

W. Wells,

Bed Bottom,

N<sup>o</sup> 20,112.

Patented Apr. 27, 1858.

Fig. 2.

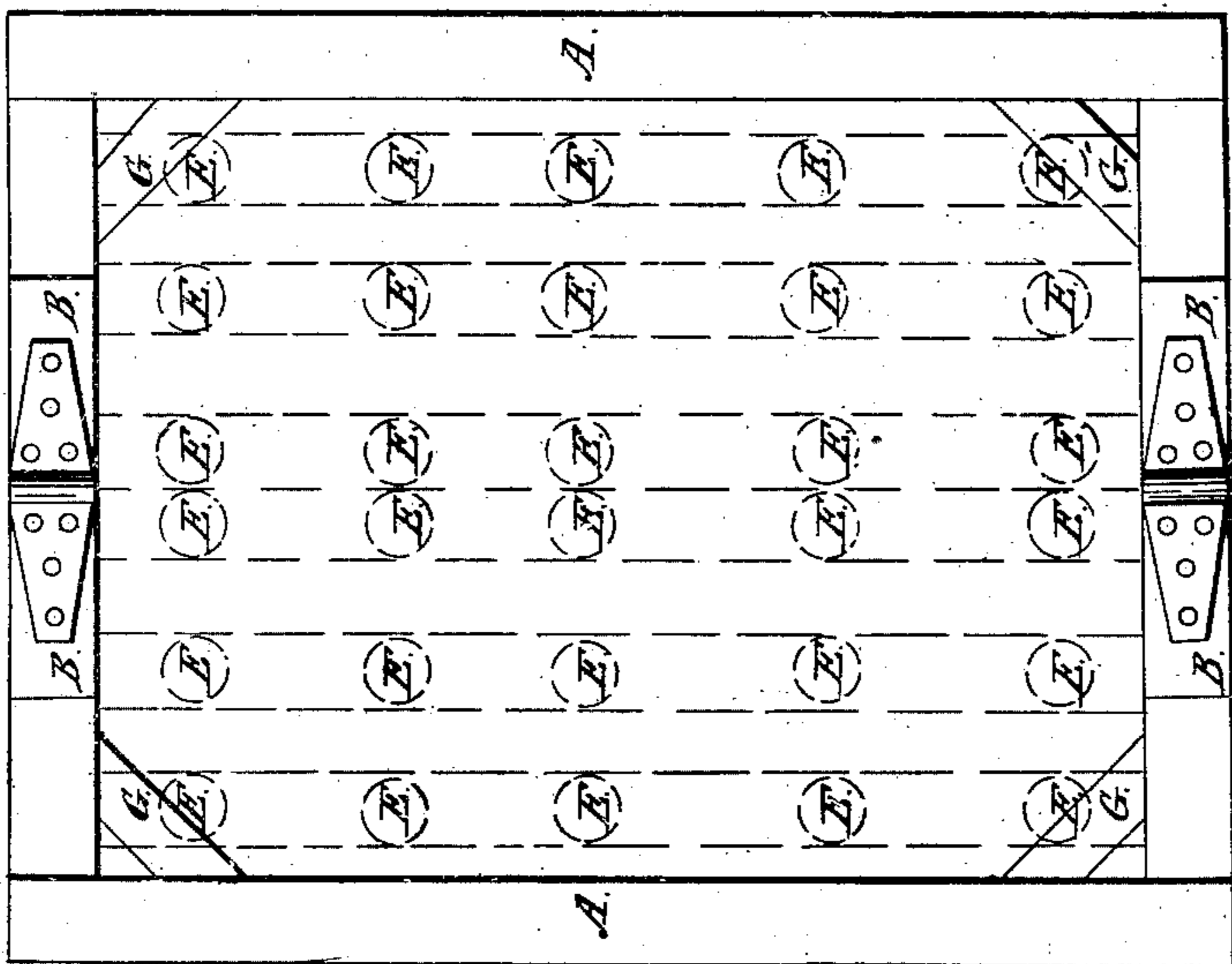


Fig. 4.

