

(No Model.)

J. AINSLIE, Jr.
FOLDING BED BOTTOM.

No. 326,375.

Patented Sept. 15, 1885.

Fig. 1.

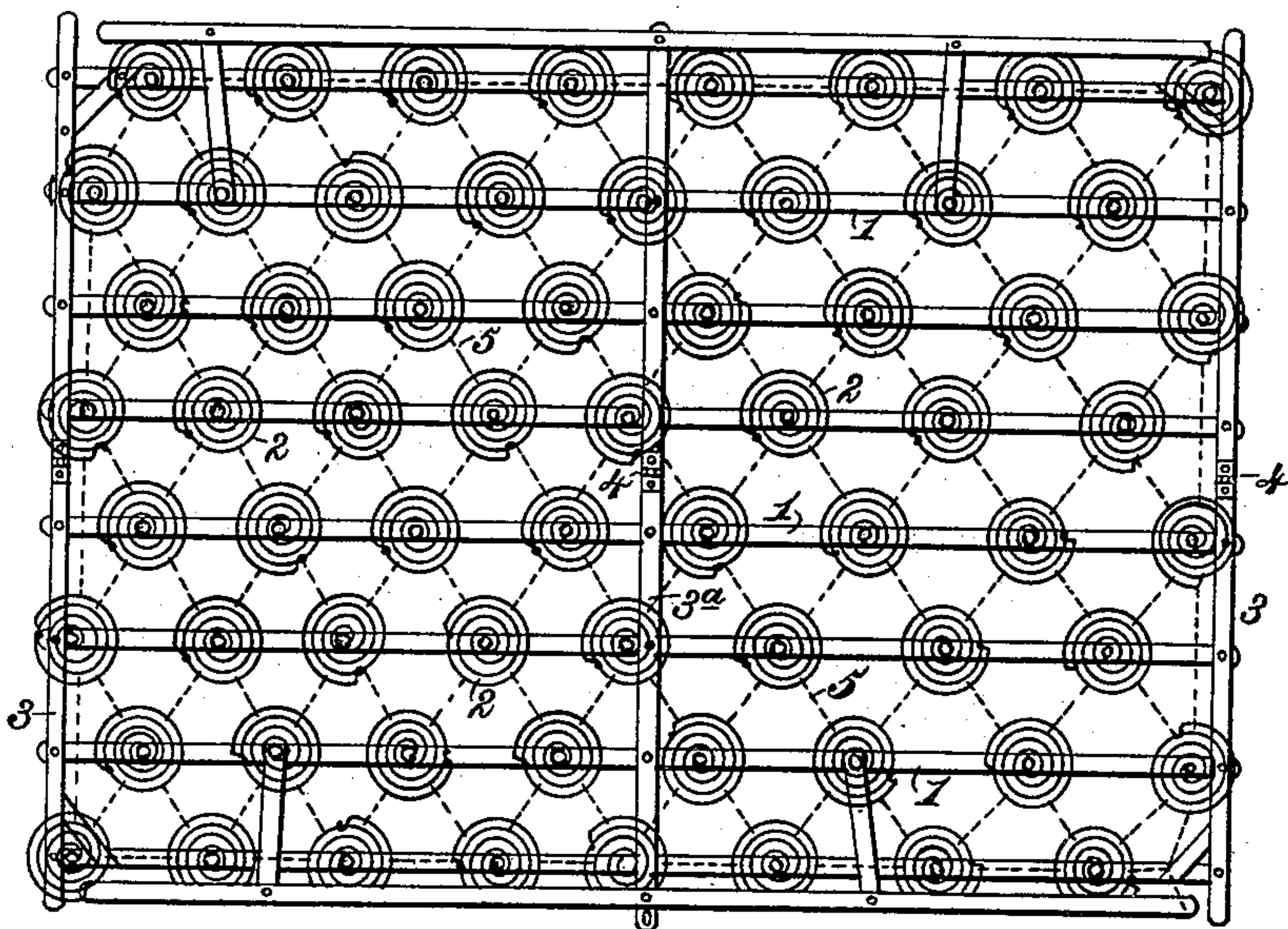


Fig. 2.

