(No Model.)

E. R. YAUGER.

BED SPRING.

No. 350,180. Patented Oct. 5, 1886.

Fig. 1.

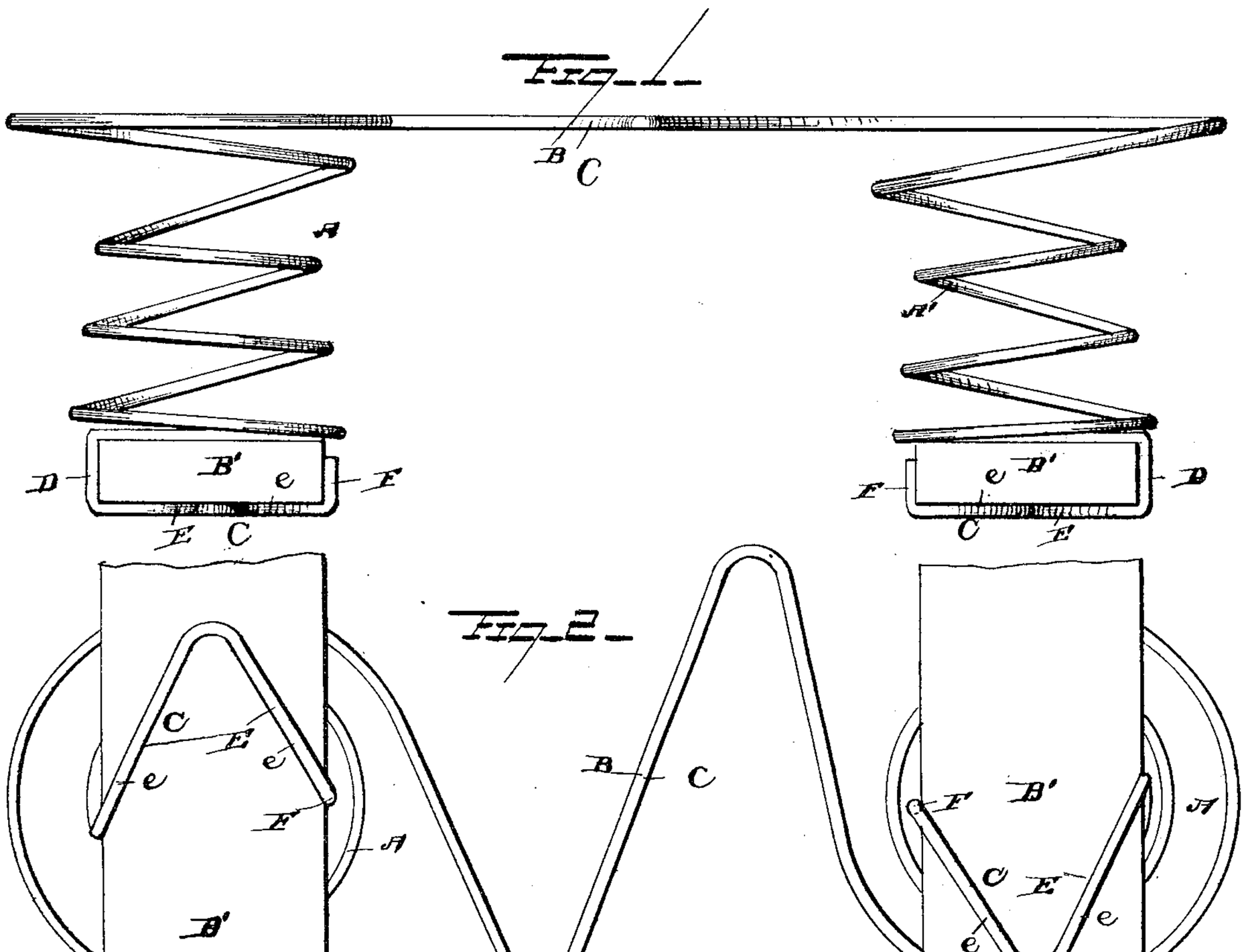
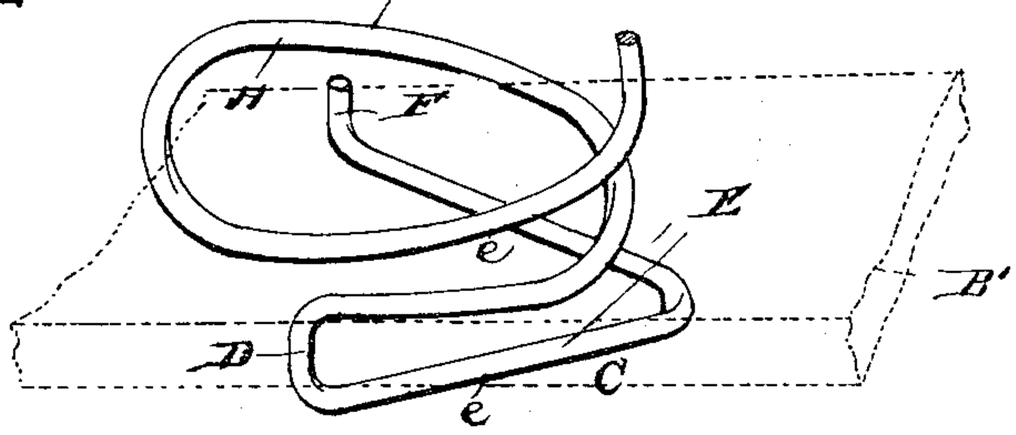


Fig. 2.

Fig. 3.



Witnesses
Wm. G. Gile
John S. Diggers.

