(No Model.)

J. B. RYAN.

METALLIC BEDSTEAD.

No. 524,955. Patented Aug. 21, 1894.

Fig. 1.

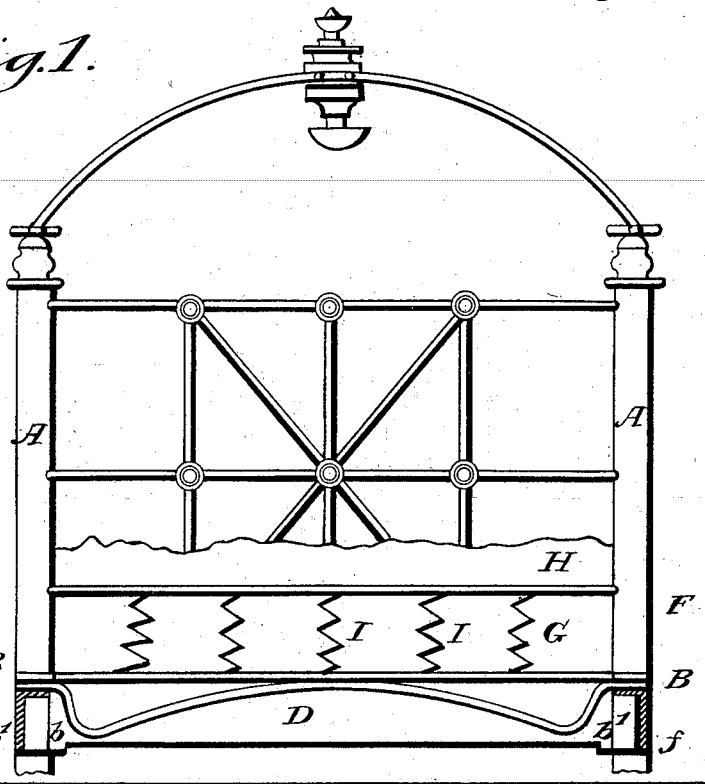


Fig. 2.

Fig. 3.

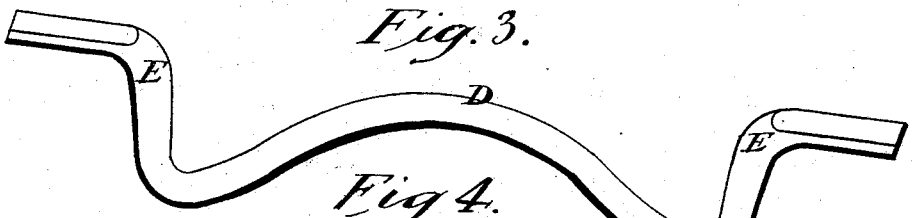
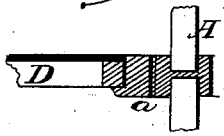


Fig. 4.



Witnesses
Ludwika Wieser
Louis Wieser

Inventor
James B Ryan
by Baldwin & Medway
Attorney

UNITED STATES PATENT OFFICE.

JAMES B. RYAN, OF NEW YORK, N. Y.

METALLIC BEDSTEAD.

SPECIFICATION forming part of Letters Patent No. 524,955, dated August 21, 1894.

Application filed December 14, 1893. Serial No. 493,689. (No model.)

To all whom it may concern:

Be it known that I, JAMES B. RYAN, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Metallic Bedsteads, of which the following is a specification, reference being had therein to the accompanying drawings.

Figure 1, is a vertical transverse section of a bedstead containing my invention, part of the head end framework being broken away. Fig. 2, is a partial horizontal section taken on line *x x* Fig. 1. Fig. 3, is a detached view, enlarged, of one of the the truss-bars. Fig. 4 is a detail.

This invention relates to the construction of metal bed-steads and has for its object the providing of a bed-stead of that class with a cheap and efficient support for a spring bed of some of the types which are in common use, such supports being formed of metal.

Referring to the drawings, A are the posts and B B the side rails.

As shown in the drawings, particularly Fig. 1, the side rails are made of angle-iron so disposed that the web or rib *b* projects inward from the upper edge of the web or rib *b'*, so that the outer faces of these webs are exposed to view instead of the inner faces as is the case with some of the prior beds.

C C indicate corner pieces or blocks, by means of which the ends of the rails B B are attached to the posts; but as my invention does not pertain to the construction of these corner pieces not, in fact, to any particular means of connecting the rails to the posts, I have only indicated these pieces conventionally; because any usual, approved, or convenient mode may be adopted for attaching the rails to the posts.

D, E, F, are the truss bars for supporting the spring bed or mattress. These truss bars are by preference made of round iron rods and each has a central upwardly curved or arched section D, with reversely bent sections E, E, connecting the arch portion with horizontal supporting ends F, F, bent at about right angles to the sections E, E, and adapted to rest upon the upper faces of the webs *b b* of the side rails. I propose to flatten the supporting ends F, F, and make them of a length which corresponds substantially to, or less than, the width of the webs *b b;* and, as indicated in the drawings, the length and shape of the sections D, E, are such that the upper outer faces of the sections E E fit quite closely between the inner edges of the webs, so as to prevent the truss bars from moving endwise to such an extent as to thrust the ends of the supporting sections or arms F F beyond, or even too near, the outer edges or faces of the rails B, B.

A downward movement of the crown of the arch, D, will thrust outward the lower ends of the sections E, E, springing them slightly and lifting upward upon the outer ends of the sections F, F, which upward movement will be resisted by the weight of the superimposed bed resting thereon; whereby the elasticity or resiliency of the truss-bars operates in a way which is entirely different from that which occurs in a bed wherein an arched bar having horizontal end extensions is secured to the under side of bed rails; or one having a flat or straight section with upturned ends hung upon the side rails; or one having the ends of an arch resting on the rails with the entire bar above its support; in which latter case guides are needed to keep the arch in an upright position, whereas if my truss-bar is tilted sidewise it tends to right itself.

G is the lower slat, H the upper slat, and I I interposed springs of a spring bed bottom adapted to be used with my invention.

I propose to make the length of the sections E E such that the central portions of the arched section D will be about level with the upper faces of the side rails so as to engage with and form a central support for the spring bed bottom or mattress when the latter is in ordinary working position, substantially as is indicated in Fig. 1, where it will also be seen that by reason of the peculiar shape of the bar no portion of it projects below the plane of the rails so as to be seen when the bed is in use, or beyond their outer edges, even when narrow webbed angle-iron is used.

While I have shown in the drawings a well-known form of spring bed which is adapted for use in connection with my invention, I do not wish to be limited thereby; because there are many other well-known beds and mattresses which may be substituted therefor. Of

course the number of these truss bars which should be used in any given bed should be varied according to the requirements of each particular case. Owing to the arched form of these bars, they may be made quite small in cross section and have sufficient elasticity to supplement or add to the springiness of the bed; and while, for ordinary uses I propose to make them of round iron or flat iron rods, yet under some conditions they may be advantageously made of steel.

While I have illustrated and described the best mode now known to me for carrying out my invention, I do not wish to be limited to the details above set forth; because many modifications will suggest themselves to persons skilled in the art to which my improvement pertains without going outside of, or departing from, the spirit of my invention.

What I claim is—

The herein described truss-bar for a bedstead, having a central arch, ends in the horizontal plane of the crown of the arch, and depending sections connecting the ends with the arch, whereby the weight of the arch tends to keep the truss in an upright position, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES B. RYAN.

Witnesses:
S. J. EVERITT,
SYLVESTER POPE.