

G. CORAY.
FOLDING COT.
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1,413,901.

Patented Apr. 25, 1922.

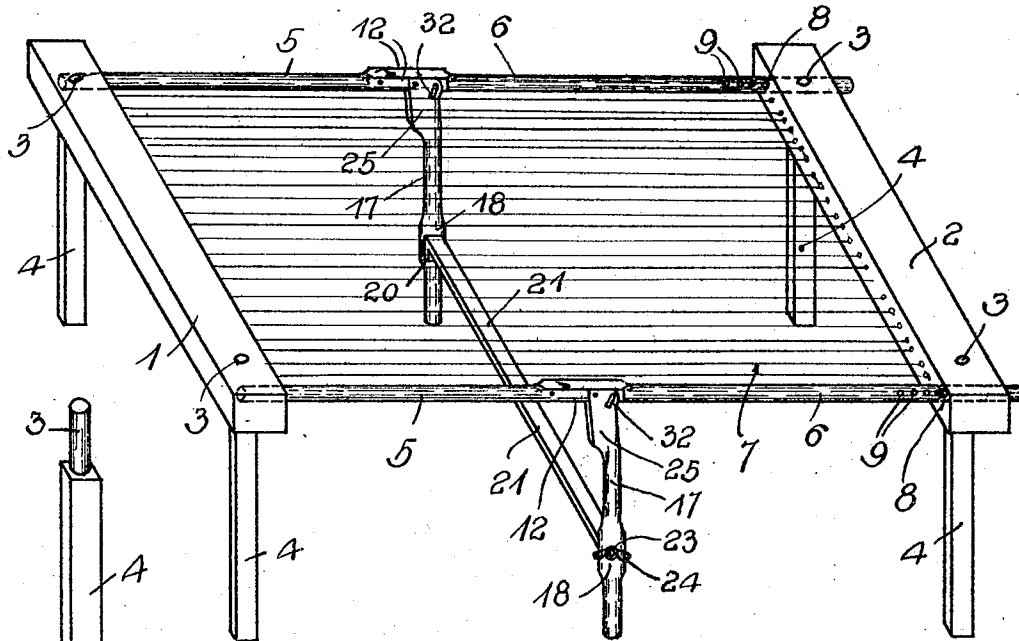


Fig. 1.

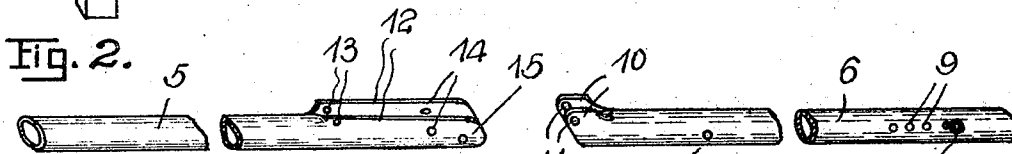


Fig. 2.

Fig. 3.

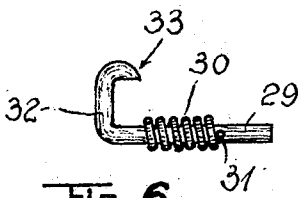


Fig. 4.

Fig. 5.

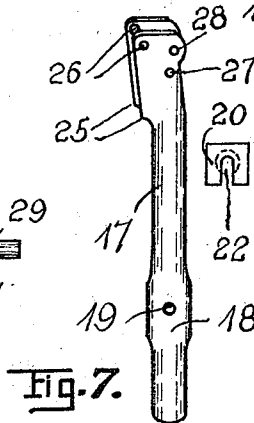


Fig. 6.

Fig. 7.

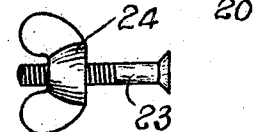


Fig. 8.

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FOLDING COT.

1,413,901.

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To all whom it may concern:

Be it known that I, GEORGE CORAY, a citizen of the United States, residing at Salt Lake City, in the county of Salt Lake and State of Utah, have invented certain new and useful Improvements in Folding Cots; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improved folding cot for use in camping and one object of the invention is to provide a cot having improved construction in folding side bars and locking means for releasably holding the side bars in an extended position and further having intermediate supporting legs pivotally connected with the folding side bars and carrying latching means for locking the sections of the side bars in the extended position.

Another object of the invention is to so construct and mount the latching means that the side bar sections may be swung to the extended position and the supporting legs then swung to an operative position, movement of the supporting legs to an operative position causing the latching means to be moved by cam action into position for snapping into locking engagement with the side bar sections.

