

E. ERICKSON.

BED SPRING.

APPLICATION FILED JULY 10, 1909.

947,332.

Patented Jan. 25, 1910.

Fig. 1.

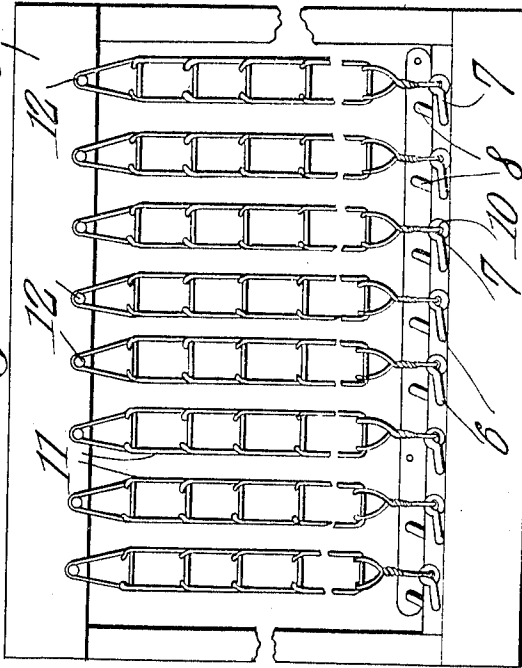


Fig. 2.

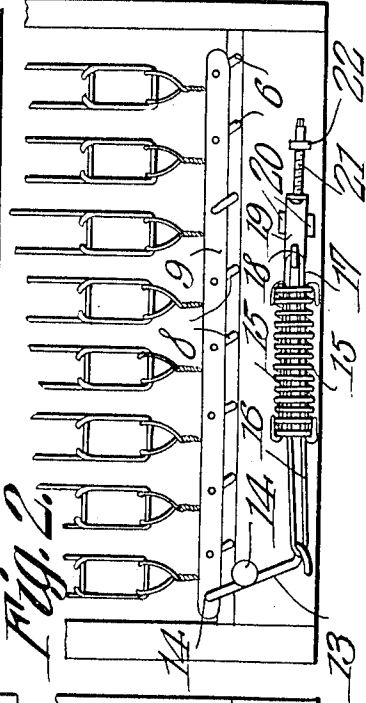
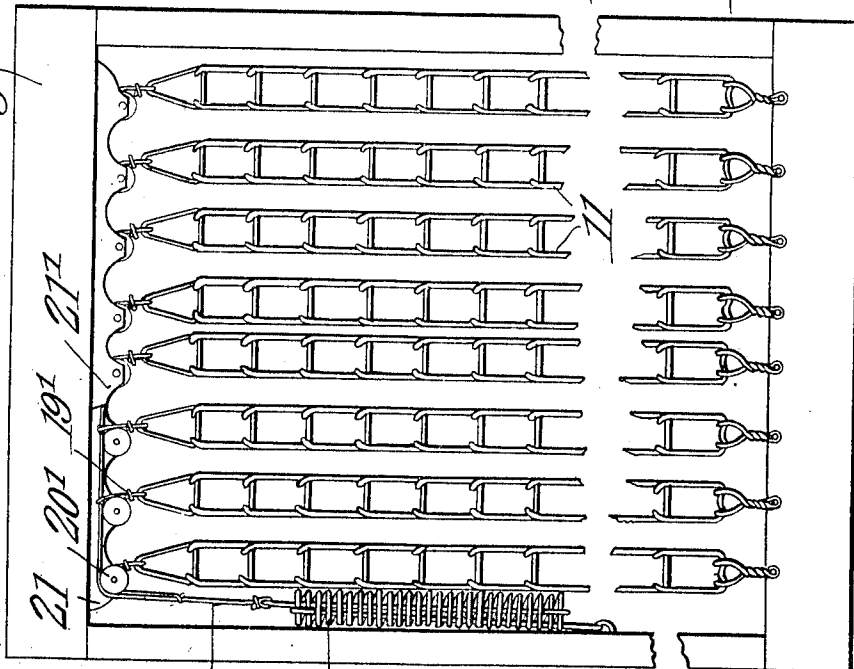


Fig. 3.



Inventor
Edward Erickson.

Witnesses

J. L. Smith
J. L. Smith

By

C. Snow & Co.
Attorneys

UNITED STATES PATENT OFFICE.

EDWARD ERICKSON, OF CHASELEY, NORTH DAKOTA.

BED-SPRING.

947,332.

Specification of Letters Patent.

Patented Jan. 25, 1910.

Application filed July 10, 1909. Serial No. 506,981.

To all whom it may concern:

Be it known that I, EDWARD ERICKSON, a citizen of the United States, residing at Chaseley, in the county of Wells and State of North Dakota, have invented a new and useful Bed-Spring, of which the following is a specification.

It is the object of the present invention to provide an improved construction of bed spring, and the invention aims, more specifically speaking, to provide a bed spring of such construction that the web or filling thereof will yield or sag evenly at all points. In the ordinary construction of bed spring such yield is had only at the point at which the weight is imposed, so that such springs very frequently, after being in use for a while, become permanently sagged at one side or the other.

It is the object of the invention to overcome this disadvantage.

