

(No Model.)

P. FORSBERG.
VENTILATED MATTRESS.

No. 597,058.

Patented Jan. 11, 1898.

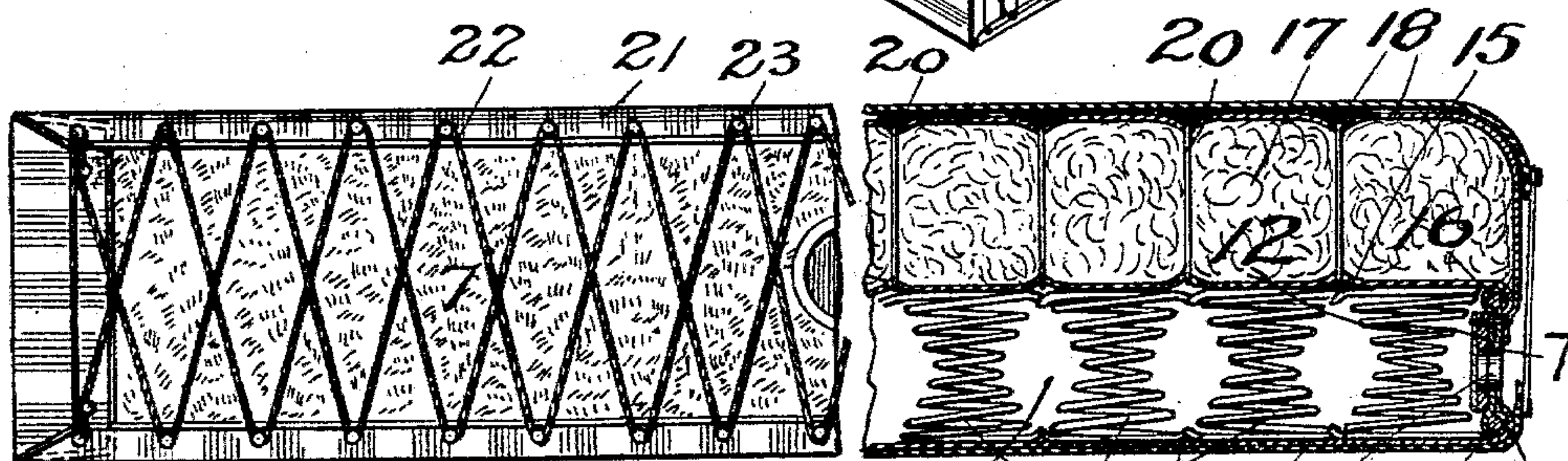
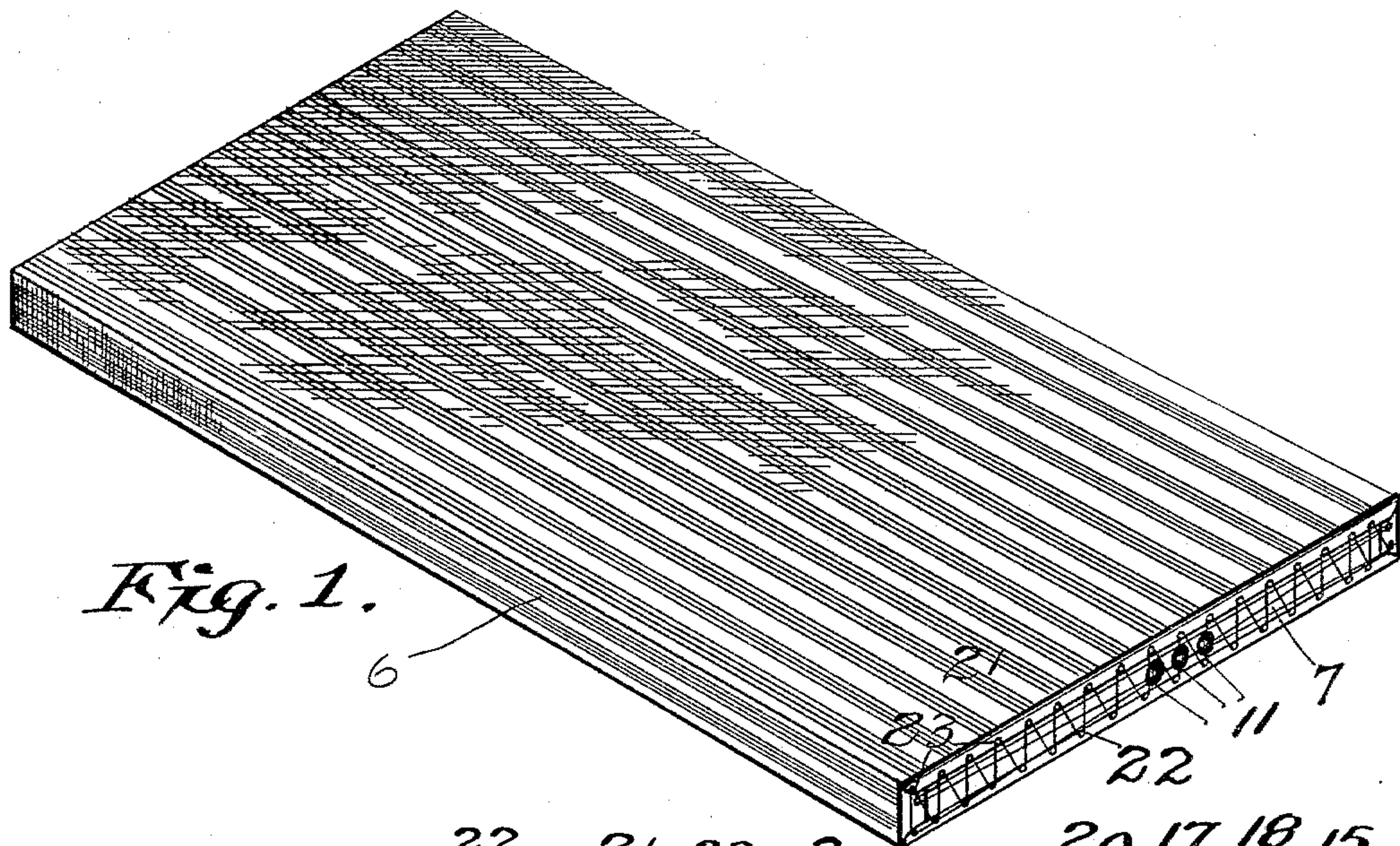


