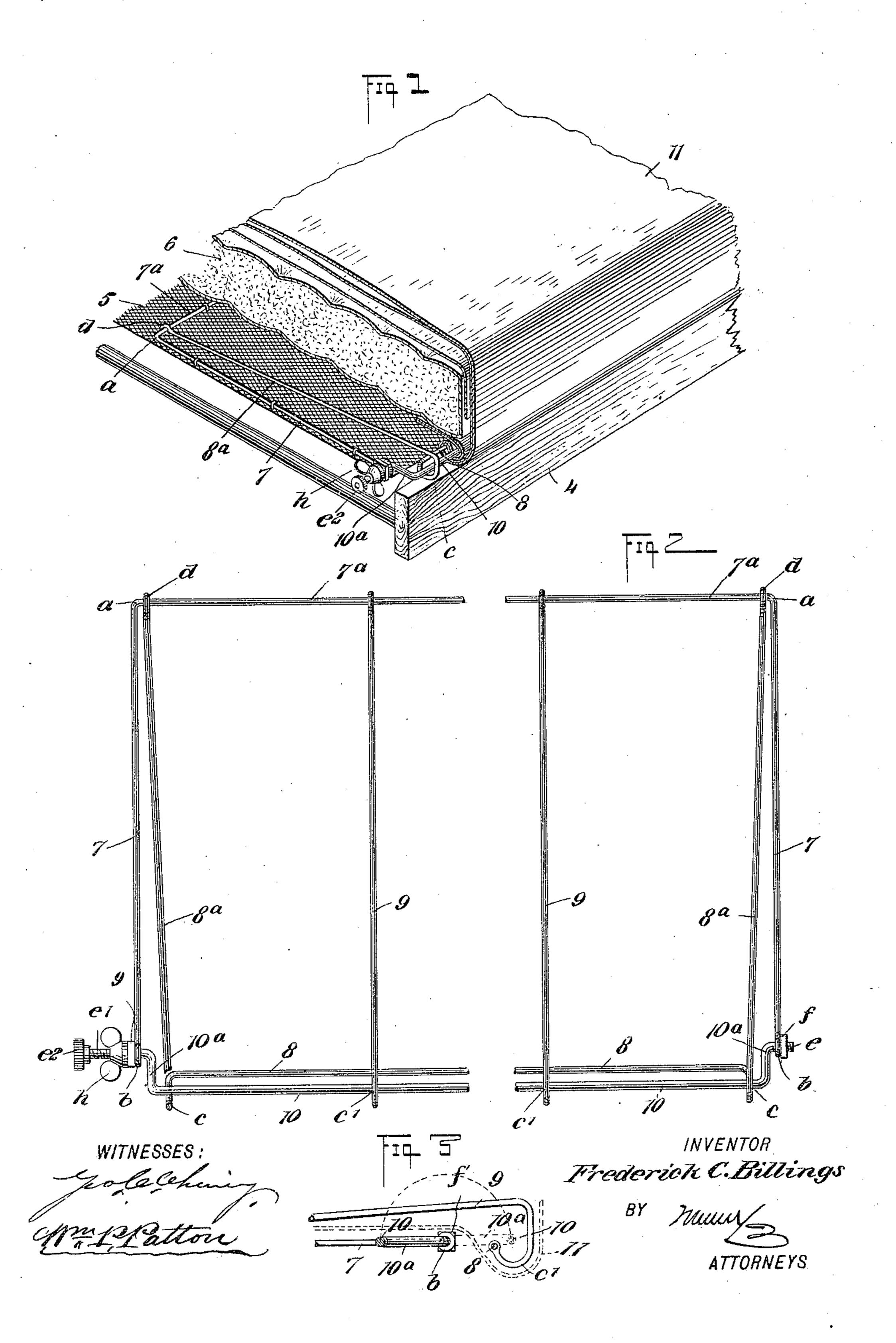
No. 685,562.

F. C. BILLINGS. CLAMPING DEVICE.

(Application filed Mar. 22, 1901.:

(No Model.)



United States Patent Office.

FREDERICK C. BILLINGS, OF MACON, MISSOURI.

CLAMPING DEVICE.

SPECIFICATION forming part of Letters Patent No. 685,562, dated October 29, 1901.

Application filed March 22, 1901. Serial No. 52,370. (No model)

To all whom it may concern: .

Be it known that I, FREDERICK C. BILLINGS, a citizen of the United States, and a resident of Macon, in the county of Macon and State of 5 Missouri, have invented a new and Improved Clamping Device, of which the following is a full, clear, and exact description.

This invention relates to means for preventing the displacement of bed-coverings 10 while the bed is in use, and has for its object |to provide a novel, simple, and inexpensive clamping device for the purpose indicated which is light, strong, and easy to manufacture, is fully concealed from view when ap-15 plied for service, and is adapted for convenient adjustment to clamp the bed-clothing at the side edges of the bed, so as to hold them in position, or for release of the bed-covers, as may be desired.

The invention consists in the novel construction and combination of parts, as is hereinafter described, and defined in the appended claims.

Reference is to be had to the accompanying 25 drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view in part of a bed, showing the improvement applied there-30 to and adjusted to clamp the bedclothing in place at one side of the bed. Fig. 2 is a plan view of the improved clamping device; and Fig. 3 is a transverse sectional view of details, showing by dotted lines the clamping 35 member of the device adjusted to hold the bedclothing from displacement and by full lines rocked for the release of the bedclothing.