The invention resides, briefly stated, in the provision of a compression spring, a member which is connected with the spring and has connected to it the ends of filling elements which elements have a line of extent at right angles to the line of movement of the member which connects with the compression spring. Such an arrangement of parts presents numerous advantages over similar devices now in use, inasmuch as such devices ordinarily embody rocking frames which take up considerable room and even then do not allow for any great latitude of yield of the web or filling of the spring. In accomplishing these objects, the filling members of the spring are connected to a laterally movable member having connection with a compression spring, and this member may be either in the nature of a cable, or a bar, or some other similar element arranged for lateral movement, or, in other words for movement in the direction of its line of extent. Such a member will take up considerably less room than a rocking frame and will permit of considerable sag of the spring.

In the accompanying drawings:—Figure 1 is a top plan view of a bed spring constructed in accordance with the present invention. Fig. 2 is a bottom plan view of the said spring. Fig. 3 is a plan view illustrating a slight modification of the invention.

In the drawings the frame of the bed-spring is indicated by the numeral 5 and is

of the ordinary rectangular form, and in the form of the invention shown in Figs. 1 and 2 of the drawings there are mounted, at one end of the frame 5, a number of rockers which are indicated in general by the reference numeral 6. Each of the rockers 6 has an arm 7, an arm 8, and a connecting portion, which is journaled in one of the end members of the frame 5, as is clearly shown in Figs. 1 and 2 of the drawings. The arm 7 above referred to projects at right angles from the connecting portion and above the upper face of the end member of the frame upon which the rockers are mounted, the arms 8 of the rockers extending beneath the said end member of the frame. The arms 8 of the rockers project normally in the direction of the other end of the frame 5, and are mutually connected through the medium of a bar 9, in which their terminals are pivoted, the points of pivotal connection being equidistantly spaced. It will be understood that this bar 9 serves to connect all of the rockers for simultaneous movement.

Each of the arms 7 is formed at its extremity with an eye 10, and connected to the eye 10 of each arm 7, at one end, is one of a number of filling members 11, these members, in the present instance, being made up each of a plurality of connected links. At their other ends the filling members 11 are fixedly connected as at 12 to the end of the frame 5 opposite the end at which the rockers are mounted, the members extending lengthwise of the frame, or, in other words, from end to end thereof, as will be readily understood. It will be understood however, that while the filling members, as stated, in the present instance, are made up each of a plurality of connected links, these filling members may be of any other desired construction and they form no part of the present invention.

Mounted to rock upon the first described end member of the frame of the spring is a rocker 13 which at one end has pivotal connection as at 14 with one end of the bar 9, and at its other end has connection with a spring in a manner which will now be described. The spring mentioned above is indicated by the numeral 15 and has inserted therethrough the usual form of compression element having connection at its mid portion with the other end of the rocker 13 and engaging at its extremities with the end

whirls of the spring 15. Another one of the compression elements is assembled with the spring with its terminals in engagement with the whirls at the other end of the spring, and this last compression element, indicated by the numeral 17, connects with a hook 18 at one end of a plate 19, this plate being slidably mounted in suitable guides 20, upon the under side of that end of the frame 5 at which the rockers are mounted. The end of this plate 19 opposite its hooked end, is bent to extend upwardly at right angles, and to this portion is swiveled one end of an adjusting screw, indicated by the numeral 21, this screw being threaded through a bearing 22 also upon the under side of the said end of the frame.

From the foregoing description of the invention it will be readily understood that when weight is imposed upon any one or several of the filling members 11, the rockers will be oscillated and the bar 9 shifted laterally, or, in other words, in the direction of its line of extent. It will further be understood that this shifting of the bar will result in an oscillation of the rocker 13 and a compression of the spring 15, and, further, that inasmuch as the bar 9 connects all of the rockers and all of the filling elements are connected to the said rockers, all of the filling elements will be permitted to sag to the same degree. Also, it will be understood that, by adjusting the screw 21, the tension of the spring may be adjusted, so that it will be rendered more or less yieldable, as may be found desirable.

In the form of the invention shown in Fig. 3 of the drawings, the rockers and bar 9 are omitted, and there is substituted therefor a cable or other flexible element, which is indicated by the numeral 18' and is connected at one end to one of the filling members 11, and at its other end to one of the compression elements for the spring 15, there being other shorter cables 19' connected one to each of the filling members 11 at one end thereof, and to the first mentioned cable 18' at equi-

distant points, these cables being passed about pulleys 20' which are journaled in a suitable bracket 21', fixed upon one end member of the frame 5. The spring 15 exerts a constant pull upon the cable 18' and, through the medium of this cable, upon the cable 19', and, as a consequence, when one or several of the filling members are depressed or have weight imposed upon them, the pull exerted upon the cable 18' will slacken all of the cables 19' to the same degree, and, as a consequence, all of the filling members will yield or sag to the same degree.

What is claimed is:—

1. In a device of the class described, a compression spring, an element connected to the spring and movable bodily laterally against the tension thereof, and filling elements connected each at one end to the said element.

2. In a device of the class described, a fixed member, a plurality of rockers supported thereon, a bar carried by the rocker and movable thereby, a compression spring having connection with the bar, and filling elements each connected at one end to the bar.

3. In a device of the class described, a fixed member, a plurality of rockers mounted thereon, means connecting the rockers for simultaneous movement, a compression spring having connection with the rocker, and filling elements each connected at one end to the rockers.

4. In a device of the class described, a fixed member, a plurality of rockers mounted thereon, a bar connecting all of the rockers for simultaneous movement, and a plurality of filling elements each connected at one end to one of the rockers, and a compression spring connected with the bar.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

EDWARD ERICKSON.

Witnesses:

F. I. LYON,

A. E. TUTT.