

(No Model.)

C. H. HARD.
MATTRESS FRAME.

No. 288,431.

Patented Nov. 13, 1883.

Fig. 1.

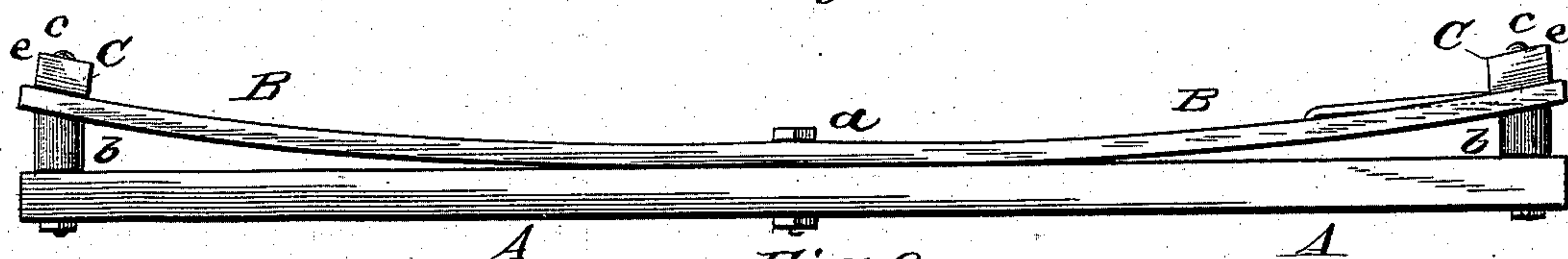


Fig. 2.

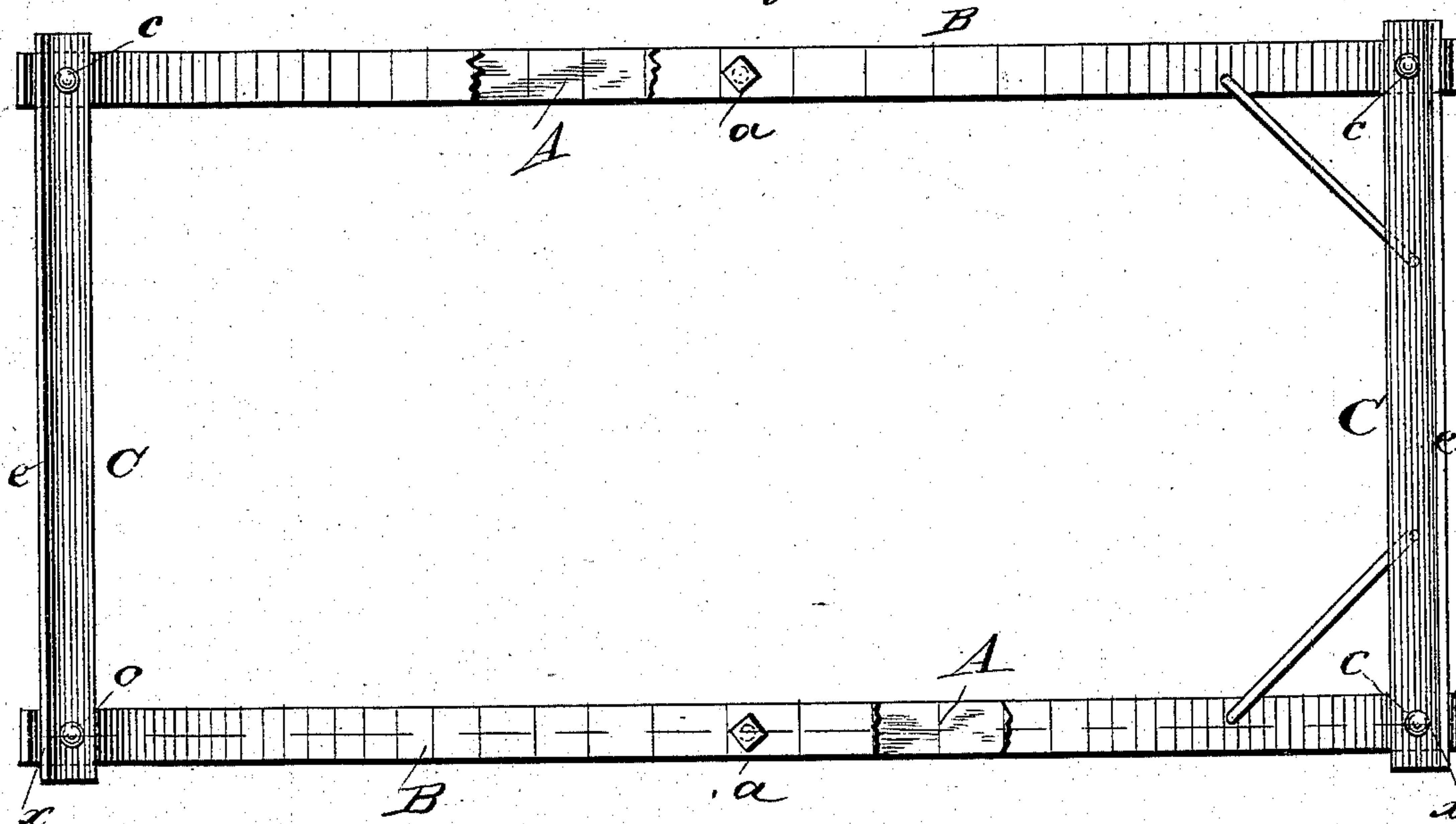
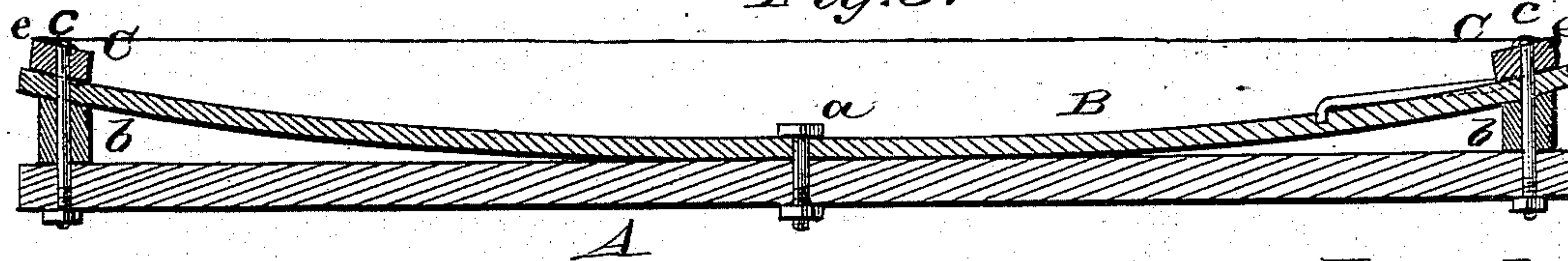


