

E. F. Dunaway.
Imp^a Bedstead-Springs

No. 118,351.

Patented Aug. 22, 1871.

Fig. 1

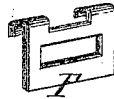
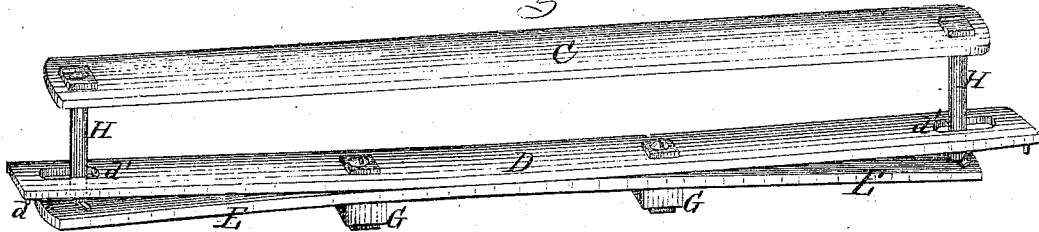
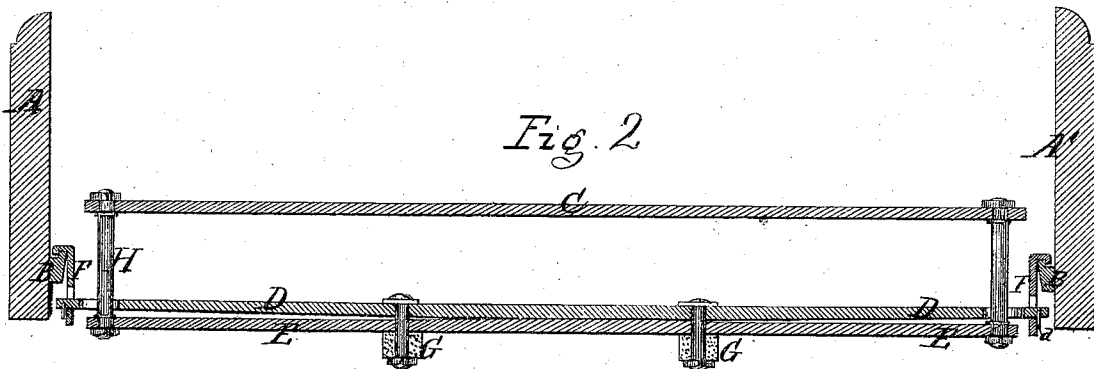


Fig. 3

Fig. 2



Attest
A. Ruppert.
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UNITED STATES PATENT OFFICE.

ELIJAH F. DUNAWAY, OF CINCINNATI, OHIO.

IMPROVEMENT IN BEDSTEAD-SPRINGS.

Specification forming part of Letters Patent No. 118,351, dated August 22, 1871.

To all whom it may concern:

Be it known that I, ELIJAH F. DUNAWAY, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a certain new and useful Improvement in Bedstead-Springs, of which the following is a specification:

My invention consists in the employment, in combination with three or more slats connected together through apertures in the supporting-slat, of gum or other springs placed under the lower slat, around the bolts by which it is connected to the supporting-slat, so that when a heavy load is placed upon the spring the lower slat may separate from the supporting-slat by compressing the gum blocks to obviate the danger of a permanent deflection of such lower slat. My invention further consists in the provision of vibrating hangers for the ends of the supporting-slats to connect these slats with the bed-rails, the hangers being designed and constructed to give a greater range of vibration without displacement than is practicable with vibrating prop-supports such as form in part the subject of a separate application of mine for Letters Patent accompanying this.

In the annexed drawing, Figure 1 is a perspective view of my improved spring for bedsteads and other uses, detached from its supports. Fig. 2 is a cross-section of a bedstead with the spring in place. Fig. 3 is a perspective view of one of the vibrating supports detached.

A A' are the bed-rails, and B the strips which support the springs. The simplest form of my spring is composed of three slats, C, D, and E, and gum blocks G, the slat D being sufficiently longer than the others to connect with the rails and form the support for the spring. The connection of this slat with the rails A A' is made by the intervention of vibrating hangers F, which receive the ends of the slat and hook over the strips B. The slat D may have pins *d* to prevent displacement. The provision of the hangers enables the slats to be deflected without a creaking noise, and they being hangers, not vibrating props, a great range of vibration is secured without risk of displacement. The slats D and E are

firmly and closely connected by bolts, which are encircled below the slat E by gum or other stiff springs G, which permit the latter to separate from the supporting-slat D whenever an unusually heavy load is placed upon the spring, and thus relieve the slat E from excessive strain, which would be liable to cause its permanent deflection. The slat D is perforated at *d' d'*, and the slats C and E are connected through these perforations by means of columns or rods H, in such a way as to have simultaneous action. Between the slats D E any number of additional slats may be inserted for the purpose of lessening the degree of deflection of each slat, and preserve at the same time the extent of elastic range of the entire spring, or increase it. The additional slats added should all be placed below the supporting-slat D so as not to encroach upon the space between the top and bottom of the bed-rails A A'. They should be added in pairs connected together at the outer ends, the upper one of the pair being secured to the slat above it and the lower one to the slat below.

Although I have shown and described this spring attached to a bedstead only, it is obvious that it may be put to many other uses, such as a lounge-spring, carriage-seat spring, &c. The slats C D E are connected by detachable screw-fastenings, as shown, so that they can be taken apart and reversed after becoming permanently set in use.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the slats C D E and rubber springs G, arranged and operating in the manner described.

2. In combination with the rails A A' and slat D, the hangers F, as described and for the purpose specified.

In testimony of which invention I hereunto set my hand.

ELIJAH F. DUNAWAY.

Witnesses:

FRANK MILLWARD,
J. L. WARTMANN.