I. E. PALMER. HAMMOCK SUPPORT.

No. 522,720. Patented July 10, 1894. D d' Isaac E. Palmer,

## UNITED STATES PATENT OFFICE.

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## HAMMOCK-SUPPORT.

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To all whom it may concern:

Be it known that I, ISAAC E. PALMER, of Middletown, in the county of Middlesex and State of Connecticut, have invented a new and 5 useful Improvement in Hammock-Supports, of which the following is a specification.

My invention relates to an improvement in hammock supports in which two pairs of legs, one pair at each end of a central ridge pole, to are removably connected with the ridge pole and the ridge pole itself separable into sections whereby the support may be quickly set up in a secure manner for suspending a hammock or may be folded up in compact form for shipment.

A practical embodiment of my invention is represented in the accompanying drawings,

in which---

Figure 1 is a view of the support in side 20 elevation set up as in use. Fig. 2 is an end view. Figs. 3 and 4 represent an end and side view respectively upon an enlarged scale of the groove and tongue plates for removably interlocking the adjacent ends of the 25 ridge pole, and Fig. 5 represents an enlarged view in detail of one of the hooks at the top of a leg and its corresponding eye-piece on the ridge pole.

The four supporting legs are quite similar in structure and a specific description of one will answer for all. They each consist of a bar A, split from its upper end to a point near its lower end so as to form two sections a and a' which may be drawn apart at their upper ends so that the one section a' shall form a diagonal brace between the lower portion of

the bar A and the ridge pole.

In practice the bar A may be formed of a single piece of material, or it might be formed 40 of two separate pieces bolted together. In either event I find it desirable to insert a staybolt  $a^2$  through the bar A from side to side at a point in proximity to the point where the sections a and a' begin to diverge.

The ridge pole is divided, preferably at its middle point, into two sections B and B' and each of these sections is split from the end at the center of the pole toward the ends of the support into upper and lower branches, the branches of the former being denoted by b late C just described, and the sections are 95 held in assembled adjustment by a bolt c<sup>5</sup> through their webs. The tongue plate C' is provided at its top with a laterally projecting tongue c<sup>6</sup> adapted to enter the groove c' in the plate C and at its lower portion it is 100

and b' and the branches of the latter by  $b^2$  and  $b^3$ . Each ridge pole section like the legs, may either be formed of a single piece of material or it may be formed of two longitudinal half sections secured together near the ends of the support. The adjacent ends of the branches of the ridge pole sections are held the proper distance apart by means of sockets c extending in opposite directions from the interlocking groove and tongue plates C and C'. 60 The ends of the branches b, b', are adapted

The ends of the branches b, b', are adapted to enter the sockets projecting from the rear of the plate C and the ends of the sections  $b^2$ ,  $b^3$  are adapted to enter the sockets extending from the tongue plate C'. It is intended that 65 the ends of the said sections of the ridge pole shall be permanently fixed in their sockets so that the plates will be held to their respective ridge pole sections and at the same time the parts of the ridge pole sections will 70 be held spread apart in a position to form an effective brace.

The groove and tongue plates C, C' are each formed in two half sections, the plane of separation extending about midway through 75 the upper and lower sockets c longitudinally of the sockets or in the direction of the length of the pole. The groove plate C is provided at its top portion with a short groove c' in the arc of a circle and with a longer groove c<sup>2</sup> at 80 its bottom, also arranged in the arc of a circle, the grooves being preferably formed in laterally extended branches at the front of the plate. The groove plate C is further provided with a central socket c<sup>3</sup> in its face for 85 the reception of a corresponding lug on the opposite plate.

The sections of the groove plate C are drawn together to clamp the branches of the ridge pole in its sockets by means of a later-9c ally extending bolt  $c^4$  extending through the webs of the sections to the rear of its face. The opposite or tongue plate C' is separated into two sections in the same manner as the plate C just described, and the sections are 95 held in assembled adjustment by a bolt  $c^5$  through their webs. The tongue plate C' is provided at its top with a laterally projecting tongue  $c^6$  adapted to enter the groove  $c^6$  in the plate C and at its lower portion it is 150

provided with a pair of laterally projecting tongues  $c^7$  adapted to enter the groove  $c^2$  at

the bottom of the plate C.

The plates are adjusted, the one to the other by entering the central stud on the plate C' into the socket at the central portion of the plate C with one of the parts turned a quarter of a revolution, more or less, to the right or left and the plate C' with its ridge 10 pole branches fixed therein is then ready to slide the tongues at the top and bottom into their respective grooves in the opposite plate by a rotary movement of the one relative to the other. The plates are locked in adjusted 15 position by means of a latch c's pivoted to the top of the plate C and adapted to swing down through a groove at the top of said plate and into a notch c's formed in the tongue at the top of the plate C'.