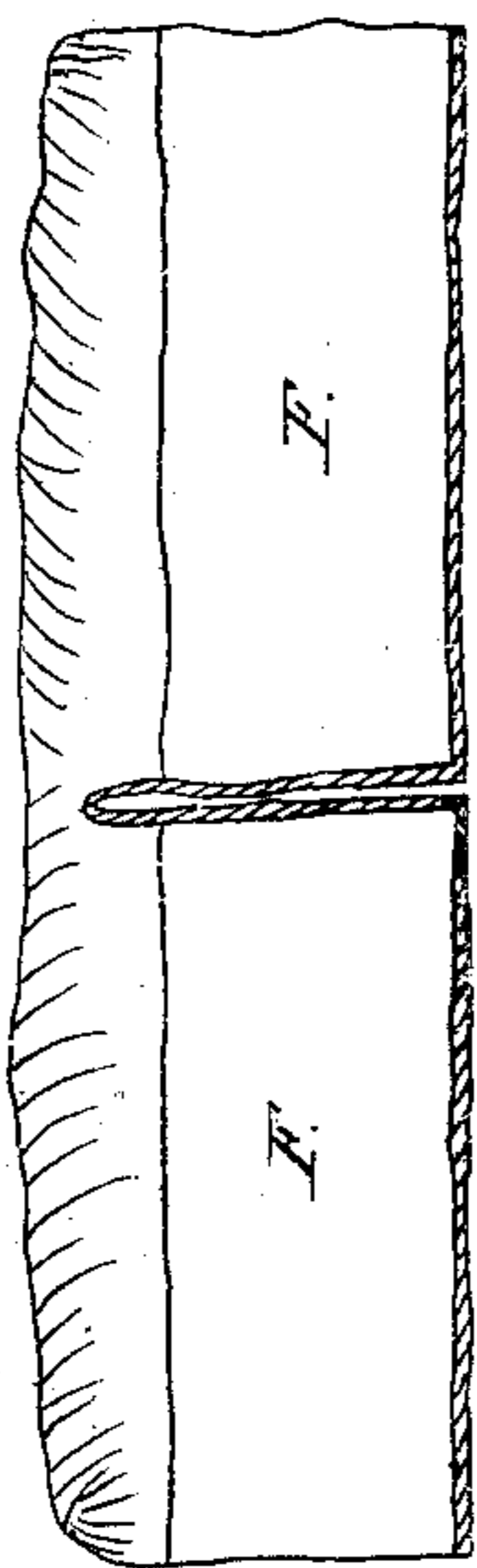


Fig. 1.

