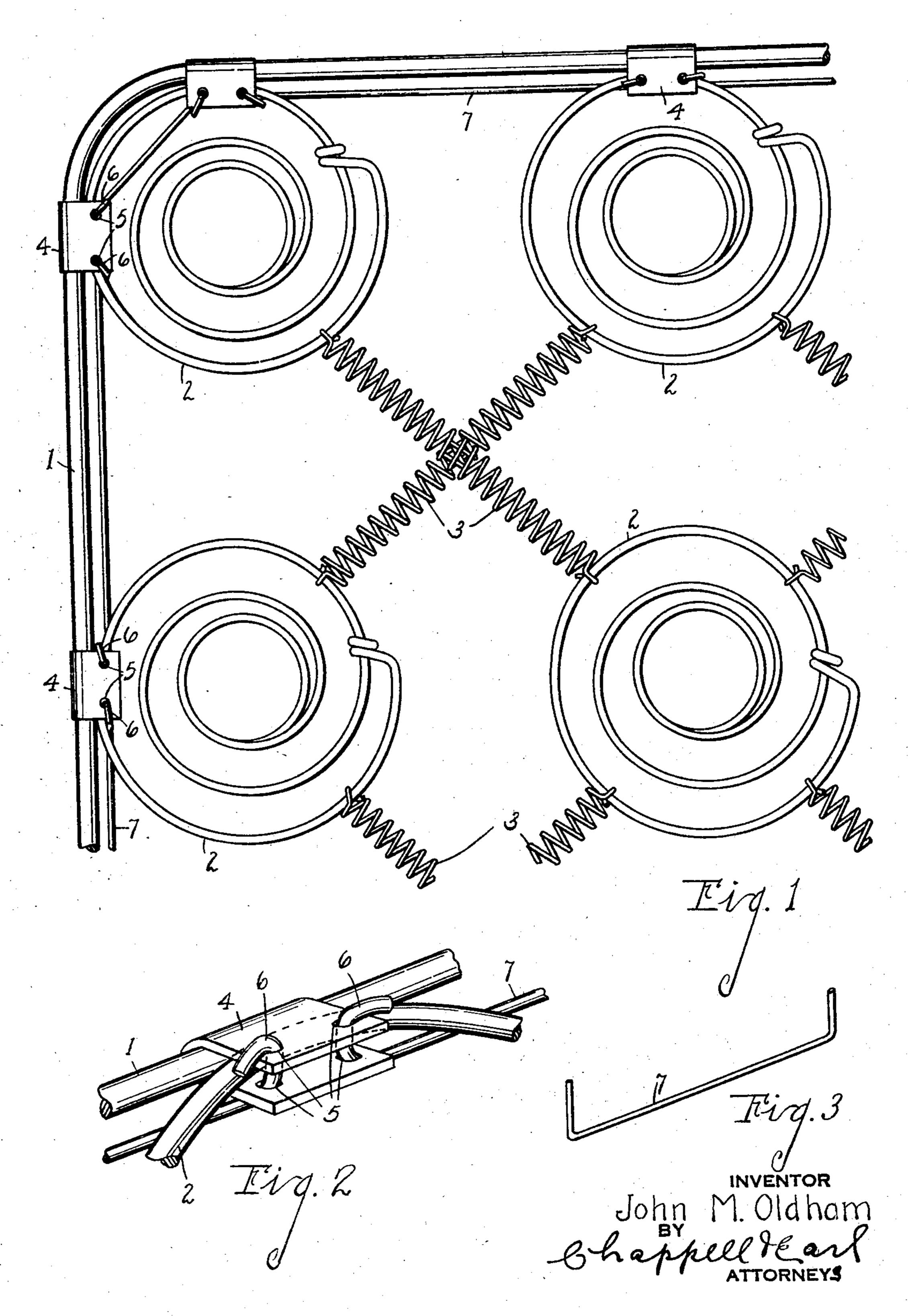
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SPRING STRUCTURE

Filed Jan. 29, 1932



## UNITED STATES PATENT OFFICE

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## SPRING STRUCTURE

Application filed January 29, 1932. Serial No. 589,597.

The main object of this invention is to provide a spring structure for beds, cushions, mattress fillers and the like in which the border springs are effectively supported in upright position and maintained in properly spaced relation.

A further object is to provide a structure

in its parts and easily assembled.

Objects pertaining to details and economies of my invention will definitely appear from the description to follow. The invention is defined in the claims.

A structure which embodies the features of my invention is clearly illustrated in the ac-

companying drawing, in which:

Fig. 1 is a fragmentary plan view of a spring structure embodying features of my invention.

Fig. 2 is an enlarged fragmentary perspective view showing structural details.

Fig. 3 is a perspective view of one of the combined spacing and locking members.

The embodiment of my invention illustrated comprises a border frame 1 preferably of light rod or heavy wire, and a plurality of helically coiled body springs 2, these being shown conventionally and the bottom support being omitted. The springs are connected by the crossed helical spring ties 3. The outer body springs are arranged with their end coils adjacent the border frame to which they are secured.

The connection consists of the U-shaped sheet metal clips 4 arranged with their bights embracing the border frame and their arms embracing the adjacent coils of the border or outer springs. These clips have alined holes 5 in their arms disposed so that the hooks 6 of the spacing members 7 can be passed through the holes at the inner side of or within the adjacent spring coils, thereby locking the border springs to the border frame and at the same time supporting these border springs in proper spaced relation, the spacing members connecting adjacent pairs of clips.

With this arrangement of parts the outer my hand. body springs are very securely connected to the frame and held in proper spaced rela-

tion thereon. This is of advantage inasmuch as border springs in cushions, bed springs, mattress fillers and the like are subjected to severe strains which tend to dislocate them. With this arrangement they are very securely 55 supported.

Having thus described my invention what having these advantages which is economical I claim as new and desire to secure by Let-

ters Patent is:

1. In a spring structure, the combination 60 with a border frame, of a plurality of border springs disposed with coils thereof adjacent said border frame, U-shaped clips embracing said border frame and said spring coils disposed adjacent thereto, the arms of the 65 clips having alined holes therein, and spacing members having hooks at their ends disposed through the holes of adjacent clips and within the spring coils, thereby supporting the springs in spaced relation and 70 securing them to the border frame.

2. In a spring structure, the combination with a border frame, a plurality of body springs disposed with the coils thereof adjacent said border frame, U-shaped clips em- 75 bracing said border frame and said spring coils disposed adjacent thereto, the arms of the clips having alined holes therein lying within the confines of the end coil of the border spring that the clip secures to the bor- 80 der frame, and spacing members having their ends disposed through said holes to secure the springs to the border frame and support

them in spaced relation. 3. In a spring structure, the combination 85 with a frame, a plurality of body springs disposed with coils thereof adjacent said frame, clips embracing said frame and said spring coils disposed adjacent thereto, the arms of the clips having alined holes therein 90 lying within the confines of the end coil of the spring that the clip secures to the frame, and spacing members having their ends disposed through said holes to secure the springs to the frame and support them in 95 spaced relation.

In witness whereof I have hereunto set

JOHN M. OLDHAM.