Fig. 2.

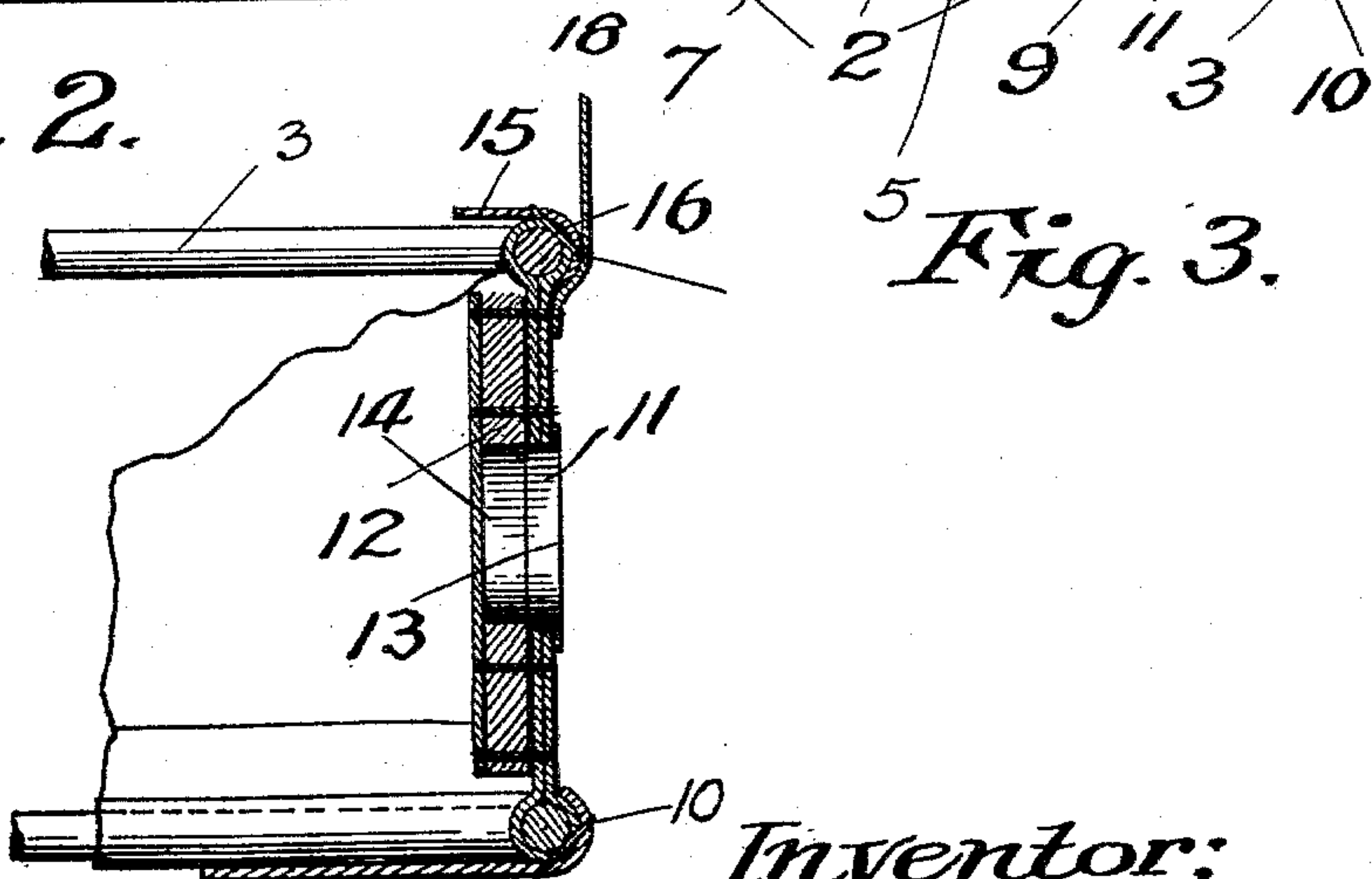


Fig. 3.

Witnesses;
Chas. E. Van Dusen
W. E. Gookey.

Fig. 4.

Inventor;
Peter Forsberg
By Paul H. Hawley
his att'y

UNITED STATES PATENT OFFICE.

PETER FORSBERG, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR OF ONE-HALF
TO GUST LAGERQUIST, OF SAME PLACE.

VENTILATED MATTRESS.

SPECIFICATION forming part of Letters Patent No. 597,058, dated January 11, 1898.

Application filed January 28, 1897. Renewed November 5, 1897. Serial No. 657,560. (No model.)

To all whom it may concern:

Be it known that I, PETER FORSBERG, of the city of Minneapolis, county of Hennepin, State of Minnesota, have invented certain new and
5 useful Improvements in Ventilated Mattresses, of which the following is a specification.

This invention relates to upholstered spring-mattresses; and the particular object of the
10 invention is to provide means for thoroughly ventilating the mattress by forcing air through the upholstered top, thereby securing a complete ventilation of the mattress.

Another object of the invention is to provide a spring-mattress having an upholstered
15 top so constructed that it may be quickly removed for the purpose of renovating the hair or other material forming the filling for the upholstered part.

Another object of the invention is to provide a mattress with a cover that may be
20 quickly removed or put in position.

The invention consists generally in a mattress having a lower or spring portion inclosed
25 by material through which the air does not readily pass, with certain inlet-valves arranged in such inclosing material and with an upholstered part arranged upon the lower or spring portion, the inclosing material of
30 said upholstered portion of the mattress being of loose or open texture, so that the air which enters the lower part of the mattress is forced up through its upholstered top, thereby ventilating the hair or other material forming
