

985,749.

O. R. MITCHELL.
DIVAN OR COUCH.
APPLICATION FILED APR. 16, 1908.

Patented Feb. 28, 1911.
2 SHEETS—SHEET 1.

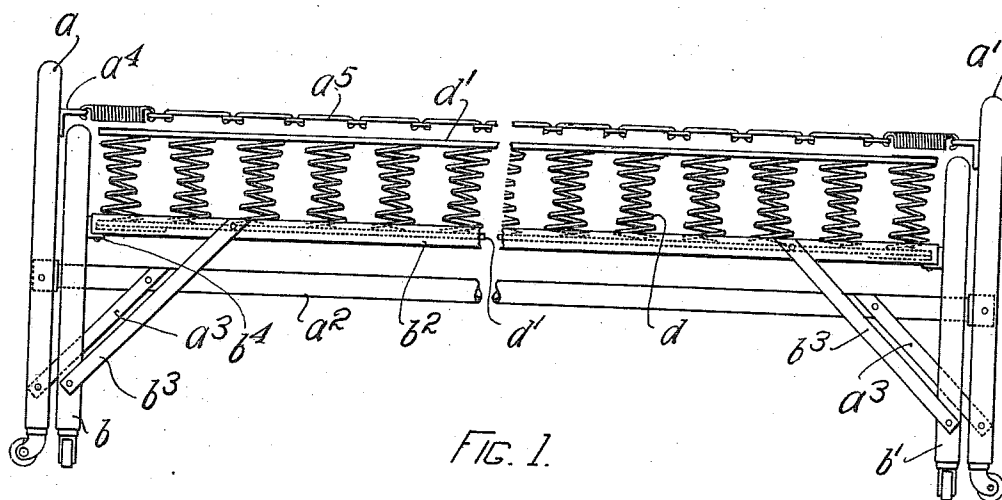


FIG. 1.

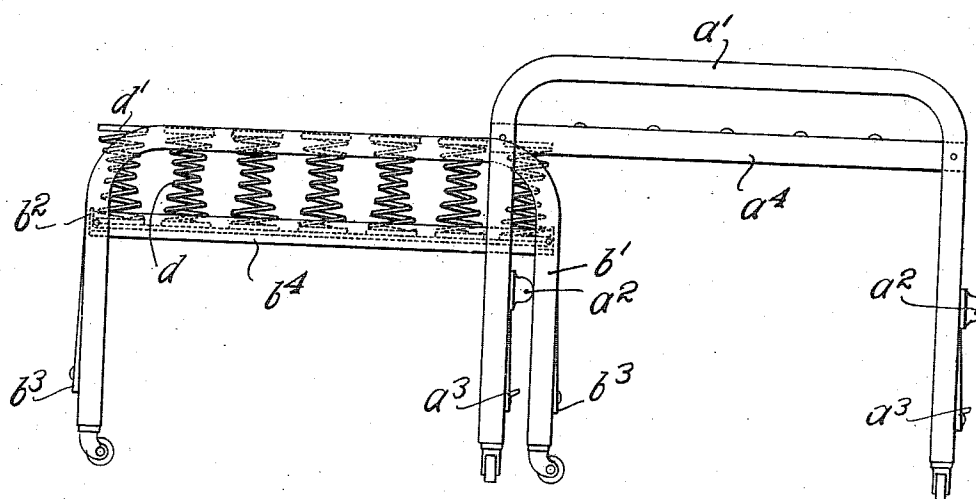


FIG. 2.

WITNESSES

A. T. Palmer
Joseph O. Brinman

INVENTOR
Oliver R. Mitchell

O. R. MITCHELL.
DIVAN OR COUCH.
APPLICATION FILED APR. 16, 1908.

985,749.

Patented Feb. 28, 1911.

