(No Model.)

C. L. AMES.

FOLDING COT.

No. 249,444. Patented Nov. 15, 1881.

Fig. 1.

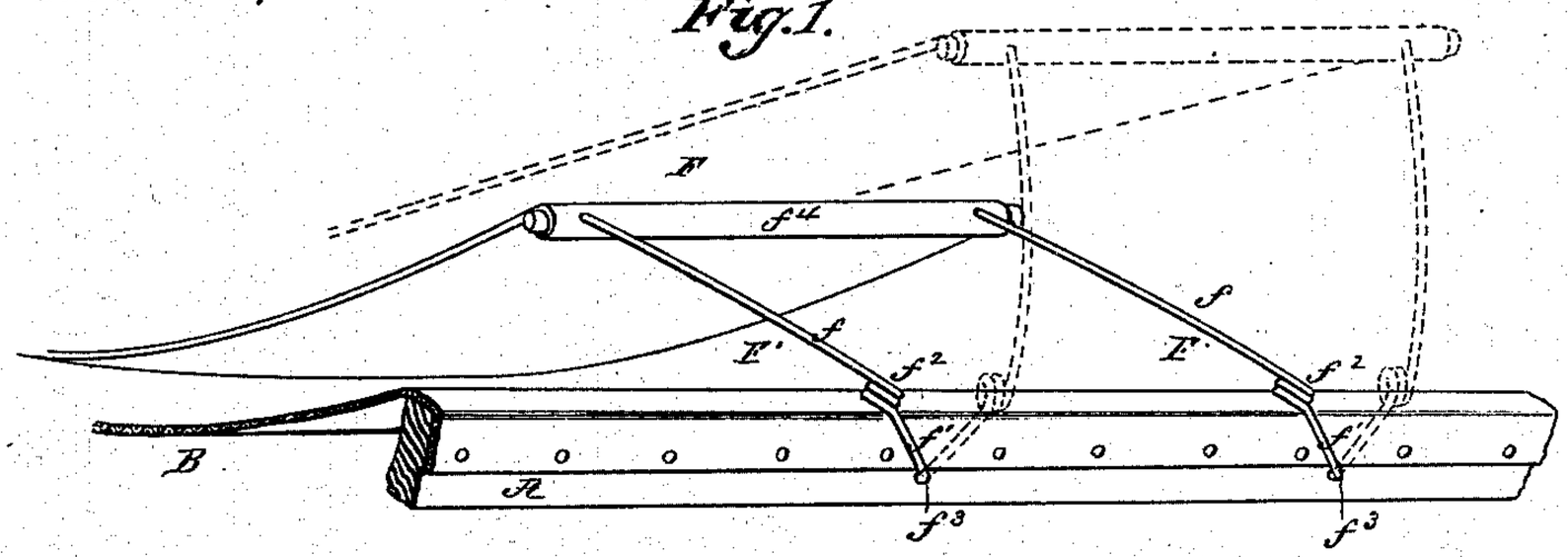


Fig. 2.

