

(No Model.)

A. H. VIEL.  
SPRING BED.

No. 476,178.

Patented May 31, 1892.

Fig. 1.

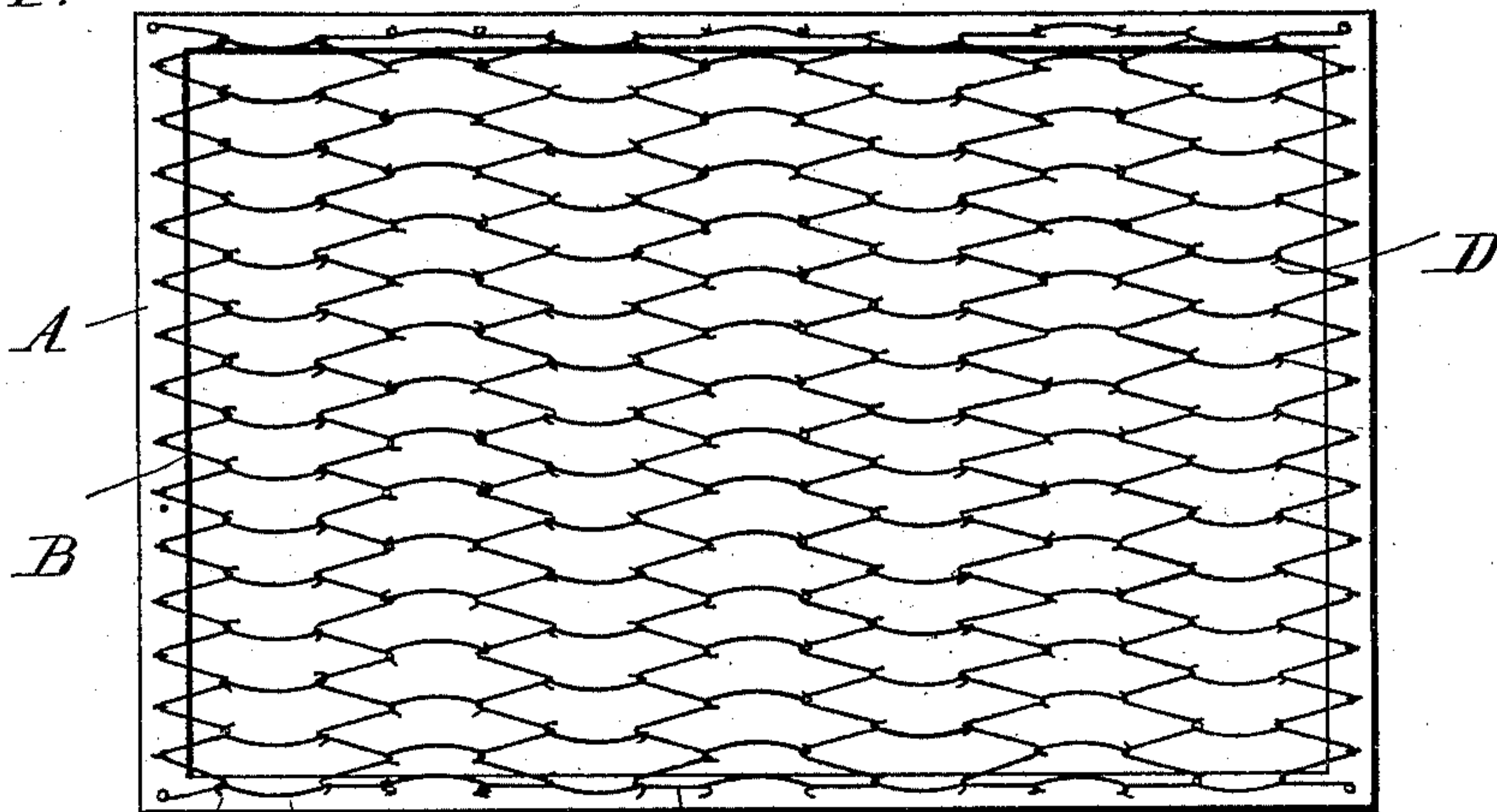


Fig. 2.