35 the filling for the upholstered top.

The invention consists, further, in the constructions and combinations hereinafter described, and particularly pointed out in the
40 claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of a mattress constructed in accordance with my invention. Fig. 2 is a partial end elevation. Fig. 3 is a detail section
45 through the frame and valve of the lower part of the mattress.

The lower portion of the mattress is composed of a series of ordinary springs 2, preferably connected together in the usual manner and inclosed, preferably, at top and bot-

tom by the rectangular frames 3. The bottom of the mattress and the sides and ends of the lower portion are formed of leather, canvas, duck, or other material that is practically impervious to the passage of air. The
55 sides 6 and ends 7 are preferably secured to the rectangular frames 3 in any suitable manner, and the bottom 9 is preferably stitched around its edges by suitable stitches 10 to the lower edges of the side 7. These parts may,
60 however, be formed and be secured together in any suitable manner. In the side or end walls, preferably, and as here shown in the end walls, are one or more openings 11, and arranged over these openings and upon the
65 inside of the wall is a plate 12, preferably formed of leather or other suitable material and having openings 13 registering with the openings 11 in the wall of the mattress. A flap-valve 14 is secured over the openings 13,
70 and while said valve permits the air to pass freely into the mattress it prevents it from passing out through the openings 11 and 13. Preferably three or more of such openings are
75 arranged in each end wall of the mattress, and a single valve or flap may be provided for each series of openings.

