Jan. 12, 1926. **1,569,728**

W. W. DOUGLAS ET AL

ALL STEEL CAMP COT

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Fig. 1

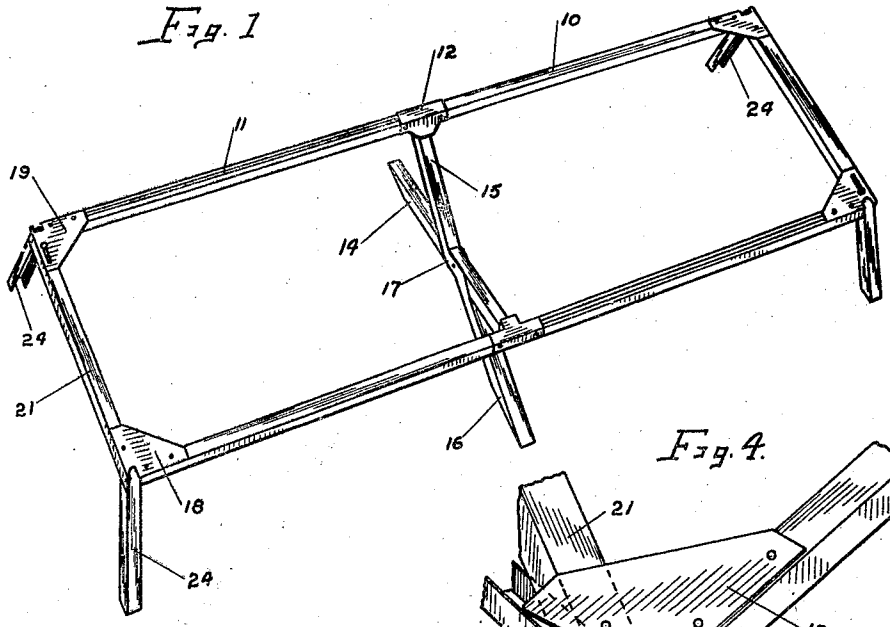
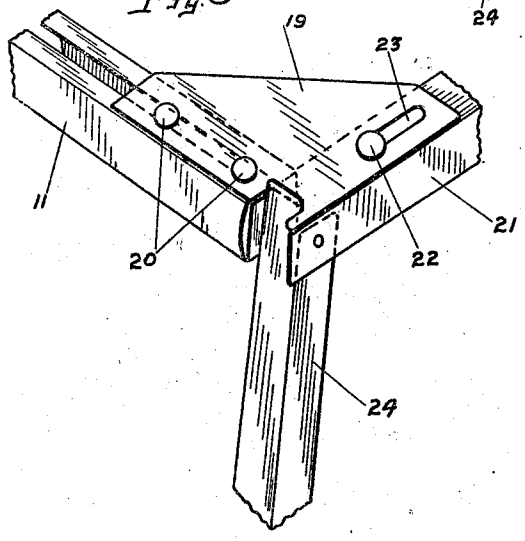


Fig. 4

Fig. 5



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Fig. 2.

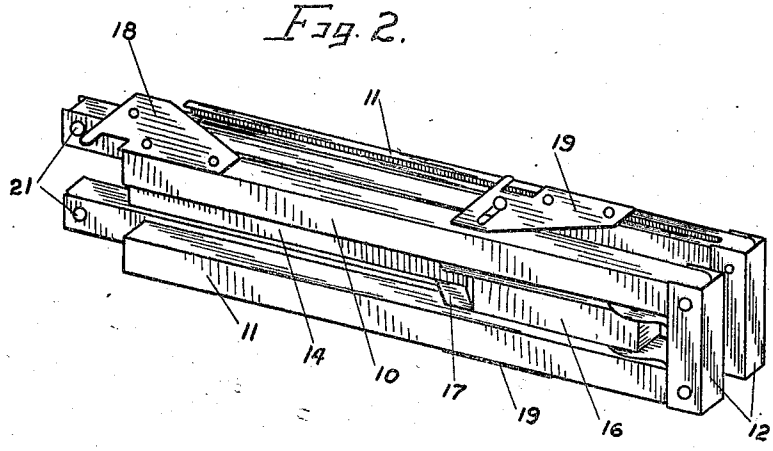


Fig. 3.