Another object of the invention is to so construct the side bars that the end bars may be connected therewith, the side bars fitting into sockets formed in one of the end bars and the second end bar having openings slidably receiving the side bars so that this end bar may be moved longitudinally of the side bars and secured in an adjusted position to tighten the rope carried by the end bars and forming a spring structure.

Another object of the invention is to provide improved means for securing the adjustable end bar in a set position upon the side bars.

Another object of the invention is to provide an improved type of bracing bar for the intermediate supporting legs, the bracing bar being releasably held in place and permitted of easy and quick removal when desired.

This invention is illustrated in the accompanying drawings, wherein:

Figure 1 is a perspective view of the improved folding cot.

Figure 2 is a perspective view of one of the supporting legs positioned at the ends of the cot and supporting the end bars.

Figure 3 is a perspective view of one of the side bar sections.

Figure 4 is a perspective view of the second side bar section pivotally connected with the side bar section of Fig. 3.

Figure 5 is a perspective view of the bracing bar which braces the intermediate supporting legs.

Figure 6 is an enlarged view of the latch for releasably holding an intermediate supporting leg in an operative position and locking the two sections of a side bar in an extended position.

Figure 7 is a perspective view of an intermediate supporting leg.

Figure 8 is an enlarged view of a securing bolt for connecting one end of the bracing bar of Fig. 5 with the intermediate supporting leg shown in Fig. 7.

This improved cot is provided with end bars 1 and 2 each of which is provided with openings adjacent its end to receive pins 3 at the upper ends of the supporting legs 4. It will thus be seen that the supporting legs 4 will be removable and that when in place the end bars 1 and 2 will rest upon the shoulders at the lower ends of the pins 3 and be supported in a very efficient manner. The end bar 1 is provided with sockets to receive the ends of the side bar sections 5 and the end bar 2 is provided with passages through which will extend the end portions of the side bar sections 6. It will thus be seen that when in use, the end portions or sections 6 of the side bars may be passed through the passage of the end bar 2 and the ends of the side bar sections 5 then inserted into the sockets of the end bar 1. A rope is connected at one end of one of the end bars and is then passed back and forth from one end bar to the other and passed about guides in the form of openings in the end bars or pulleys carried by the end bars. After being passed about all of the guides, the second end of the rope will be secured to one of

the end bars thus providing a spring structure 7 which will be stretched tight when the end bar 2 is drawn along the side bar sections 6 and secured by keys 8 passed through openings 9 formed in the end portions of the sections 6 as shown in Figs. 1 and 4. If it is found that the rope has been stretched too tight or has not been stretched tightly enough, the securing pins or keys 8 will be removed and after proper adjustment of the bar 2 has been made, the keys replaced in a second set of openings.

As previously pointed out, the side bars will each be formed in two sections 5 and 6 and will be formed from metal tubing or pipe. The section 6 has its inner end portion split for a short distance and bent to provide ears 10 perforated as shown at 11 to provide hinge ears. The second section 5 has its inner end portion split longitudinally to provide an elongated cross-shaped seat or pocket having upstanding walls 12 each of which will be provided with alined openings 13 and 14 and one of which will be provided with an opening 15. The inner end portion of the section 6 fits into the pocket or seat of the section 5 and a pivot pin is passed through the openings 11 and 13 thus pivotally connecting the section 6 with the section 5. When the sections of the side bars are swung to the extended position, the opening 16 formed in the section 6 registers with the opening 15 formed in the section 5. In order to support the side bars between the end bars there has been provided intermediate supporting legs 17 each of which is formed from a tube or length of pipe flattened intermediate its length as shown at 18 and perforated as shown at 19 so that the depending arms 20 at the ends of the bracing bar 21 may fit flat against the intermediate supporting legs 17. Each of these heads is provided with a slot 22 cut between the side flanges provided by the channel bar construction of this bracing bar. Therefore when the bolts 23 which are mounted in the openings 19 are engaged by the depending heads of the bracing bar with the bolts positioned in the slots 22 and the heads of the bolts engaged by the side flanges of the bracing bar, the securing nuts 24 may be tightened thus securely but releasably holding the bracing bar in engagement with the intermediate supporting legs. The upper end portion of the pipe forming each intermediate supporting leg will be split longitudinally and then cut and bent to provide spaced arms 25 which will extend upon opposite sides of the seat at the inner end of the side bar section 5. Openings 26 are formed in the side arms 25 to receive rivets which pivotally connect the supporting leg with the side bar section and these side arms will further each be provided with an opening 27 and one of them will be provided with an opening 28 to register with

the alined openings 15 and 16 when the supporting leg is swung to the operative position as shown in Fig. 1.