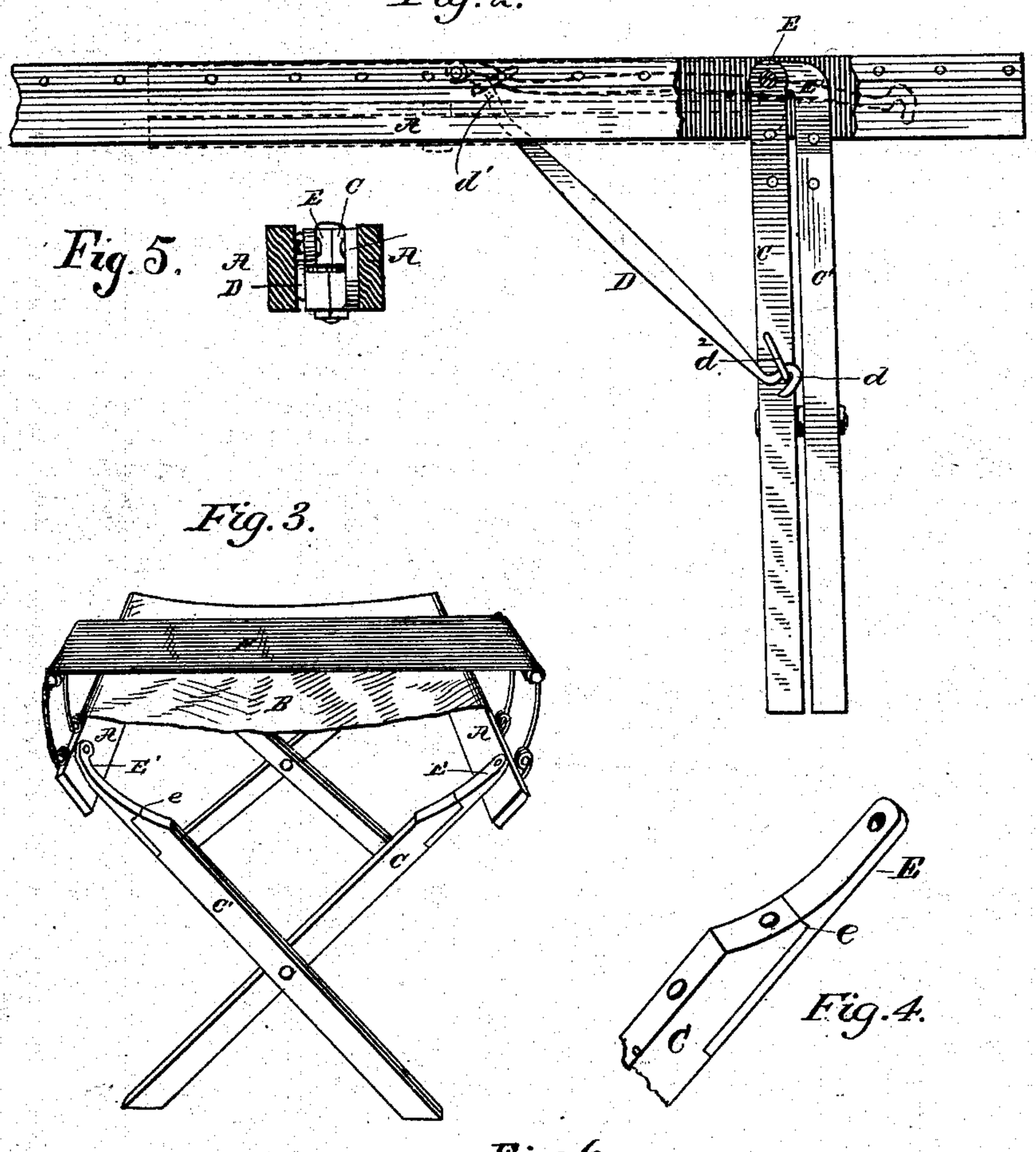
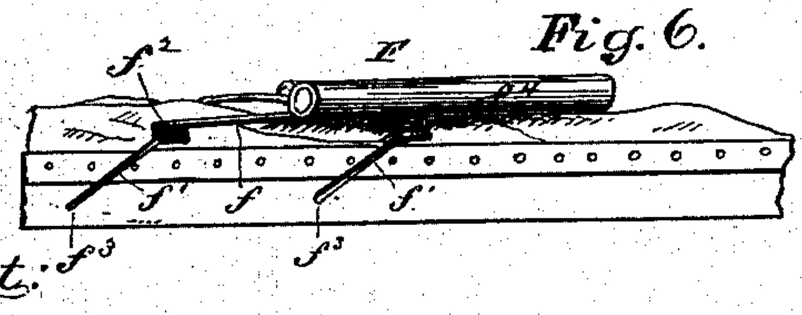


Fig. 5.

Fig. 3.

Fig. 4.

Fig. 6.



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FOLDING COT.

SPECIFICATION forming part of Letters Patent No. 249,444, dated November 15, 1881.

Application filed August 15, 1881. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. AMES, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Folding Cots; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to the class of folding cots having crossed and pivoted legs, which, when the cot is folded upon the central pivot of the legs, also fold against or into line with the side rails.

It also relates to the wire springs of the head-rest of a folding cot.

As it relates to the folding legs, the invention consists in certain features of construction in the irons by which the legs are pivoted to the side rails, and in the combination, with a staple affixed to one of the legs, of a brace of special form and arrangement for holding the legs extended.

As it relates to the head-rest supports, the invention consists in a certain form of such supports by which the head-rest may be more readily folded closely upon the remaining parts when the cot is closed, all as will be hereinafter more fully set forth, and pointed out in the appended claims.