2 SHEETS—SHEET 2.

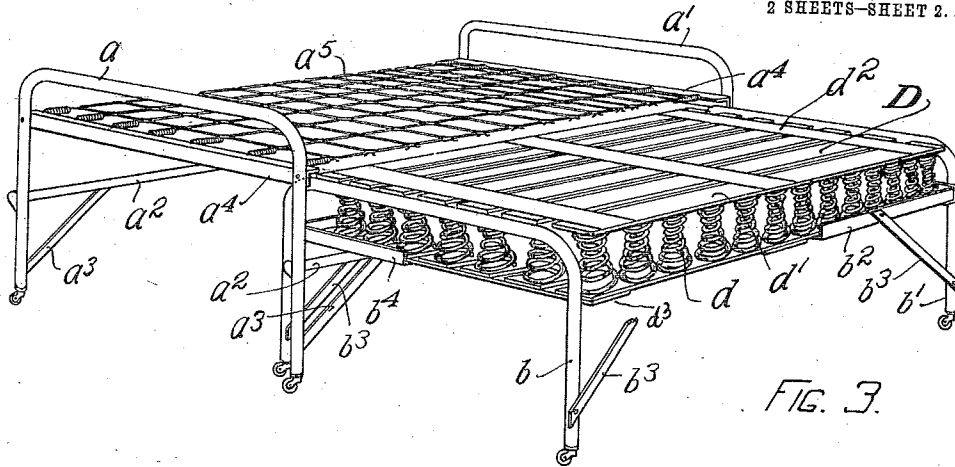


FIG. 3.

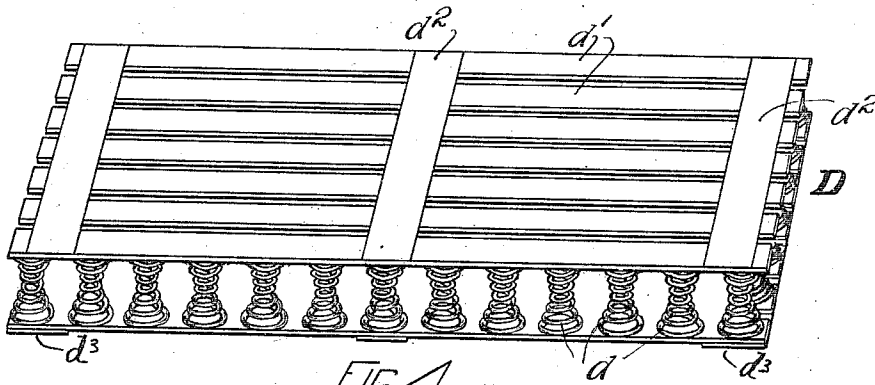


FIG. 4.

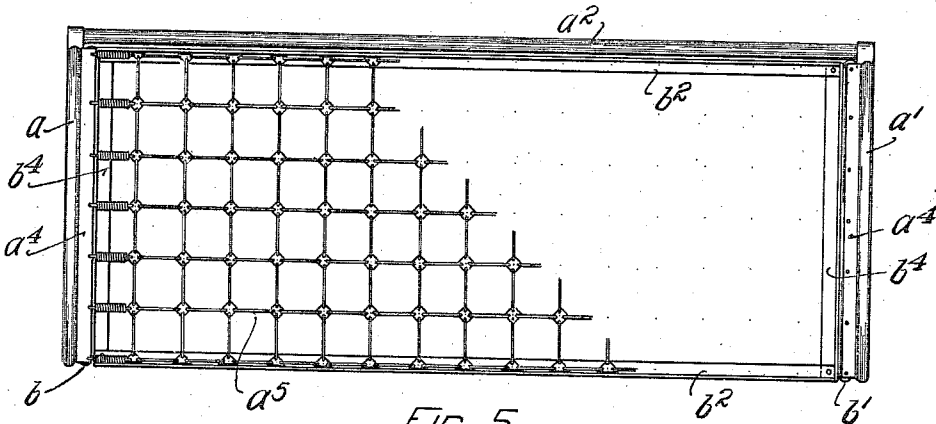


FIG. 5.

WITNESSES

A. T. Palmer
Joseph T. Brennan.

INVENTOR

Olin R. Mitchell

UNITED STATES PATENT OFFICE.

OLIVER R. MITCHELL, OF BOSTON, MASSACHUSETTS.

DIVAN OR COUCH.

985,749.

Specification of Letters Patent.

Patented Feb. 28, 1911.

