(No Model.)

J. F. PLUCHE.

FOLDING HAMMOCK SUPPORT.

No. 290,921. Patented Dec. 25, 1883.

Fig. 1.

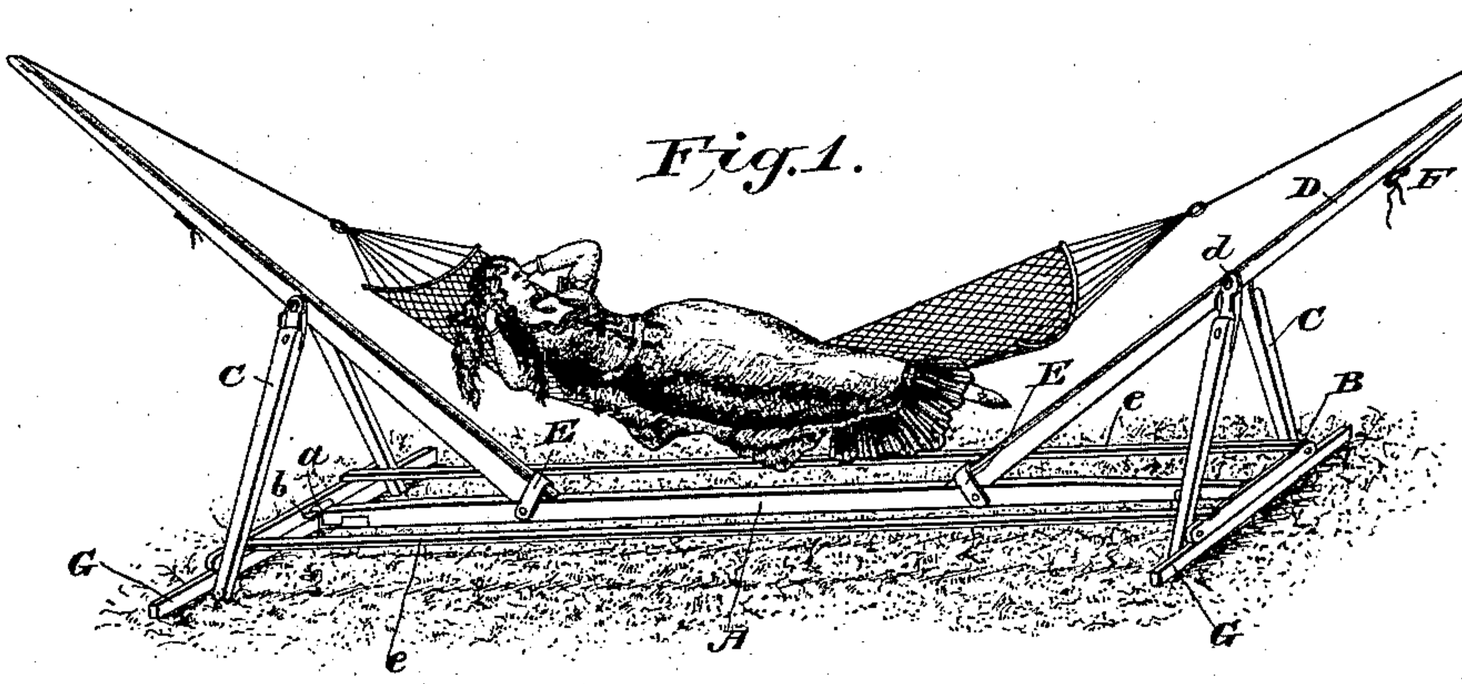


Fig. 2.

