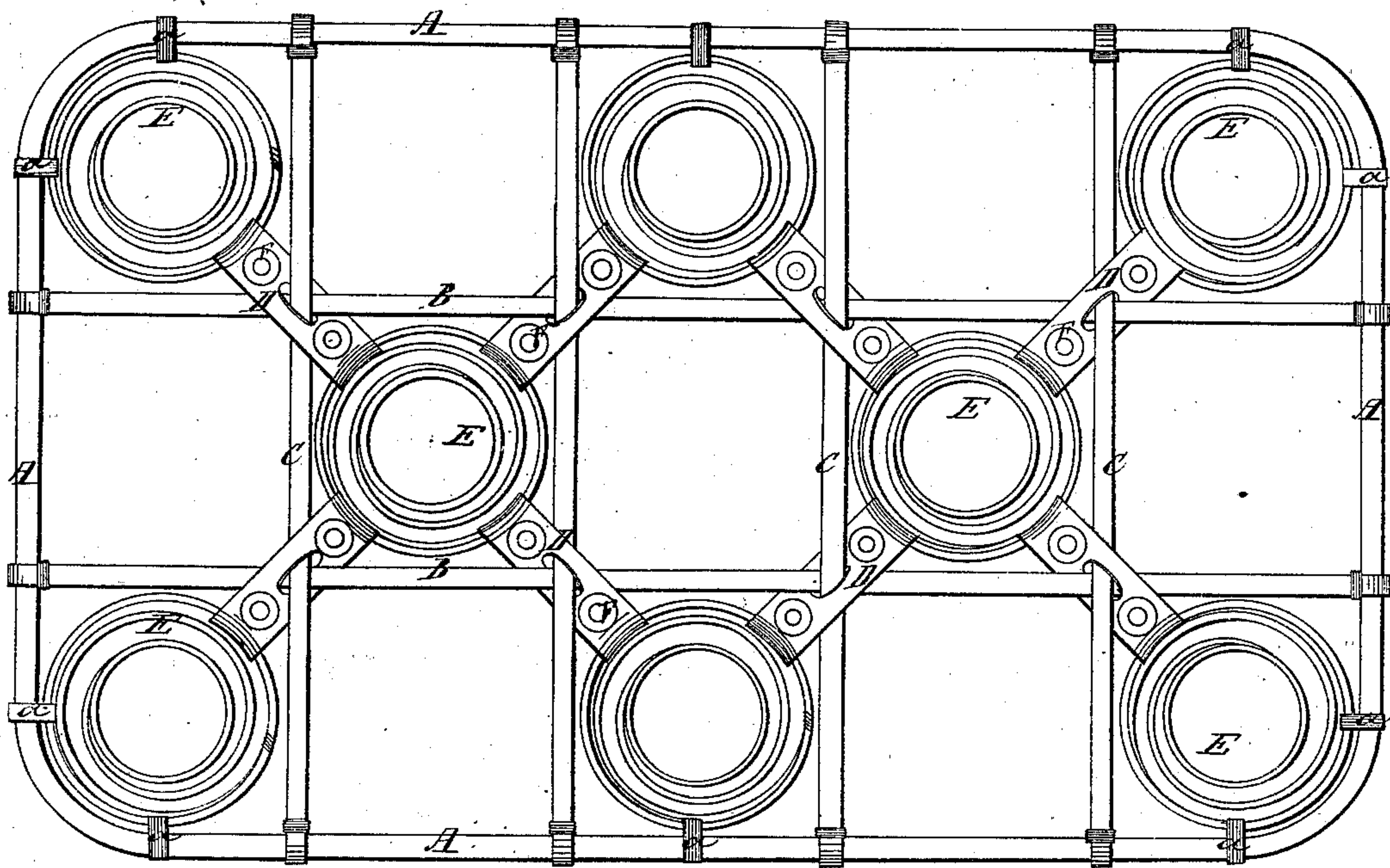


J. Waters,
Bed Bottom,
N^o 8,669. Patented Jan. 20, 1852



UNITED STATES PATENT OFFICE,

JOHN WATERS, OF SOUTHWARK, PENNSYLVANIA.