When the supporting legs are in the operative position and the sections of the side bars extended, it is desired to securely lock the parts in the operative position. Therefore each of the supporting legs will be provided with a latch constructed as shown in Fig. 6. This latch is provided with a shank or stem 29 which will be slidably mounted in the openings 27 of the two side arms 25 and will carry a spring 30 positioned upon the stem 29 between the side arms 25 with one end engaging one of the side arms 25 and the second engaging an abutment pin 31 so that the latch will be normally drawn to a locking position. The bill 32 of this latch extends across the outer face of one of the side arms 25 and is provided with a tooth 33 for passing through the opening 28 and into the alined openings 15 and 16. It should be noted that the tooth 33 has its outer face curved longitudinally thus providing a cam face which cooperates with the curved cam face of the seat of side bar section 5 to move the latch against the action of the spring 30 when swinging the supporting leg to the operative position. As this supporting leg is swung to the operative position, the latch is moved against the action of the spring and will move outwardly through the opening 28 until the opening 28 registers with the two openings 15 and 16. The spring 30 will then cause the latch to move inwardly to position the tooth 33 in the registering openings 28 and 15. This will securely lock the supporting legs and sections of the side bars in the operative position. It will thus be seen that there has been provided a folding cot in which the end bars may be connected with the end portions of the side bars and the supporting legs then swung to an operative position with the tooth of the latch extending through the openings 28 and 15. The side bar section 6 can then be swung down into the seat of the section 5 thus tightly stretching the rope which forms the spring structure 7. As the side bar sections 6 move into the seats of the sections 5, the sections 6 through engagement with the curved faces of the teeth 33 of the latches will move the latches outwardly until the openings 16 register with the openings 15, at which time the springs will return the latches to the locking position. The supporting legs 17 may thus be moved to the operative position either before or after the side bar sections 6 are swung down to the extended position. When the cot is no longer to be used, the latches will be moved to a releasing position and the supporting legs swung upwardly against the side bar sections 5. The side bar sections 6 will be folded to extend along the side bar sections

5 and the end bars 1 and 2 removed. The bracing bar 21 will be released and moved out of engagement with the supporting legs and the supporting legs 4 will be removed from the end bars. The elements forming the cot can thus be taken apart and the side bars and supporting legs 17 together with the bracing bar 21 and supporting legs 4 placed to extend longitudinally of the end bars 1 and 2 and the disassembled cot rolled into a compact mass.

I claim:

1. A cot including folding side bars each having end sections pivotally connected and extending in overlapping relation when in an operative position, and having openings registering when the side bar sections are extended, a supporting leg pivotally connected with one section and a latch carried by the leg and having a tooth portion for extending through the openings of the side bar sections, the tooth portion having a curved face forming a cam surface engaged by the side bar sections to move the latch to an inoperative position, when the bar sections are swung to an extended position, and resilient means for normally holding the latch in an operative position and moving the tooth into the openings.

2. A cot including folding side bars each having end sections having pivotally connected inner end portions extending in overlapping relation when extended and fitting one within the other, a supporting leg pivotally connected with the inner end portion of the section receiving the second section when extended, the leg and bar sections being provided with openings registering when

the bar sections and leg are in an operative position, and latching means for passing through the registering openings to secure the bar sections and supporting leg in an operative position.

3. The structure of claim 2 having the latching means in the form of a pin slidably carried by the leg and having a bent end for passing through the registering openings, and a spring normally holding the latch in an operative position for extending through the openings.

4. The structure of claim 2 having the latching means in the form of a pin slidably carried by the leg and having a bent end for passing through the registering openings, and a spring normally holding the latch in an operative position for extending through the openings, the end of the pin passing through the openings having a cam face for moving the latch to an inoperative position against the action of the spring when a bar section is swung to an operative position, and engages the cam face of the latch.

5. A folding cot comprising end bars, a spring structure carried by the end bars, folding bars each having pivotally connected sections, an intermediate supporting leg for each side bar pivotally mounted upon its pivotally connected sections for movement into and out of an operative position and common latch means for releasably holding the side bar sections and intermediate leg in an operative position.

In testimony whereof I have hereunto set my hand.

GEORGE CORAY.