Application filed April 16, 1908. Serial No. 427,310.

To all whom it may concern:

Be it known that I, OLIVER R. MITCHELL, a citizen of the United States, and resident of Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Divans or Couches, of which the following is a specification.

My invention relates to beds and particularly to two-part divans or couches which can be nested together to decrease the width thereof or can be drawn out so as to increase the available extent of supporting surface. Such divans or beds are well known in the art and a good illustration of such a structure is shown in the patent to Leighton, No. 667,916, dated Feb. 12, 1901. In the Leighton patent is illustrated an extensible and contractible bed in which the two members which have relative movement each carry a metallic spring fabric, the object being to get the supporting surface so nearly upon the same plane that in use the fabric of the extended section will be practically upon the same plane as its companion fabric upon the other section. Such divans or couches are commonly used during the time when they are not in use as a sleeping bed as sofas or divans upon which persons may sit. It is obvious, however, that these spring fabrics supported as they are only at the ends, must yield very considerably when the weight is centered at the middle of the couch as by a person sitting thereon as distinguished from the stress which is placed upon the spring fabric when a person lies extended thereon and in practical use a couch in which the supporting spring material is of the metallic spring fabric type supported only at the ends is defective owing to the fact that it sags at the center very considerably somewhat as a hammock does and such a divan for seating purposes in the day time is defective as compared with the ordinary form of divan or sofa which is built especially to be sat upon and in which the spring support is by spiral springs vertically placed with slats or webbing or other means to distribute the pressure over several springs. In such a spiral spring divan or couch there is no sagging at the center but a mere yielding at the point where a person sits, in accordance with the weight.

It is the object of my invention to provide a two-part divan or sofa which may be extended and used for sleeping purposes at

night and which may be nested in the day time to decrease the floor space occupied and which when in its nested relation will serve for seating purposes equally as well as a divan or couch especially designed to be sat upon rather than to be used as a bed. In other words, I aim to attain the merits and efficiency of a nested divan or couch with the merits of a sofa or divan which is especially designed for seating purposes. To this end, I combine a fabric section and a spring mattress section in such a fashion that when in use in their nested position for seating purposes the spring mattress section will carry the weight by the direct support of the spiral springs at the point where the weight is applied while at night the two sections may be drawn into open position and the upper surface of the spring mattress section will be upon the same or practically the same level as the surface of the metallic spring fabric.

In the preferred form of my divan which is shown in the drawings two independent bed frames are employed, one of which is slightly longer than the other and these bed frames are made up essentially of end frames each comprising two legs and cross bars which end frames are connected by side bars. The side bar of the longer bed frame which carries the spring fabric is so placed relative to the spring fabric that the legs of one side of the shorter section which carries the spring mattress may be passed over the side bar of the longer section and the shorter section then shoved into the longer section, the upper surface of the spring mattress passing beneath the spring fabric carried by the longer section so that the spring mattress extends completely beneath and supports the entire spring fabric carried by the longer section when such spring fabric is depressed at any point, as when the divan is used as a seat. The spring fabric upon the fabric (or long) section may be secured to the fabric section permanently or removably and the spring mattress carried by the mattress (or short) section may be permanently or removably secured to the mattress section.

In the drawings I have shown the spring fabric as permanently secured to the fabric section and the spring mattress removably placed upon the mattress section.

In the accompanying drawings:—Figure 1 is a side elevation of a divan embodying

my invention; Fig. 2 is an end view of the divan shown in Fig. 1 showing the parts in their extended position; Fig. 3 is a perspective view of my divan showing the parts in their extended position, bars b^2 , b^3 , b^4 broken off. Fig. 4 is a perspective view of the spring mattress removed from the supporting frame; and Fig. 5 is a plan view of a fabric and mattress section interlocked with the spring mattress removed.

Having reference to the drawings the fabric section of my improved cot comprises end frames a , a' connected by side bars a^2 , the latter being also connected with the end frames a , a' by diagonal bars a^3 . Each end frame a , a' has fastened to it an angle iron a^4 and to these angle irons a^4 is secured the elastic wire fabric a^5 constituting the supporting surface of the fabric section of my divans.