SPRING-MATTRESS.

Specification of Letters Patent No. 8,669, dated January 20, 1852.

To all whom it may concern:

Be it known that I, JOHN WATERS, of the city and county of Philadelphia, in the State of Pennsylvania, have invented certain new and useful Improvements in Spring Beds or Mattresses; and I do hereby declare the following to be a full, clear, and exact description of the manner of making the same, reference being had to the accompanying drawing, forming a part thereof, and which exhibits a top view of the frame and the fastenings of the several parts constituting the same.

The nature of my invention consists, first, in making the frame of the bed of whalebone, bamboo, ratan, gutta-percha, or any other equally light and strong material; and secondly, in so combining and arranging the rim, and longitudinal and cross bracing, and passing them through slots in the leather straps which hold together the helical springs, as to allow any weight placed at any one point in the bed, to be distributed equally over the whole frame, and at the same time allow the springs free play, without the possibility of their being disarranged by unequal pressure thereon, and preventing what has hitherto been a trouble to the manufacturer, and an annoyance to the purchaser, that is, the breaking of the cane on the edge or top of the spring when under the weight of the body.

In some of the spring mattresses heretofore constructed, the cords which connect the tops and bottoms of the helical springs together and to the frame were attached by a single turn over the first coil of the helix, and then passed to the next spring, thus passing over the tops of the springs which prevents their free action, and besides the fretting or chafing of the cord soon parts it and lets down the whole tier of springs. Others, have been arranged with chains instead of cords, but the rings on the chains slip around on the springs when slackened, and then when strained up, they draw the spring out of its perpendicular position, and consequently destroy its utility. The frames of both these kinds, have heretofore, universally been made rigid, which prevented them in many instances from being moved up narrow or winding stairs, or from room to room without the greatest difficulty. By my arrange-

ment, I have obviated all these difficulties; the frame being elastic may be bent in any form, and possesses withall great strength and lightness; the fastening, by straps, of the springs, and the passing the longitudinal and cross bracing through a suitable slot in said straps, makes them receive and carry a portion of the weight placed upon any one point, and distribute it over the whole frame.

The rims A, on the top and bottom are made of whalebone, bamboo, ratan, gutta-percha, or other equally light, strong, and elastic material, and are firmly braced by the longitudinal braces B, and cross braces C. The ends of these braces are bent over and around the rim and wrapped with fine wire, but may be secured in any well known permanent manner. At the points where the braces B, and C, cross each other, they are passed through slots in strong leather straps D, which connect the helical springs E, together. The straps D, have their ends lapped around the top coil of the spring, and by means of a metallic rivet F, strongly attached thereto. The outside tier of springs, where they approach nearest to the rim A, are attached to said rim, by wrapping or binding them together with fine wire as seen at *a*, and on this frame is placed the mattress of any kind. By this method of combining the several parts of the frame together, the springs are left free to act, without the least danger of their being cramped down by any unequal pressure and destroyed. The weight also when applied to any one point on the bed, will be distributed through the whole frame by means of the straps and braces, and be equalized on all parts of the frame. The advantages of this mode of construction, are first, extreme lightness with great strength, and an elastic frame which may be bent in any form so as to easily remove it from place to place, and when released will spring back to its original form; and second, the distributing of the weight equally over the frame—its adaptation to the free use or play of the springs, and the manner of connecting them together so that the straps cannot move around on the coils of the springs, and its total freedom from chafing or fretting and letting down the frame.

Having thus fully described the nature of

my invention what I claim therein as new and desire to secure by Letters Patent is—

The method herein described of securing the springs of spring mattresses to the frame
5 and to each other so as to leave the tops of the springs free to play or yield to any pressure viz: by connecting them together by a riveted leather hinge, and allowing the

longitudinal and cross pieces of the frame to pass through a slot in said leather hinges, 10 the whole being combined and arranged in the manner and for the purpose set forth.

JOHN WATERS.

Witnesses:

L. C. DONN,

A. B. STOUGHTON.