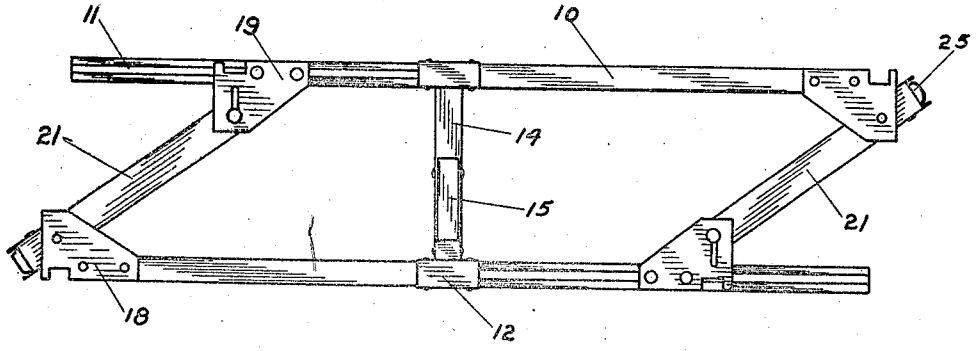


Fig. 6.

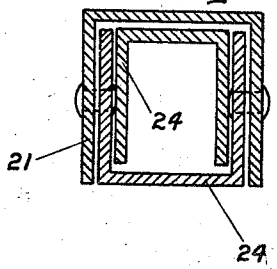
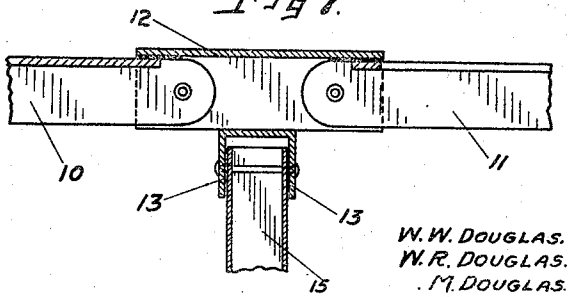


Fig 7.



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UNITED STATES PATENT OFFICE.

WILLIAM W. DOUGLAS, WALLACE R. DOUGLAS, MARCELLA DOUGLAS, WILLIAM H. DOUGLAS, AND DONALD Q. DOUGLAS, OF CRETE, NEBRASKA.

ALL-STEEL CAMP COT.

Application filed November 17, 1924. Serial No. 750,457.

To all whom it may concern:

Be it known that we, WILLIAM W. DOUGLAS, WALLACE R. DOUGLAS, MARCELLA DOUGLAS, WILLIAM H. DOUGLAS, and DONALD Q. DOUGLAS, citizens of the United States, residing at Crete, in the county of Saline and State of Nebraska, have invented certain new and useful Improvements in All-Steel Camp Cots, of which the following is a specification.

The rapidly growing use of the automobile for extended touring trips and for camping trips has created a demand for camp furniture of types differing radically from those of ordinary furniture. Many of these demands have been supplied, but there has been an insistent need of a cot which is peculiarly suitable for the conditions met with on touring trips. The army type of cot is being very largely used for this purpose, but such a cot is rickety and uncomfortable in use, it is short lived and it has detachable parts which are liable to become lost. In brief, it is our object to provide a folding camp cot having a frame of steel construction which is substantial and rigid during use and which has no detachable parts. Other objects will be pointed out in the following description.

Referring now to the drawings,

Figure 1 is a view in perspective of the cot frame as it appears when set up.

Figure 2 is a perspective view of the folded cot.

Figure 3 is a plan view of the cot frame as it appears when partly folded or unfolded.

Figure 4 is a view in perspective of the corner of the cot frame having a fixed pivot.

Figure 5 is a perspective view of one corner of the cot frame showing the sliding pivot.

Figure 6 is a sectional view of the end rail with the legs folded therein.

Figure 7 is a sectional view of the middle joint of the cot frame.

The cot frame includes two side rails, each composing a section 10 and a section 11, the two sections of the pair being each pivotally secured to the clip 12 as shown in Figure 7. The clip 12 is in channel form and serves to hold the sections 10 and 11 in alignment in the set-up cot. Each clip 12 has secured thereto a pair of ears 13 for supporting the middle leg structure of the cot. The leg 14 is made from a single piece of channeled steel while the other of the legs comprises two portions 15 and 16 connected by a pair of webs 17. A pivot pin passing through the webs 17 and through the leg 14 secures the two legs together in pivotal relation and in such a manner that when the legs are folded they are parallel to each other and the sections 15 and 16 are on opposite sides of the leg 14. The pivots for the sections 10 and 11 with the clips 12 are spaced as shown in Figure 7 so that the two sections of the side rail fold against the middle leg structure. This construction, however, is similar to that of the army type of cot, and is described here merely to point out its relation with the novel structure hereinafter described.