The shorter section or spring mattress section of my improved divan fits within the longer section and straddles one of the side bars a^2 as is usual in nested couches of this character so that the two sections are interlocked. This shorter or spring mattress section comprises two end frames b , b' connected by angle iron side bars b^2 with diagonal bars b^3 connecting the side bars with the end frames b , b' . To the bars b^2 are secured transverse cross pieces b^4 to support the ends of spring mattress D , which is made up of spiral springs d , organized together by slats d' , and webbing d^2 in the usual manner. The under side of the spring mattress carries a number of transverse slats d^3 to which the slats d' upon the under side of mattress D are secured. The slats d' are secured in any suitable manner to the springs d and the transverse bars b^4 and side bars b^2 are organized at such a height as to support the upper surface of the spring mattress at or nearly at the level or plane of the spring fabric a^5 . Each slat d' has a row of springs d organized with it, although in Figs. 3 and 4 it is not practical to illustrate this. It will also be understood that the specific form of spring mattress illustrated herein is not essential.

As will now be clear the spring mattress section of my improved divan or couch can be nested within the fabric section with the spring mattress immediately beneath and reinforcing and supporting the fabric a^5 so that when in use in the day time for seating purposes the effect of a spring mattress may be had while at night the two sections when extended are suitable for sleeping purposes. Obviously to be of any practical value the relation of the spring mattress to the spring fabric must be such as herein disclosed with the mattress extending beneath the entire area of the spring fabric to reinforce and support any weight on such spring fabric at any point, for any construction in

which a spring fabric is supported only at isolated or separated points, would render the divan undesirable as a seat.

It will be noticed that on the fabric section the side bars a^2 on one side are secured to the outside of the legs of the end frames, while upon the other side the bar a^2 is upon the inside of the legs of the end frames. The object of this is to permit of a closer nesting of the two sections by permitting the legs of the mattress section to be brought into alinement with the legs of the fabric section. The object of this construction is to make it possible to pass the shorter section completely beneath the longer section, so that when in use as a divan or couch its character as an extensible bed will be more completely concealed.

As will be seen, each section is not only complete in itself, but is also of a similar type, viz: each is provided with head and foot frames which project above the plane of the support for its spring member. When the sections are assembled, the head and foot frames or end frames of the shorter section are of a height such as will cause the fabric supports a^4 of the longer section to act as stops to limit relative longitudinal movement of the sections, as well as tend to prevent a relative lateral twisting movement of the sections. Furthermore, the presence of the projecting portions of the head and foot frames of the shorter section at the ends of the spring mattress (the frames projecting to a height approximating the height of the mattress) serve as barriers to protect the ends of the mattress from being struck by a person in moving about the room, an advantage particularly appreciated where the mattress is formed with slats extending longitudinally of the top of the mattress as indicated in Fig. 4.

I claim:—

1. In a nesting divan or bed, the combination of two independent sections, one carrying a spring fabric and the shorter section carrying a spring mattress with its upper surface extending in the plane of the spring fabric, each of said sections having head and foot frames projecting above the plane of the support for its spring member, the head and foot frames of the shorter section extending approximately on the top plane of the spring mattress and being positioned with respect to the spring support of the longer section in a manner to prevent substantial relative movement of the sections longitudinally.

2. In a nesting divan or bed, the combination of two independent sections, one carrying a spring fabric and the shorter section carrying a spring mattress with its upper surface extending in the plane of the spring fabric, each of said sections having head and foot frames projecting above the plane of

the support for its spring member, the projecting portions of the head and foot frames of the shorter section being of a height to substantially approximate the height of the
5 mattress, whereby said latter frames provide a barrier at the ends of the mattress.

3. In a nesting divan or bed, a bed section having head and foot frames, a spring mattress, and a support for the mattress, said
10 support being positioned below the top plane of the head and foot frames a distance sub-

stantially equal to the height of the mattress, whereby the top of the mattress and the head and foot frames will be on an approximate plane.

Signed by me at Boston, Massachusetts,
this fourteenth day of April, 1908.

15

OLIVER R. MITCHELL.

Witnesses:

JOSEPH T. BRENNAN,
ANNA B. LINDSAY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