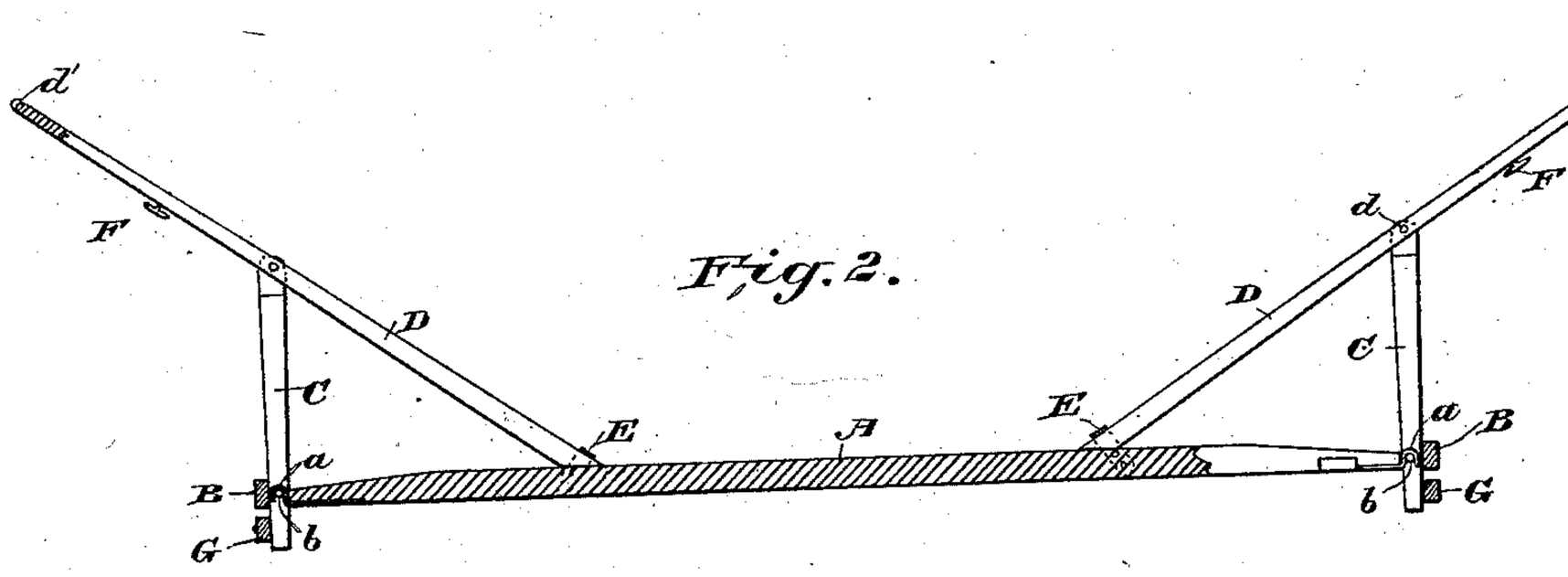


Fig. 3.

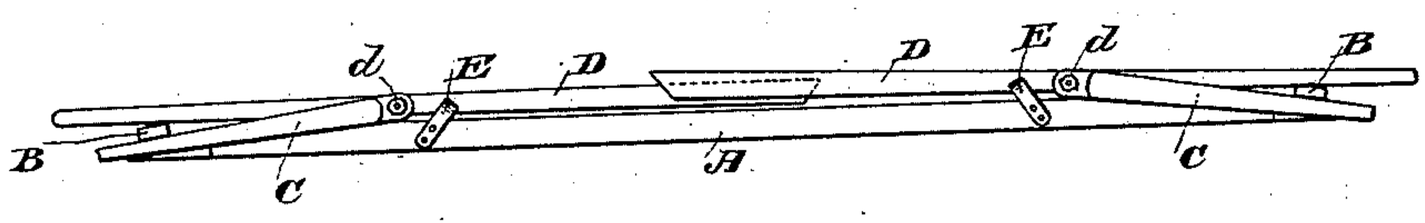
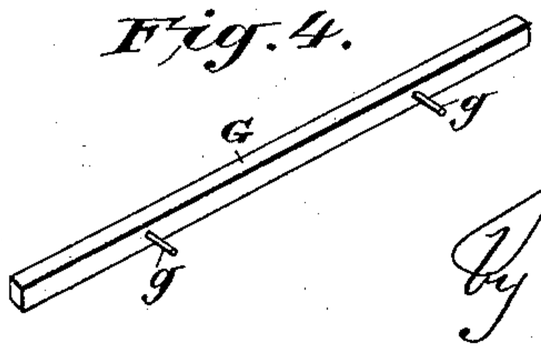


Fig. 4.



Attest:

Geo. T. Smallwood.

J. Henry Kaiser.

Inventor.

James. F. Pluche

by A. Pollok

his attorney

UNITED STATES PATENT OFFICE.

JAMES FRANCIS PLUCHE, OF WATERTOWN, NEW YORK, ASSIGNOR TO GEORGE J. PORTER AND C. H. TUBBS & CO., ALL OF SAME PLACE.

FOLDING HAMMOCK-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 290,921, dated December 25, 1883.

Application filed July 7, 1883. (No model.)

To all whom it may concern:

Be it known that I, JAMES FRANCIS PLUCHE, of Watertown, in the county of Jefferson and State of New York, have invented a new and useful Improvement in Folding Hammock and Awning Supporter, which improvement is fully set forth in the following specification.

The present invention relates to portable frames or supports for hammocks, swings, awnings, and the like, and has for its object the production of a strong and light frame, readily set up and taken down, capable of reduction to small compass, and easily handled and transported from place to place.

The invention resides, chiefly, in the combination and arrangement of the several elements of the frame, and in the special construction of certain parts thereof, as hereinafter fully set forth.

The weight of the hammock and its occupant is sustained by a long bar or bed-piece, which forms the base of the frame. At each end of this bar cross-pieces are fastened at their centers by detachable hinge-joints, and from the ends of each cross-piece project uprights or braces having pivoted between their upper ends, which come together, long arms or stretchers, to which the ends of the hammock-rope are attached when the same is in use. These arms or stretchers have grooves at the top for the ropes to rest in, and on their under sides are furnished with cleats or buttons for the attachment of the same. When the frame is set up, the stretchers (which are in the same vertical plane with the bed-piece) are depressed at an angle and their inner ends inserted under stirrups on said bed-piece. This is all the manipulation required to prepare the frame for use. The direction of the stretchers causes the weight to fall approximately in the line of their length, so that they may be made very light and yet have the requisite strength.