The two sections 10 are each in channel form with the open edge on the under side. The sections 11, on the other hand, are almost completely closed except for a slot running lengthwise in their upper sides. At the outer extremities of each of the sections 10 is rigidly secured a latch plate 18 as shown in Figures 1 and 4. At the outer extremities of the sections 11 is a latch plate 19 having two pins 20 which have a sliding engagement with the notches in the sections 11. The latch plates 18 and 19 are identical in outline, but they differ in that the plate 19 has a sliding instead of a fixed relation with its section and also in that it is provided with a sliding pivot as shown in Figure 5. The end rails 21 are secured to the side rails through these latch plates, the plate 18 having a fixed pivot on the end rail and the plate 19 having a sliding pivot, as shown in Figure 5. The end rail 21 has an upwardly projecting pin 22 which engages a slot 23 in the latch plate 19, the slot permitting movement of the end rail but limiting that movement to the width of the side rail.

The legs 24 are also made of channeled steel and they are pivoted directly to the end rails, a portion of the upper surface of the end rails being cut away to permit the legs to assume their operative position at an inclination to the cot frame. The legs 24 have upwardly projecting ears 25 which seat in these cut away portions of the end rails when the cot is set up. The latch plates have notches which register with the cut away portions of the end rail when the cot is set up, and the ears seat in these notches

to hold the structure rigid and latched against accidental collapsing. The legs 24 are also made of channeled steel of such dimensions that one of the legs fits snugly into the larger of the legs, as shown in Figure 6.

When set up the cot frame has the appearance shown in Figure 1. In folding this frame it is necessary first to fold the smaller legs 24 into the end rails and then to fold the larger legs 24 into the end rails and about the smaller legs. This folding of the legs releases the plates 18 and 19 from latching engagement permitting a pivotal movement of the end rail 21 on the latch 18 and permitting the latch plate 19 to slide on the section 11. Before the latch plate 19 is permitted to slide on the section 11 the end rail must be moved to bring the pin 22 to the outer end of the slot 23, this movement bringing the end of the end rail slightly within the inner side of the section 11. As the two plates 19 are moved inwardly there is a parallel movement of the two side rails, gradually bringing them into juxtaposition. At the same time the middle legs are folded on each other so that when this operation is completed the structure has the form of a T, the pair of side rails forming the bar of the T and the folded middle legs forming the leg of the T. There remains only to fold the side rail sections on their pivots in the clips 12 so as to bring the side rail sections and the end rail sections into parallel relation with the middle leg structure.

The operation of setting up the cot is very simple. The first step brings the parts into the position shown in Figure 7, after which the side rails are spread by pulling them apart. The spreading of the side rails causes the sliding of the plates 19 in the grooves of the section 11 until the end rails are positioned at right angles to the side rails to form a rectangular structure. The latches 19 should have such a position at the end of their sliding movement that the inner walls of the cut away portions will be flush with the outer ends of the sections 11, so as to permit the ears 25 of the legs 24 to enter the cut away portions and to latch the parts. It should be here noted that this latch to a certain extent depends on the weight placed upon the cot. The heavier the occupant the more rigidly will the latch hold the parts in fixed position.

The cot, when set up, is a full length cot of 76 inches, having a width of twenty-seven inches. When folded it occupies an almost insignificant space. Its folding and unfolding operations require only a few seconds of time. All of its parts are secured so that there is no danger of loss of any detachable parts. Every portion of the frame is made of steel, which materially reduces the weight but at the same time gives added rigidity and wearing qualities to the frame. In the size in which we construct the cot it supplies the demand for a single cot. It is, however, possible to construct it as a cot of a greater width, or in fact to increase its width to bed size.

Having thus described our invention in terms which will be readily understood by others skilled in the art to which it pertains, what we claim to be new and desire to secure by Letters Patent of the United States is:

1. A collapsible bed frame having end and side rails forming a rectangular structure, pivotal connections between the end and side rails at the corners of the frame, two of the said connections at diagonally opposite corners of the frame being fixed pivots and the other two of the said connections being pivots which are adapted to slide lengthwise of the respective side rails, the arrangement being such that during the collapsing movement of the frame the side rails maintain their parallel relation.

2. In a collapsible bed frame, end and side rails, plates rigidly secured to said side rails at diagonally opposite corners of the frame, other plates slidably secured to said side rails, said second named plates being diagonally positioned in the set-up bed and on the sides of the bed opposite said first named plates, said end rails being each pivotally secured at its opposite ends to one of said fixed plates and to one of said slidable plates.

3. A bed corner including a side rail and an end rail which is adapted to rest against the extremity of the side rail, said end rail being in channel form, a leg pivotally secured to said end rail so as to be foldable therein, a latch plate slidably secured to said side rail and pivotally secured to said end rail, said end rail having limited sliding movement relative to said latch plate, the upper wall of said end rail being cut away at its extremity and said latch plate being provided with a notch which is adapted to register with the cut-away portion of the said end rail when the bed is set up, and an ear on said leg, said ear being adapted to enter the registering notch and cut-away portion of said latch plate and end rail respectively to latch the said parts against accidental displacement, said ear also serving as an abutment for the leg when the bed is set up.

In witness whereof we affix our signatures.

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