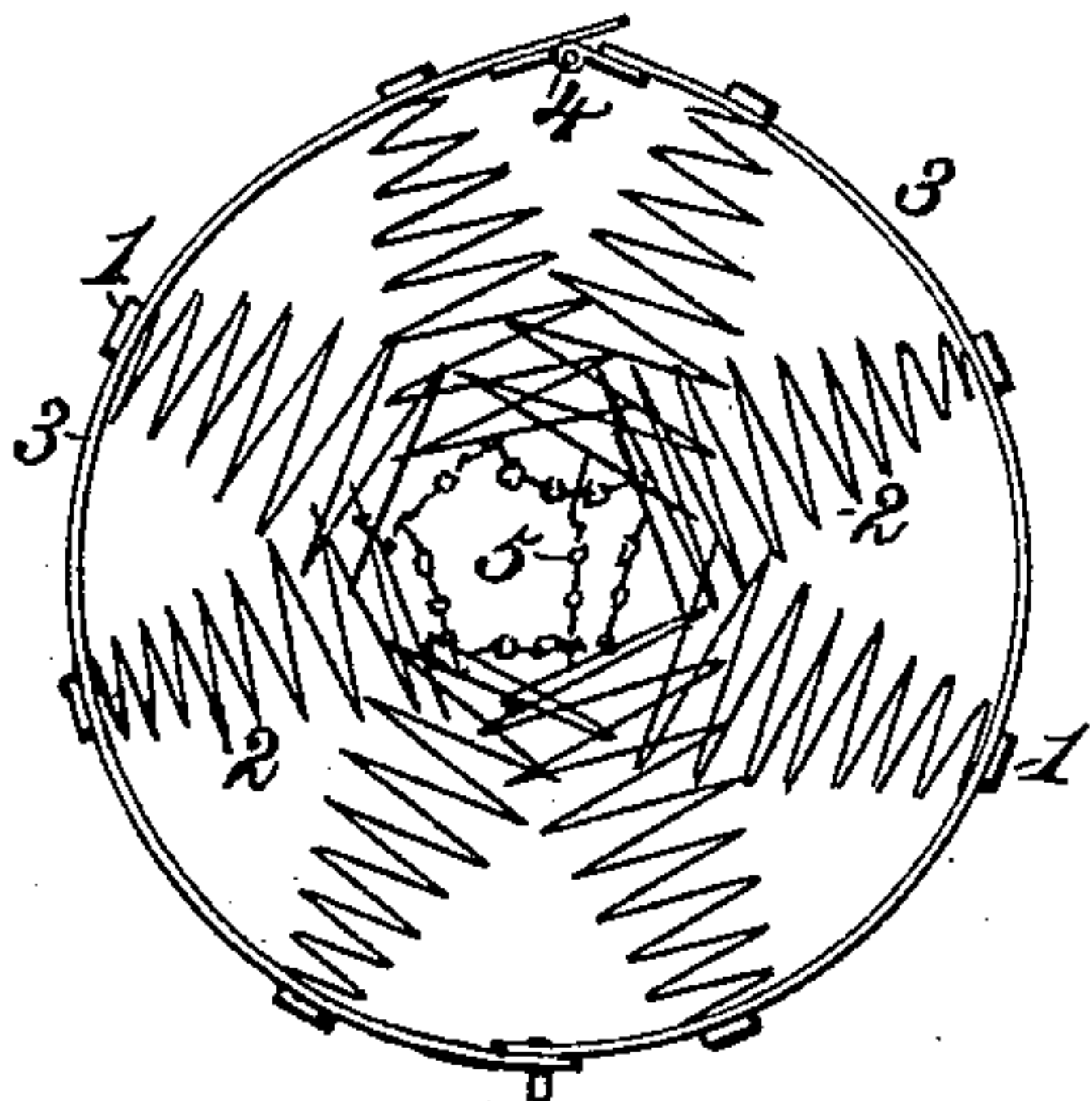


Fig. 3.