In the drawings, 4 indicates the side rail of 40 a bedstead, 5 a woven-wire bed-bottom, and 6 a mattress supported by the bed-bottom.

The improved clamping device in brief comprises a stationary light frame open at one side and securable upon the bed-bottom, so that its open side will be adjacent to the bedrail. A rockable frame is mounted upon the stationary frame, so as to rock thereon from its inner edge, and a keeper-bar having cranks at its ends is adapted for rocking movement 50 on the members of the stationary frame, so that it may be adjusted to bear upon the rockable frame and hold it clamped toward the

stationary frame or be rocked therefrom for the release of said rockable frame, as will be hereinafter more fully described.

The stationary frame of the device is formed of a light metal bar bent at right angles at two points a a equally distant from its ends, whereon ring-eyes b are formed, thus providing two like side members 77 and a 60 spacing member 7^a, all in the same plane.

The rocking frame is formed of the same material as the stationary frame, and at equal distances from the free ends of the inetal rod or bar 8 composing the same two like side mem- 65 bers or limbs 8a are formed by bending the material so as to produce an open loop c at the point of junction between each limb 8a and an end of the spacing-bar 8. The two similar loops c are open at their upper por- 70 tions and depend from the side limbs 8a, which latter project above and outside of the bar 8, as is clearly shown as to one loop and bar in Fig. 1.

The side limbs 8a have greater length than 75 the side members 7 of the stationary frame, and upon the ends of said limbs opposite those having the loops c eyes d are formed, which respectively receive the member 7° of the stationary frame and loosely engage therewith 80 adjacent to the side members 7, as represented in Fig. 2. The length of the frames which have been described may be nearly equal to that of the bed-bottom 5, or the frames may be formed in two sections for each side of the 85 bed, and to adapt them for efficient service the stationary frame is affixed upon the bedbottom or upon stable projections on the bedstead, as may be preferred.

If the clamping device is afforded consider- 90 able length, it may be found advantageous to stiffen the rockable frame by providing one or more braces 9, that are held to rock with the frame intermediately of the limbs 8a, said braces being held in place by loosely securing 95 one end of each upon the frame bar or member 7^a and forming a depending loop c' at the opposite end, which loop is connected at its upwardly-bent end with the rockable-frame bar 8, as best shown in Fig. 3.

The keeper-bar hereinbefore mentioned consists of a mainly straight metal rod 10, bent near each end to form two similar short crank-arms 10^a, straight journal extensions

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e e' projecting outward from the crank-arms at directly opposite points. On one journal extension e, which passes through an adjacent ring-eye b on a stationary-frame limb 7, 5 a nut f is screwed, so as to prevent displacement of said extension. The journal end e'on the opposite crank-arm 10° is longer than the extension e and is threaded, as shown in Fig. 2. A washer g is loosely mounted upon To the journal end e', and a winged nut h is screwed thereon outside of the washer. Upon the extremity of the journal end e' a head e^2 is secured, which may be milled on its edge to adapt it for manipulation; but it is not es-15 sential that this particular form be employed for the head, as it may have wings or be otherwise adapted for being gripped manually.

The relative proportion of parts should be such that when the nut h is slackened and 20 the head e^2 is manipulated the body portion of the keeper-bar 10 may be rocked outwardly, so as to enter it within the loops c c', as indicated in Figs. 1 and 2, or be rocked rearwardly, as represented in Fig. 3.

In use the operator first rocks the keeperbar 10, so as to carry it upward and away from the loop formations cc', which will cause said bar to raise the forward portion of the rockable frame of the device. The covering 11 for the bed when it is to be secured is drawn down over the bed proper and then passed inwardly between the bar 8 of the rockable frame and the keeper-bar 10, and the latter-named bar is then rocked outward and downward, so as to enter the open loops cc', which will fold the covering and clamp

It is to be understood that the improved clamping device is provided in sufficient num-40 ber to clamp the bed-covering at opposite

it, as represented in Fig. 1.

points on each side of the bed, and after the covers are clamped at opposite side edges, as explained, the adjustment of the nut h on each clamping device will prevent the keeperbar 10 from releasing the bed-covers, as the 45 nut will bind the adjacent crank-arm 10° against the eye b and hold it from rocking.

The improvement is well adapted for nursery or hospital use, as it may be adjusted to retain the bed-covering in place and prevent 50 delirious patients or young children from exposure to cold, and consequent injury, if left unattended. It is also equally well applicable to folding beds.

Having fully described my invention, I 55 claim as new and desire to secure by Letters Patent—

1. A clamp for bed-covers, comprising a rectangular frame securable on a bed-bottom, a frame held to rock upon the rectangular 60 frame and having open loops at its free edge, and a cranked keeper - bar rockable on the rectangular frame toward and from the open loops.

2. A clamp for bed-covers, comprising a 65 rectangular frame, a clamping-frame held to rock on the side member of the rectangular frame, intermediate braces on the rockable frame, open loops on the rockable frame and braces, a keeper-bar having a crank-arm at 70 each end and held to rock on side members of the rectangular frame, means to rock the keeper-bar, and means to secure it.

In testimony whereof I have signed my name to this specification in the presence of 75 two subscribing witnesses.

FREDERICK C. BILLINGS.

Witnesses:

Ross Larrabee, A. J. Glenn.