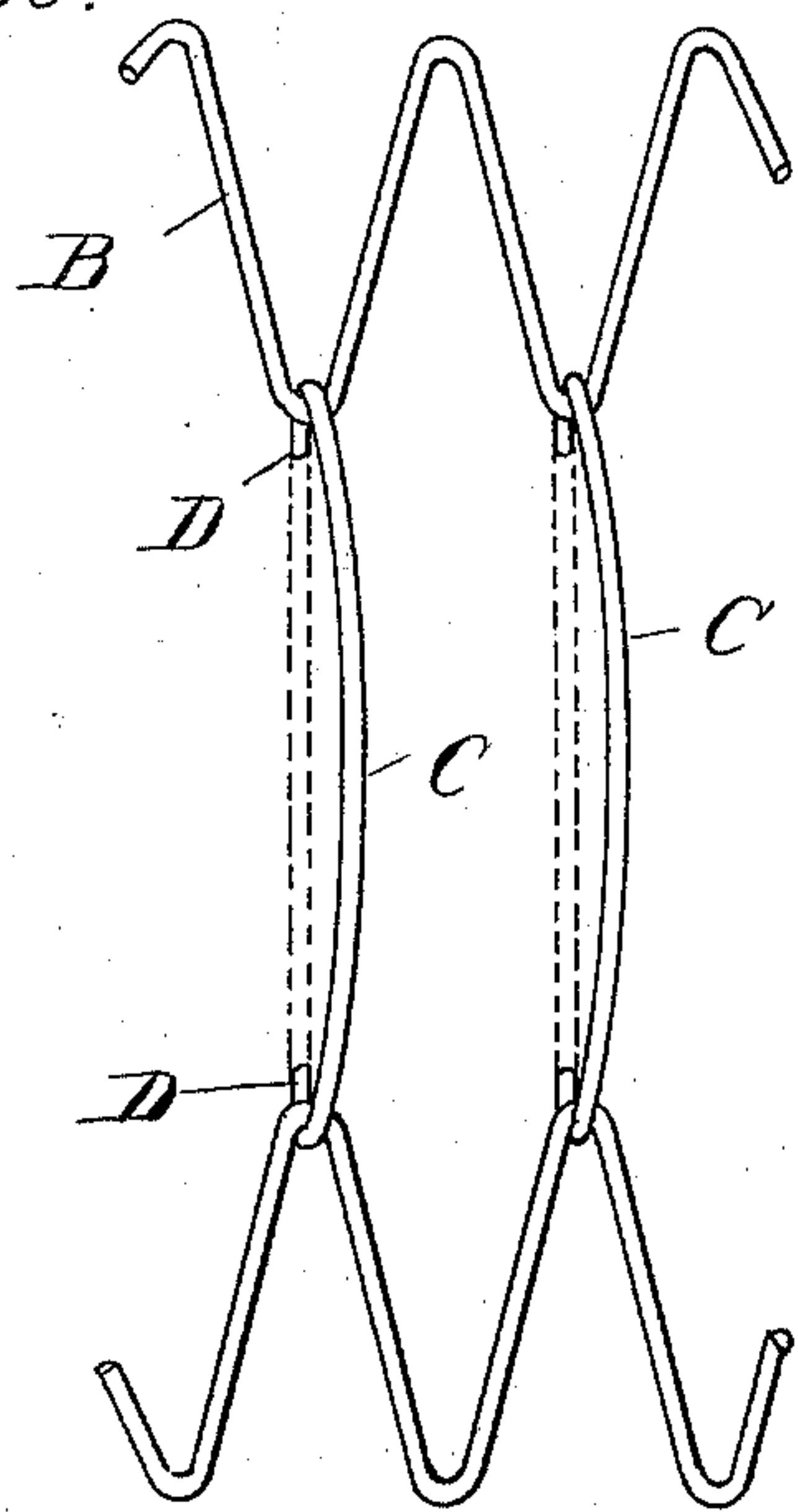


Fig. 3.

