

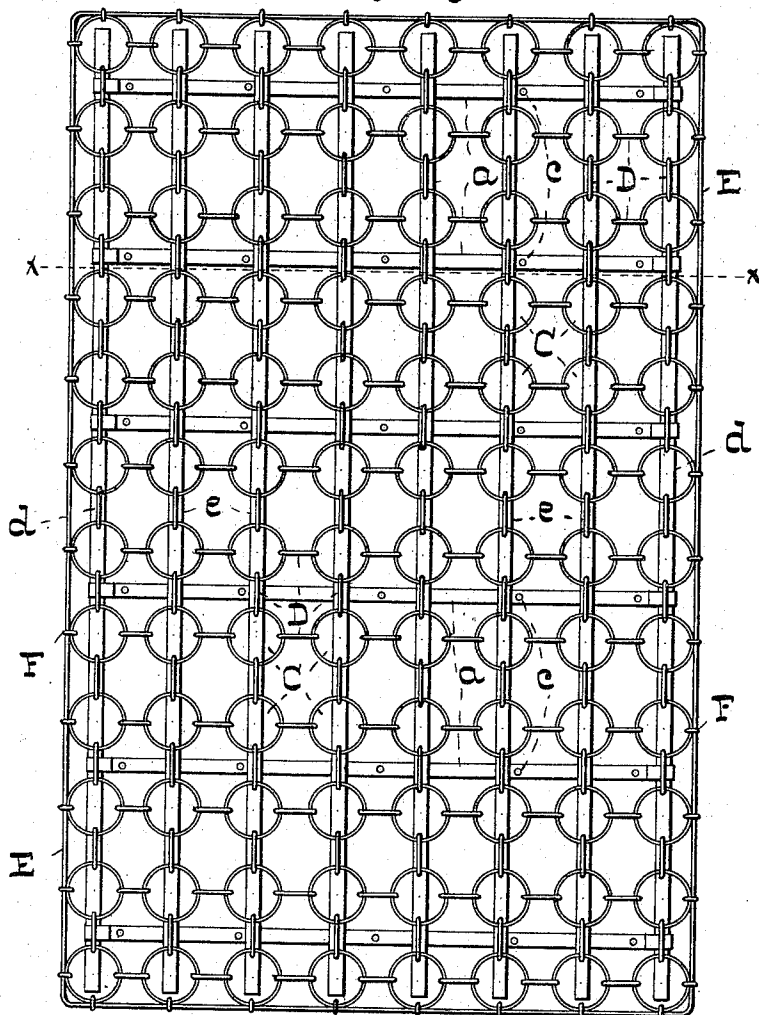
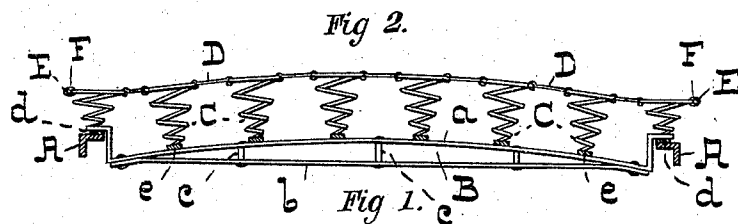
(No Model.)

2 Sheets—Sheet 1.

F. DE W. COLVIN.  
SPRING BED BOTTOM.

No. 570,425.

Patented Oct. 27, 1896.



-WITNESSES-

*Dan'l Fisher*  
*Harry Constantine*

-INVENTOR-

*Frank De Witt Colvin,*  
*by Wm. T. Mearns,*  
*att'y.*

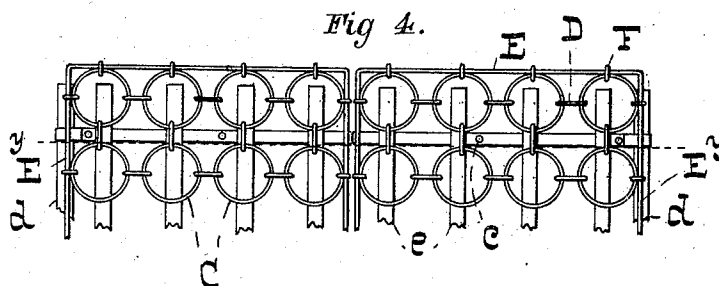
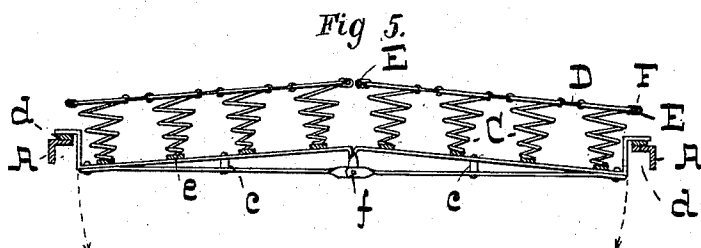
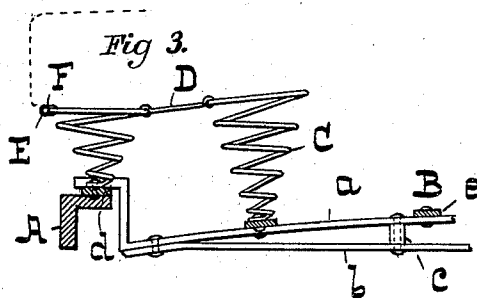
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-INVENTOR-