Witnesses.

Robert Emmett.

J. A. Rutherford

Inventor.

James Ainslie Jr.

By *James L. Norris.*
Atty.

UNITED STATES PATENT OFFICE.

JAMES AINSLIE, JR., OF BROOKLYN, NEW YORK.

FOLDING BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 326,375, dated September 15, 1885.

Application filed November 13, 1884. (No model.)

To all whom it may concern:

Be it known that I, JAMES AINSLIE, Jr., a citizen of the United States, residing at Brooklyn, Kings county, New York, have invented
5 new and useful Improvements in Folding Bed-Bottoms, of which the following is a specification.

My invention relates to spring bed-bottoms of that class wherein the transverse portions
10 of the bed-bottom are adapted to roll up for the purpose of diminishing the bulk in transportation or in packing.

My invention consists in the several novel features of construction and combinations of
15 parts hereinafter fully set forth, and definitely pointed out in the claim annexed to this specification.

Referring to the drawings forming part of this application, Figure 1 is a plan view of a
20 bed-bottom embodying my invention. Fig. 2 is an elevation showing the bottom rolled. Fig. 3 is a detail section of a part of one of the cross-strips.

The purpose of my invention is to effect an
25 improvement in this class of beds whereby the cost of manufacture is diminished, the construction simplified, the shape of the bed preserved, and the ease of manipulating it promoted. To these ends, therefore, I construct
30 the bed-bottom in the following manner:

In the accompanying drawings, the reference-numeral 1 denotes the longitudinal strips of the bed-bottom, which are formed each of a continuous piece of iron or steel, to which
35 the tops of the volute springs 2 are riveted. At each end these longitudinal slats are connected by means of cross-strips 3, formed of iron or steel, riveted to the slats 1, and a similar strip, 3^a, is attached at a point intermediate of the ends of the said slats. Each of these
40 transverse strips is formed of two pieces centrally united by a butt-hinge, 4, applied, as shown in the drawings, in such manner that they will fold readily when the bed-bottom is
45 rolled up, but will not diminish the elasticity of the strips 3 when the bed is unrolled for use. For this purpose the hinge 4, which is a butt-hinge, is so attached to the sections of the cross-strip that it folds downward, or to-
50 ward the bottom portion of the bed, as shown in Fig. 2. This readily permits the rolling of

the bed; but when opened to its full extent the joint is rigid or unyielding to any weight placed upon the bed, and the elasticity of the cross-strips is thereby substantially the same
55 at the longitudinal center of the bed as at other points.

By reference to Fig. 3 of the drawings it will be seen that the adjacent ends of the two parts of the cross-strips are riveted to the leaves of
60 the butt-hinge in such manner that the end of one section of each strip overlaps the end of the other section of each strip. The cross pieces or strips being riveted to the back of the hinge, with their ends lapped, as described
65 and shown, a smooth and neat connection is formed, and is regarded as a desirable and useful construction.

The springs 2 are connected by chains 5, and the general construction of the bed-bottom is
70 in other respects essentially similar to that heretofore known.

By this invention the construction of the bed is simplified, and the bed will retain its shape much longer and better than those beds
75 in which the cross-strips are made of numerous pieces united by hinges. Moreover, the bed will roll much better and more easily. Beds having the cross-strips made of one solid
80 piece require much strength in rolling up, and in unrolling the strips recoil with sufficient force to throw down the person handling them. In other words, this bed combines all the advantages of both the classes of bed named
85 above, and avoids the objections found in each.

I am aware that the cross-strips of a roll-up bed have been composed of sections united together by butt-hinges, and such therefore I
90 do not broadly claim.

What I claim is—

In a bed-bottom, the combination, with longitudinal slats 1, of cross-strips 3 and 3^a, each made in two parts united by a butt-hinge, the
95 ends of said strips being lapped upon the back of the hinge, substantially as described.

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

JAMES AINSLIE, JR.

Witnesses:

ROBT. J. KNOX,
WM. T. KNOX.