Arranged upon the lower portion of the mattress is an upholstered part formed, preferably, of open-meshed material with a suitable filling of hair or other material. As here
80 shown, this upholstered part of the mattress consists of the lower covering 15, formed of burlap or other loosely-woven or open-meshed material, the edges of this covering being secured, as by suitable stitching 16, to the upper edges of the side walls 7 of the lower or spring portion of the mattress. Suitable hair or other filling material 17 is placed over the covering 15, and above this is a covering 18,
85 also formed of burlap or other open-meshed material. The edges of this covering are preferably secured by suitable stitching to the top of the lower part of the mattress. Suitable tufting 20 is provided at suitable intervals
90 extending through the covering 18, the filling 17, and the lower covering 15.

I also prefer to provide an outer case or covering 21, having an open end and which
100 may be drawn over the mattress and secured

in position by a suitable lacing-cord 22, that is laced back and forth over suitable hooks 23, arranged upon the covering 21, or instead of the lacing-cord and hooks the covering 21 may be secured in position by any other suitable means.

The present invention is an improvement upon that shown and described in Letters Patent issued to me on the 19th day of May, 1896, No. 560,613. In the construction herein shown and described the air is forced through the hair or other filling of the upholstered top, thereby thoroughly ventilating the same. The mattress is especially designed for use upon sleeping-cars, and for this purpose the outer removable covering 21 is especially advantageous, as at the end of each run made by the car upon which the mattress is used this outer covering may be removed and a fresh one substituted, and as the filling of the upholstered top is thoroughly ventilated by the circulation of the air through it the mattress can be used a long time without being taken apart for the purpose of renovating it. When it is necessary to renovate the mattress, the covering 18 of the top may be removed and the hair taken off and renovated and put back in position without taking apart the other portion of the mattress or removing the lower covering 15.

It will be obvious that the details of the construction and the manner of securing the various parts together may be changed or modified in many particulars without departing from this invention.

I do not limit myself to the use of the invention for mattresses, as the same may be used with advantage for seats, cushions, or any other upholstered article.

I claim—

1. The combination, in a mattress, with a lower or spring portion provided with impervious bottom, side and end walls, with suitable valve-openings in one or more of said walls, of an upholstered top secured upon said spring portion, formed of a suitable filling and inclosing material of loose or open texture, whereby air will be forced from the

lower portion of the mattress through said upholstered top.

2. The combination, in a mattress, of a lower or spring portion, provided with impervious bottom, side and end walls and with suitable valved openings, of an upholstered top arranged upon and secured to said lower or spring portion, said upholstered top being capable of permitting the passage of air there-through, for the purpose of ventilating the filling of the upholstered top.

3. The combination, in a mattress, of the lower or spring portion, composed of a series of springs, the rectangular frames, the impervious bottom, side and end walls secured to said frames, one or more of said walls being provided with suitable openings, flaps arranged within said walls and over said openings, and an upholstered top secured upon said spring portion, the covering of said top being formed of material that allows the passage of the air through said top, for the purpose set forth.

4. The combination, in a mattress, with the lower or spring portion, provided with impervious bottom, side and end walls, an upholstered top secured upon said spring portion, and an outer covering 21 drawn over and inclosing both parts of said mattress, for the purpose set forth.

5. The combination, in a mattress, of a lower or spring portion provided with a series of suitable springs, impervious bottom, side and end walls inclosing said springs an upholstered top secured to the upper edges of the side and end walls, and resting upon the tops of said springs, said top being covered both above and below with open-meshed material and permitting the passage of air from the lower or spring portion of said mattress through the upholstered top, for the purpose set forth.

In testimony whereof I have hereunto set my hand this 16th day of January, A. D. 1897.

PETER FORSBERG.

In presence of—

A. C. PAUL,
M. E. GOOLEY.