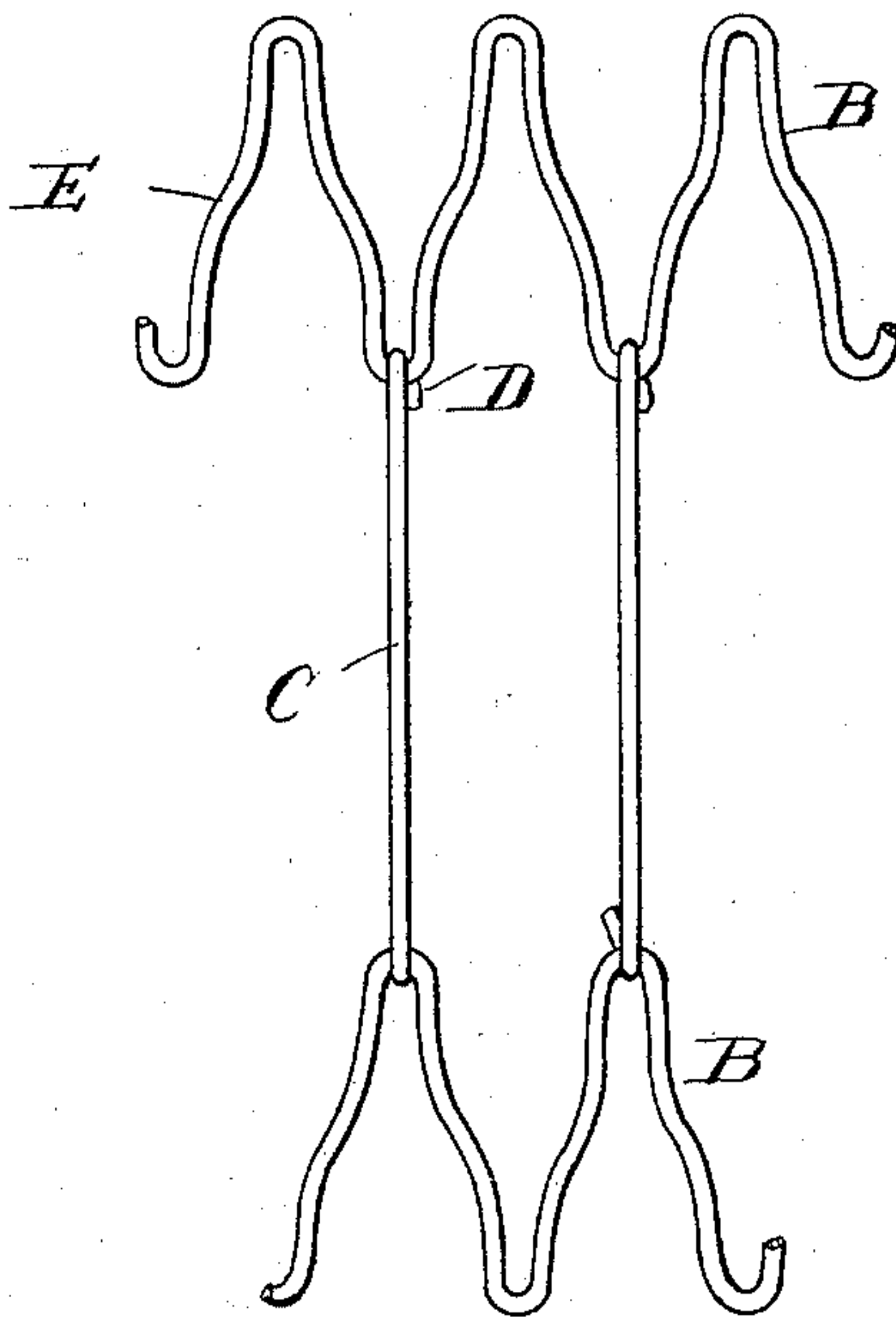


Fig. 5.



Witnesses  
A. L. Skobbe  
N. L. Lindop

Inventor  
Arthur H. Viel  
By *Wm. Sprague* Esq.  
Att'y's

# UNITED STATES PATENT OFFICE.

ARTHUR H. VIEL, OF FENTON, MICHIGAN.

## SPRING-BED.

SPECIFICATION forming part of Letters Patent No. 476,178, dated May 31, 1892.

Application filed January 29, 1892. Serial No. 419,633. (No model.)

*To all whom it may concern:*

Be it known that I, ARTHUR H. VIEL, a citizen of the United States, residing at Fenton, in the county of Genesee and State of Michigan, have invented certain new and useful Improvements in Spring-Beds, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in spring-mattresses; and the invention consists particularly of a fabric designed to be secured upon the ordinary frame, whereby with the least expense of manufacture I obtain an efficient and durable mattress, all as more fully hereinafter described.

In the drawings, Figure 1 is a plan view of a mattress embodying my invention. Fig. 2 is an enlarged plan of a section of the fabric shown in Fig. 1. Fig. 3 is a similar enlarged plan showing a modified form of the fabric. Figs. 4 and 5 are side elevations of constructions specifically referred to.

A is a frame of any desired construction, preferably the usual rectangular form for spring-mattresses, with or without means for tightening the fabric, as desired. This frame I cover with a fabric which is designed to best resist the vertical strains to which the same may be subjected without the liability of any part thereof becoming set or fixed in the shape to which it may be bent in use, and to this end I preferably make it of a series of transverse sections of wire. These transverse sections may be of various forms, that which I prefer being the simplest in construction and the most efficient in operation, as shown in Figs. 1 and 2. The sections B shown in those figures show a continuous wire bent or crimped in substantially V shape. These sections I have shown alternately with sections C, which consist of a single piece of wire having a lateral bend extending from one end to the other, with hooks B formed at one end and engaging in the apices of the bends in the sections B. The resulting fabric is one in which the strains will be taken up by the

bending of the sections C toward a straight line, as shown in Fig. 2. By making these links with a lateral curve it is evident that the fabric may be perfectly flat on top without any indentations or elevations which would be apt to injure or wear the hair or other mattress which is placed upon it. If these links were made as shown in Figs. 4 and 5 they would be objectionable for this reason, as well as for the reason that the strain being applied at right angles to their bends would tend in a short time to maintain them in their straightened position, obviating the spring which would result from their bent shape.

In Fig. 3 I have shown the section B with bends E formed in their longitudinal portions, and the sections C formed of straight wires hooked at the ends. This construction I deem to be within the spirit of my invention, as would also be one in which all the transverse sections were provided with lateral bends.

What I claim as my invention is—

1. In a mattress, the combination, with a frame, of a fabric secured thereto comprising a series of longitudinal and crimped sections transversely arranged and a series of horizontal laterally curved and yielding connecting-links hooked into the apices of said crimped sections, substantially as described.

2. In a mattress, the combination, with a frame, of a fabric secured therein and comprising a transverse horizontal section B, formed of a continuous wire bent as shown and described, and the yielding connecting transverse sections C, consisting of single pieces of wire with a lateral horizontal bend extending from end to end and hooks D formed at the ends thereof, the parts arranged and connected substantially as and for the purpose described.

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

ARTHUR H. VIEL.

Witnesses:

JAS. WHITTEMORE,  
M. B. O'DOHERTY.