The ends of the branches may be conveniently locked in their sockets by casting interior projecting fins  $c^{10}$  in the half sockets and providing corresponding lateral cuts in the ends of the branches to receive the fins as the half sockets are adjusted to the branches.

The ends of the ridge pole are fitted to enter bands D which serve as ferrules for the ends of the pole. The bands D have upon their opposite sides and fixed thereto or 30 formed integral therewith projecting ears d through which slots d' are formed for the reception of hooks on the tops of the leg sections. The said hooks on the tops of the leg sections are denoted by E and have a recess 35 on their sides toward the adjacent section of the leg, which recesses are adapted to receive a portion of the ear d adjacent to the end of the slot d' into them when they are adjusted for use to lock the legs to the ridge pole. The brace section of the branch a' of the leg is provided with a hook at its upper end quite similar to that on the section a, with its recess facing in the opposite direction and it is adapted to enter a slot in an ear on a second 45 band D', spaced from the first or end band D.

The hooks E are provided with heels e which, when the hooks have been entered through the slots d' and the pair of legs at the end brought toward one another into position for use, bear against the opposite lower portions of the band D or the opposite lower portions of the ridge pole adjacent to the band and are thereby prevented from any tendency to approach each other further than

55 such limit.

The legs forming a pair are held together near their lower ends by a tie-rod F. The tie-rod F consists preferably of a flat strip of material, hinged or pivoted at one of its ends 60 to one of the legs of the pair and at its opposite end provided with a perforation f through which a locking pin may be inserted to hold it in position.

The tie-rod F may have its free end in-65 serted between the diverging branches a, a' of the leg, and notches or abutments f' hav-

ing their abrupt faces downward may be employed to prevent the end of the brace from working up, the pin through the end of the brace being adapted to engage the abrupt 70 faces of said notches or abutments.

The end bands D may be conveniently provided with hooks  $d^2$  for retaining the ham-

mock ring.

To set the support up, first interlock the adjacent ends of the ridge pole as above set forth. The leg may then be engaged with the bands D, D' by throwing the legs off to one side sufficiently far to permit the ends of the hooks E at their upper ends to enter the sclots d' in the ears d. The legs may then be brought to the proper position and locked in such position by adjusting the free end of the tie-rod F with its pin in engagement with the notches or abutments on the leg. The structure when set up and a hammock suspended from the hooks at the opposite ends of the ridge pole, will be found very strong and stable, the different parts for resisting strain being so arranged that they will do go effective work, although they be made slender and light.

The taking apart for packing may be done by reversing the steps above set forth and either the setting up or taking apart will require but very short time and may be done by anyone, whether skilled or not, without

any liability of making a blunder.

What I claim is—

1. The hammock support, comprising a roc ridge pole and two pairs of legs, each pair of legs having a removable engagement with an end of the ridge pole, the several legs being spread apart at their upper ends forming branches one of which extends toward the end of the ridge pole and the other toward the ridge pole at a distance from the end, to form both supports and braces and means for connecting the members of each pair of legs when adjusted, substantially as set forth.

2. The hammock support, comprising a ridge pole composed of separable sections, and legs having a removable engagement with the ends of the ridge pole, the upper portions of the legs being divided and adapted to be 115 spread apart to engage the ridge pole at different points of its length, substantially as

set forth.

3. The hammock support, comprising a sectional ridge pole the adjacent ends of the 120 sections being separated longitudinally and having fitted thereto groove and tongue plates for locking the ends of the structures together in separable adjustment, and supporting legs having a removable connection 125 with the ends of the ridge pole, substantially as set forth.

4. The combination with the sections of the ridge pole, of a groove plate secured to the end of one section and a tongue plate secured to 130 the end of the other section, said groove and tongue plates being formed in half sections

522,720

and means for fastening the two plates in interlocked adjustment, substantially as set forth.

5. The hammock support comprising a hori-5 zontally extending ridge pole having leg attaching bands at its ends, the bands being provided with slotted ears, and supporting legs having hooked upper ends, the points of the hooked ends being adapted to enter the ro slotted ears on the bands and the heels of the hooked ends being adapted to bear against the lower opposite sides of the ridge pole or bands, substantially as set forth.

6. The hammock support, comprising a 15 ridge pole having legattaching bands secured at its ends and at intervals from its ends, the bands being provided with slotted ears, and legs having their upper ends separated longi-

tudinally and provided with hooks adapted to enter the slotted ears in both the end band 20 and the band at an interval therefrom, sub-

stantially as set forth.

7. The hammock support, comprising a ridge pole having leg attaching devices thereon, legs each separated longitudinally and 25 having a removable engagement with the ridge pole, and leg braces or ties consisting of strips of material pivoted at one end to one leg of a pair, and having a removable connection at the opposite end with the other 30 leg of the pair, substantially as set forth.

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Witnesses:

JOHN G. PALMER, JOHN C. BARNES.