Frank De Witt Colvin,  
by W. H. T. Howard,  
att'y.

# UNITED STATES PATENT OFFICE.

FRANK DE WITT COLVIN, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-HALF TO THE FOSTER BROTHERS MANUFACTURING COMPANY OF BALTIMORE CITY, OF MARYLAND.

## SPRING BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 570,425, dated October 27, 1896.

Application filed July 6, 1896. Serial No. 598,125. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK DE WITT COLVIN, of the city of Baltimore and State of Maryland, have invented certain Improvements in Spring Bed-Bottoms, of which the following is a specification.

The first part of my invention consists in forming the spring bed-bottom of a series of arched trusses, each one of which consists of an upper arched member, a lower chord or tie-rod, and vertical posts, and in erecting on such trusses volute springs.

The second part of the invention consists in making the arched-truss bed-bottom in two parts, hinged together, whereby it may be folded for convenience in transportation.

In the further description of the said invention which follows reference is made to the accompanying drawings, forming a part hereof, and in which—

Figure 1 is a top view of the improved spring bed-bottom. Fig. 2 is a cross-section of Fig. 1, taken on the dotted line *xx*. Fig. 3 is an enlarged view of a portion of Fig. 2. Fig. 4 is a top view of the invention embodying certain modifications hereinafter described. Fig. 5 is a section of Fig. 4, taken on the dotted lines *yy*.

Referring now to Figs. 1, 2, and 3 of the drawings, A represents the rails of the bedstead, or those parts thereof which support the bed-bottom. The said rails are shown in section and have the ordinary bar construction.

B B are trusses, consisting of the arched member *a*, the chord or the tie-rod *b*, and the vertical posts *c*. The ends of the arched members *a*, beyond the tie-bars, are turned up and then outward, as shown in Figs. 2 and 3. The trusses are placed at a proper distance apart and connected by the longitudinally-extending flat side bars *d* at their ends, and the intermediate flat bars *e* rest on and are riveted to the upper surface of the trusses, as shown in Fig. 3. The tie-bars are also riveted to the arched members *a*, and the vertical posts consist, preferably, of thimbles and rivets which pass through them, as shown in Fig. 3.

C C are inverted conical volute wire springs erected and secured by rivets to the longitudinally-extending flat bars *d* and *e*.

All the springs on the bars *e* are of a common length; but the ones on the bars *d* are shorter, so that the curvature of the general line of the upper ends of the springs will be concentric with the top of the trusses.

The springs are looped together by the wire links D, and around the whole is an endless binding-wire E, secured to the exterior springs by links F.

It will be seen that the edges of the mattress (shown only in dotted lines in Fig. 3) are sustained by the short springs and also by the binding-wire, so that when the edges are depressed their movement is communicated to every spring in the bottom.

The arched trusses being rigid, they require no support other than the rails of the bedstead.

In the modification illustrated in Figs. 4 and 5 the arched members of the trusses and the tie-rods are in two parts, hinged together at *f*, so that the bottom may be folded by bending the lateral edges thereof down in the direction indicated by the dotted arrows in Fig. 5. To admit of this folding, the springs at either side of the longitudinal center line of the bottom are not connected together by links, as are the others, but to the binding-wire frame only, which is made in two complete sections, as shown in Fig. 4. The bottom is also devoid of the short volute springs; but the edges of the mattress are supported by the binding-wire frame, as shown in the construction first described.

I claim as my invention—

1. In a spring bed-bottom, the combination of a series of arched trusses tied together to form the base, the ends of the arched members of the trusses being turned up and outward, and a series of inverted conical volute springs erected on the said trusses, the springs at the lateral edges of the bottom being mounted on the offset ends of the trusses, substantially as specified.

2. In a spring bed-bottom, the base thereof formed of a series of arched trusses in two parts hinged together, substantially as specified.

FRANK DE WITT COLVIN.

Witnesses:

WM. T. HOWARD,  
DANL. FISHER.