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

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MATTRESS-FRAME.

SPECIFICATION forming part of Letters Patent No. 288,431, dated November 13, 1883.

Application filed May 23, 1883. (No model.)

To all whom it may concern:

Be it known that I, C. H. HARD, of Oneida, in the county of Madison and State of New York, have invented certain new and useful
5 Improvements in Mattress-Frames; 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,
10 which form part of this specification, in which—

Figure 1 is a side elevation of my improved mattress-frame. Fig. 2 is a top view of the same; and Fig. 3 is a section taken longitudinally and vertically through the frame, as indicated by the dotted line *xx* on Fig. 2, showing a bed-bottom stretched from one cross-bar to the other.

This invention relates to frames for portable mattresses; and it consists in a frame which is
20 trussed and braced and made very light, at the same time it is very strong, as will be fully understood from the following description, when taken in connection with the annexed drawings.

25 A A designate the two longitudinal base-bars of my improved mattress-frame, which may be made of any desired thickness, width, and length, and B B designate longitudinal bars, which are rigidly secured by rivets or bolts *a*
30 *a*, or in any other suitable manner, to the bars A A. The upper bars, B B, are sprung, so as to form trusses, and their ends are sustained by blocks *b b*, which hold them in the bent or trussed position.

35 It will be seen that I have compound side bars, each one of which is entire throughout the length of the frame, and that these bars possess considerable strength—in fact, greater strength than a solid bar would possess, all
40 things being equal. These compound trussed side bars are connected at their ends by means of cross-bars C C, which in practice I prefer to

secure to the ends of the said side bars by means of bolts *c*, which are passed from above down through the three connected ends of each angle of the frame, and through the spreading-
45 blocks, between the base and truss bars, as shown in Fig. 1.

As the mattress-frame is subjected to great strain while handling and in transportation, I
50 employ diagonal braces, which are secured to the head strip or bar, and also to the longitudinal sprung bars or trusses B B. These braces will prevent racking of the joints at the angles of the frame and keep the frame
55 square. The bowing or springing of the top bars, B B, necessarily inclines the cross-bars C C toward the center of the frame, which inclination presents two angles, *e e*, over which the woven-wire or other fabric is stretched.
60 It will thus be seen that the mattress proper is by reason of the inclination of the cross-strips stretched from the points *e e*, and that a free play is allowed, which would not be obtained if the cross-strips were horizontal.
65

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, in a mattress-frame, of the longitudinal straight side bars, the continuous bowed bars secured on top of the side
70 bars at the middle of their length, the end blocks, *b*, between the ends of the bowed and straight bars, the transverse bars C, and the bolt-fastenings, all constructed and adapted
75 to operate substantially in the manner and for the purposes described.

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

CHAS. H. HARD.

Witnesses:

E. C. STARK,
T. H. JURDEN.