To take down and fold the frame it is only necessary to slip back the stretchers out of engagement with the stirrups when the uprights or braces, turning on the hinge-joint of the cross-pieces to the bed-piece, can be laid flat upon the latter, the stretchers turning on their pivots to a horizontal position. To still further reduce the device in compass, the cross-pieces can be readily detached from the bar or bed-piece, and the nuts holding the pivot-pins or screws connecting the stretchers with the uprights being removed, these parts may also be detached.

For ordinary use as a support for hammocks or awnings, the length of the cross-pieces affords sufficient base for the frame to prevent tipping over; but to enable the same to be used as a swing auxilliary cross-pieces of greater length are provided, and may be attached to the braces by means of pins entering small holes therein. Slats forming foot-rests are provided, one on each side of the bed-piece, and supported at either end by the cross-pieces.

In the accompanying drawings, which form a part of this specification, Figure 1 is a perspective view of a support or frame constructed in accordance with the invention; Fig. 2, a vertical section, partly in elevation; Fig. 3, a side view of the device folded, and Fig. 4 a detail of the auxiliary cross-piece.

At each end of the bar or bed-piece A is secured a metal hook, *a*, which normally embraces the metal loop or staple *b* on each cross-piece B. The latter are fastened at their ends, by screws, bolts, or otherwise, to the bottoms of uprights C, and constitute, in connection with said uprights, triangular braces or supports for the stretchers D. These stretchers are pivoted near their middle, at *d*, between the uprights C, by means of bolts and nuts, and can turn freely about this point *d*.

When in use, the inner ends of the stretchers D, which are beveled from below, are inserted under the stirrups E, the latter being bolted to the bed-piece A. The support is now in condition for use. The hammock is swung by passing the ropes through grooves *d'* in the upper ends of stretchers D, and after being adjusted to the proper height, the ropes are fastened to the buttons or cleats F. It will be seen that the strain on the stretchers is nearly in the line of their length—that is, in the direction of their greatest resisting capacity—and the weight is sustained ultimately by the

long bar or bed-piece A, and hence is distributed over considerable surface. The parts can thus be made very light and convenient, for handling without danger of breaking. Wood is the preferred material.

The function of keeping the parts in place while in use is performed entirely by the stirrups E, and no other fastening is necessary. The weight of the occupant of the hammock tends to force the stretchers D firmly into the sockets formed by said stirrups, and their ends enter under the latter far enough to prevent their riding up in case of any sudden movement or change in the position of the weight.

By constructing the stretchers D with grooved ends and providing them with cleats or buttons *d*, the hammock can be adjusted to different heights with little or no difficulty.

To fold the support or frame for transportation, the stretchers D are slipped back out of engagement with the stirrups E, and can then, together with the uprights or braces, be laid flat upon the bed-piece in the position shown in Fig. 3, the stretchers turning on their pivots *d* and the braces on the hinge-joint *a*. The device may be still further reduced in compass by slipping the loops or staples *b* out of engagement with the hooks *a*, thus detaching the cross-pieces B from the bed-piece A, and, if necessary or desirable, the stretchers can be readily detached from the uprights by unscrewing the holding-nuts and removing the pins or bolts.

If it is desired to use the support for a swing, the auxiliary cross-pieces G are applied to the uprights C by inserting the pins G in small holes prepared to receive them. By this means the bearing-surface of the base is extended sufficiently to insure steadiness of the support while the center of gravity changes from side to side.

The boards or slats *e*, supported by the cross-pieces B, afford rests for the feet, and at the same time protect the grass of the lawn from injury.

The whole device presents a strong and at the same time light support, that can be set up and taken down at a moment's notice and with small difficulty, and which can readily be packed up and transported from place to place.

By having the bar A at the bottom and the other parts connected therewith in the manner specified, the inconvenience of having a rod or guy-rope at the top from one stretcher to another is avoided.

While the frame or support shown and described is deemed the best embodiment of the invention, it is obvious that modifications may be made in the details of construction without departing from the spirit of the invention, and that parts thereof may be used without the others.

Having now fully described the said invention and the manner of carrying the same into effect, what I claim is—

1. The combination of the long bar or bed-piece, the cross-pieces, hinged one to each end of said bar or bed-piece, the uprights, the stretchers, pivoted near their middle between the upper ends of said uprights, and the stirrups, substantially as described.

2. The combination, with the bed-piece and braces hinged thereto, of the stretchers pivoted to said braces, and the stirrups for receiving the inner ends of said stretchers and holding them against said bed-piece, substantially as described.

3. The combination of the bed-piece, cross-pieces detachably connected therewith, uprights secured to the ends of said cross-pieces and converging toward their upper extremities, stretchers pivoted between the ends of said uprights, and stirrups on said bed-piece for receiving the ends of said stretchers, which are beveled from beneath, substantially as described.

4. The combination, with the frame or support comprising a bed-piece, cross-pieces, uprights, and stretchers, of the auxiliary cross-pieces, substantially as and for the purpose set forth.

5. The combination, with the bed-piece and cross-pieces attached thereto, of the slats or boards supported by said cross-pieces, and forming foot-rests, substantially as described.

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

JAMES FRANCIS PLUCHE.

Witnesses:
EDMUND B. WYNN,
PHI NORTON.