In the accompanying drawings, Figure 1 represents the parts concerned in the operation of the head-rest as they appear when the cot is extended. Fig. 2 shows one feature in the construction and the point of pivoted attachment of the plates by which the legs are joined to the rails, and also the peculiar construction of the brace. Fig. 3 is a fragmentary perspective end view of the cot extended. Fig. 4 is a perspective view of one of the leg-plates and a fragment of the leg to which it is attached. Fig. 5 is a cross-section of the side rails, showing the relative position of the rails, legs, and brace when the cot is folded. Fig. 6 is a fragmentary side view of the folded cot, showing the position into which the head-rest may be readily folded when made in accordance with my improvement.

A A are the side rails of the cot. B is the canvas which unites them and is supported therefrom. C and C′ are one pair of the centrally-pivoted legs. D is one of the leg-braces. E E′ are the plates by which the legs are pivoted to the side rails. F is the head-rest, and F′ F′ are the head-rest supports.

In order that the legs C and C′ may fold upward into line with the side rails without throwing the latter one past the other at the ends, it is necessary that the pivoted points at which the legs are joined to the rails shall be exactly opposite each other or in the same transverse line. This feature is in itself very old; but for this purpose I employ a novel construction, consisting of a straight plate on the inner leg of each pair and a bent plate on the outer leg, as clearly shown in Figs. 2 and 3. That the legs (of proper thickness) may fold entirely within the space embraced by the rails, this construction and arrangement of the plates require that the pivotal point shall be near the top edge of the rails, which, being nearer the point of strain from the canvas, (applied to said edge of the rails,) greatly increases the strength of the joint. Another effect of this form of the pivot-plates is to throw the pressure upon the legs outside the vertical plane of the joints, and to thereby give a slight tensional strain upon the braces, which, as will be readily seen, increases the security of the cot in its extended position.

The plates E E′ are secured to the legs C C′ by means of rivets or screws. For the purpose of relieving these fastenings of strain calculated to loosen them, the plates are provided with a shoulder, *e*, against which the legs abut, and which therefore take the pressure-strain upon this connection.

The brace D consists of a thin, flat metal piece, provided with the hook *d* at its free end, and pivoted at the other end to the inner surface of the side rail, near its upper edge. Near its pivoted end the brace is provided with a downward curve, *d′*, and it is guided in and engages with the staple d^2, set obliquely in the leg C, as shown in Fig. 2. When the legs are folded up between the rails the curve *d′* rests within the staple d^2, and the latter either forces or allows the brace to lie in line with the rail and legs. Moreover, by reason of the offset or bend *d′* the brace at its free end lies opposite the leg C′, attached to the opposite rail, so that while folded closely out of the way it is not clamped or caught by the leg C.

The wire springs F′, which support the head-

rest and which consist of the parts f and f', proceeding from the coil at f^2, differ from those heretofore used for the same purpose in being given a pronounced angle at f^2, as shown. Having this form when the head-rest is raised, as indicated by dotted lines in Fig. 1, the coils f^2 strike the rails considerably back of the points at which the springs are pivoted to the rails, and the rest therefore cannot, when in use, fold down beneath the weight upon it. f^3 f^3 are the points on the rails at which the springs are pivoted. By the same means, however, when the cot is folded, the parts f and the end bars f^4 naturally lie closely down against the rails, as seen in Fig. 6.

I claim as my invention—

1. In a cross-legged folding cot, the legs C and C′, provided, respectively, with the straight plate E and bent plate E′, substantially as and for the purposes set forth.

2. In a cot wherein the legs fold within the rails, the combination, with the leg and rail, of the staple d^2 and the brace D, having the hook d and the offset d', substantially as described, and for the purposes set forth.

3. In combination with the cot-legs, the pivot-plates secured to the leg by rivets and provided with the shoulders e, substantially as described.

4. Combined with the rails A, the head-rest spring F′, having its parts f and f' inclined at an angle at f^2, as described, whereby, when the rest is raised and the parts f are nearly vertical, the parts f' are inclined, and whereby, when the cot is folded, the parts f and the end bars, f^4, may fold closely upon the rails, substantially as described.

In testimony that I claim the foregoing as my invention I affix my signature in presence of two witnesses.

CHARLES L. AMES.

Witnesses:

M. E. DAYTON,

JESSE COX, Jr.