Inventor
E. R. Yauger
By his Attorneys
C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

ELAM ROBINSON YAUGER, OF KENTON, OHIO.

BED-SPRING.

SPECIFICATION forming part of Letters Patent No. 350,180, dated October 5, 1886.

Application filed June 3, 1886. Serial No. 204,062. (No model.)

To all whom it may concern:

Be it known that I, ELAM ROBINSON YAUGER, a citizen of the United States, residing at Kenton, in the county of Hardin and State of Ohio, have invented a new and useful Improvement in Bed-Springs, of which the following is a specification.

My invention relates to improvements in bed-springs; and it consists of the peculiar construction and arrangement of parts, substantially as hereinafter fully described, and particularly pointed out in the claim.

The object of my present invention is to provide improved means for fastening a bed-spring upon a slat, which shall be capable of adjustment to slats of different widths and rigidly and firmly retain the spring in place thereon. With these ends in view I bend the lower end of the spring to form a supporting-foot, which comprises a vertical arm, which is fitted against one of the side edges of the slat. Then the end of the spring is bent horizontally, so as to assume a V-shape form or with the sides lying at an acute angle to each other and bearing against the lower face of the slat, and it is then bent again to form another vertical arm, which bears against the opposite side edge of the slat. By forming the horizontal V-shaped portion of the spring an increased bearing-surface is provided, which serves more efficiently to retain the spring in place and offers greater resistance to the movement or play of the spring, and the arms of the V-shaped portion can be readily distended or separated to permit the vertical ends of the spring to be separated to a greater extent and to engage with slats of different diameters of widths, all as more fully described presently.

In the accompanying drawings, Figure 1 is a perspective view of a spring embodying my invention. Fig. 2 is a bottom plan view of the spring, showing it adjusted upon a slat. Fig. 3 is a detail perspective view of a portion of a spring to more clearly show my improved foot, the slat being shown in dotted lines.

Referring to the drawings, in which like letters of reference denote corresponding parts in all the figures, A and A′ designate the springs, which are formed of a single piece of wire and made helical or coiled in form, as is usual in this class of devices. These springs are connected together at their upper ends by an inclined bar or arm, B, that is arranged at angle to the upper coil of said springs, and the lower ends of the springs are each provided with a foot, C, of peculiar construction, to secure the spring to a slat, B′, the latter of which is of the ordinary kind. The foot C of the spring is first formed by bending the wire that forms the spring into a vertical arm, D, that lies at right angles to the lower coil of the spring, then horizontally and at right angles to the vertical arm D, to provide the V-shaped portion E, which has the two inclined arms *e*, that lie at an angle to each other and bear against the lower face of the slat, and then vertically again to provide another upright arm, F, that bears against the opposite side edge of the slat B′, as clearly shown. By providing the foot C with the V-shaped portion an increased bearing-surface for the spring in contact with the slat is provided, and thereby increasing the area of resisting-surface afforded by the foot against the movement of the spring, and permitting the arms thereof to be more easily and readily expanded or separated to adapt or adjust the foot to slats of different widths, and by means of the vertical arms D and F bearing against opposite edges of the slats the movement of the spring is prevented and the displacement of the V-shaped portion obviated. It will thus be seen that I provide a bed-spring which is very securely and rigidly fixed or secured upon a slat, and the device can be readily and easily applied to slats of different widths, inasmuch as the arms of the V-shaped portion are made of spring-wire and can be easily and readily expanded under the force or pressure of a suitable implement in the hands of an operator.

To apply my improved bed-spring upon a bed-slat, the end of the slat is fitted or adjusted so that it can be moved between the lower coil of the spring and the V-shaped portion of the foot, and also between the vertical arms D and F of the latter, the said arms and the foot pressing or bearing against the slat owing to the inherent elasticity in the wire thereof, and thus curely affix the spring thereto.

I attach especial importance to the peculiar arrangement of the vertical arms D and F to bear against the edges of the slat and the V-shaped horizontal portion E to bear against the

lower face of said slat, as therein lies the gist of my invention.

By making the V-shaped portion in the foot I have found that it can be more readily formed by a machine than if it were made of any other shape, which machine is made the subject-matter of a separate application.

I am aware that it is not new to provide a bed-spring with a bent foot, which bears against one side of the slat, and to connect an independent loop to the lower coil of the spring, and which bears against the opposite side of the slat. I am also aware that it is not new to provide a bed-spring with a foot which bears against one side of the slat and has a prong which enters the slat on its under side and at the middle thereof. My invention differs from these devices from the fact that I form the foot from the same piece of wire as the spring itself, and provide the foot with two vertical arms and an intermediate V-shaped portion connecting the said arms. The slat is fitted between the vertical arms, which bind against the opposite sides of the slat and clamp the spring thereto very securely, and the V-shaped connecting portion bears against the lower side of the slat to aid in securing the spring on the slat, while it also provides convenient means to expand or separate the vertical arms of the foot to remove and replace the spring, and also to fit slats of different sizes.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

As a new article of manufacture, a bed-spring made of a single piece of wire and having a foot, C, formed from the same piece of wire and comprising the vertical binding-arms D and F, arranged to bear against the sides of a bed-slat, and the horizontal V-shaped portion E, lying between and connecting the vertical arms, and having the arms thereof arranged at an acute angle to each other and bearing against the bottom of the bed-slat, to which the spring is adjusted, substantially as described, for the purpose set forth.

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

ELAM ROBINSON YAUGER.

Witnesses:
WARREN L. WARNER,
FRANK R. YAUGER.