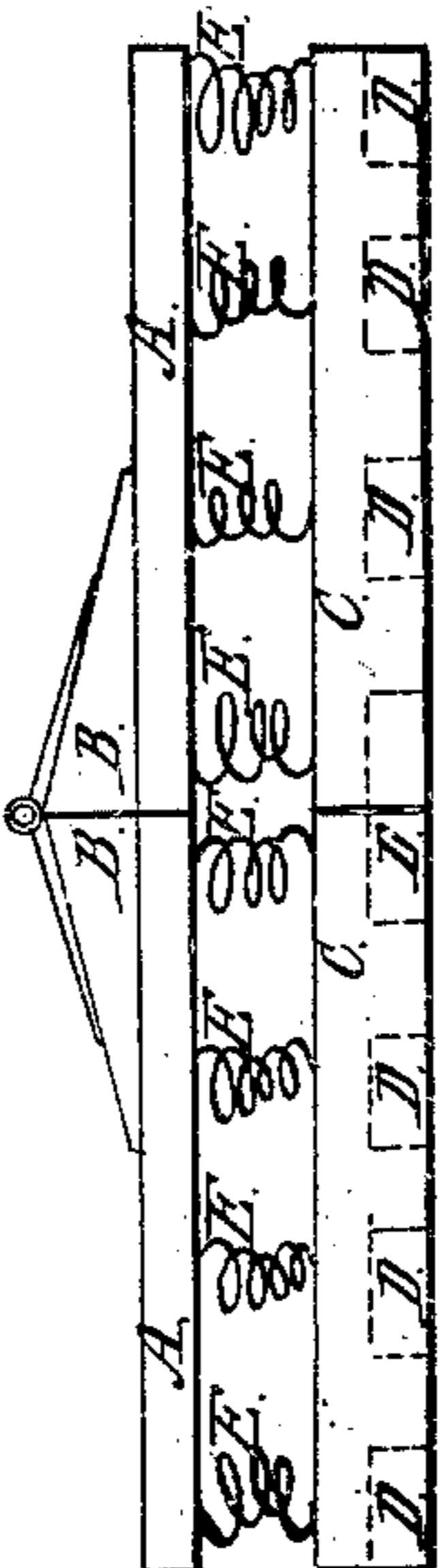
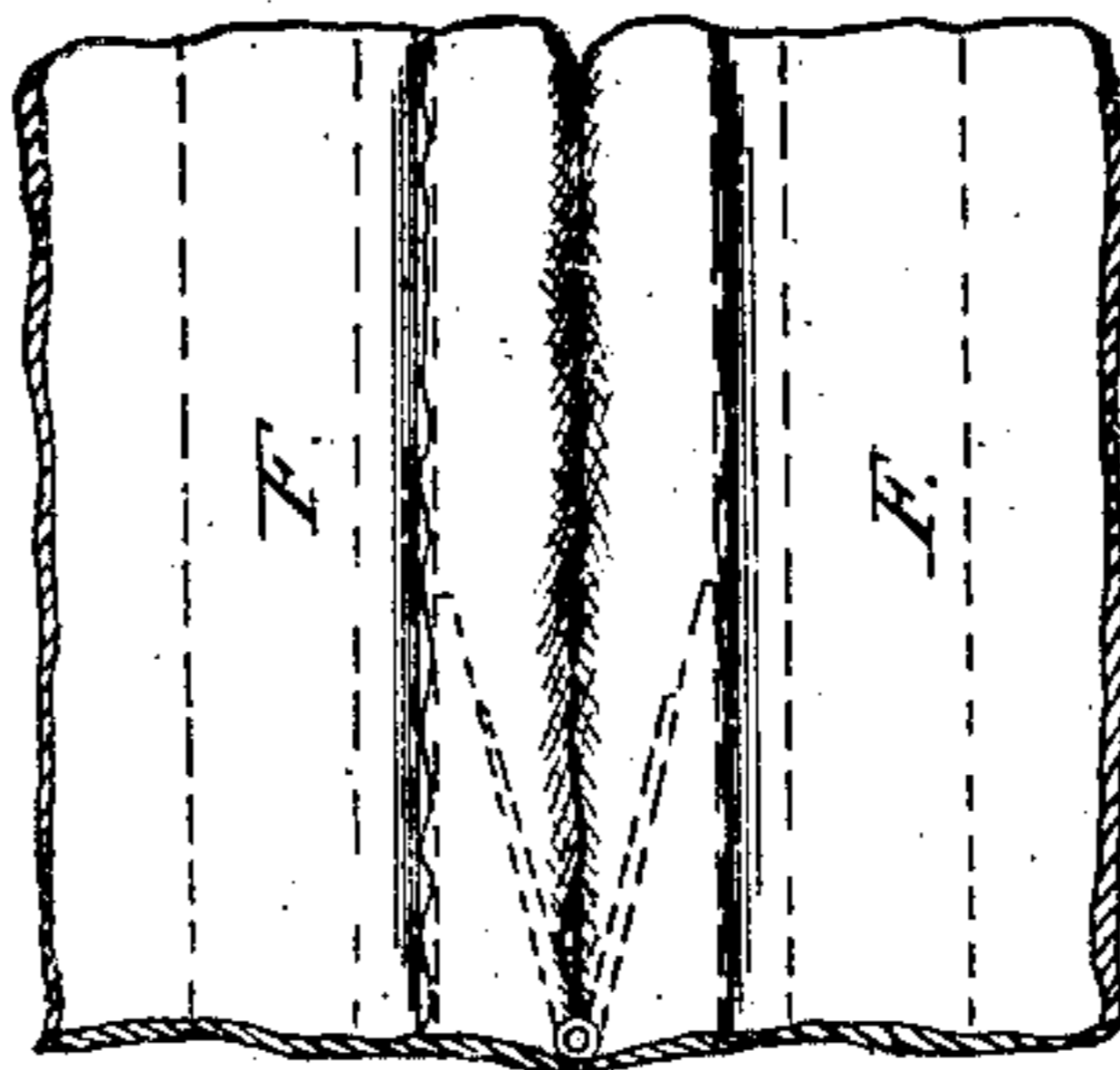


Fig. 3.



# UNITED STATES PATENT OFFICE.

WM. WELLS, OF HARRISBURG, PENNSYLVANIA.

## FOLDING MATTRESS.

Specification of Letters Patent No. 20,112, dated April 27, 1858.

*To all whom it may concern:*

Be it known that I, WM. WELLS, of the city of Harrisburg, in the county of Dauphin and State of Pennsylvania, have invented a new and useful Improvement in Folding Spring Mattresses; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference thereon marked, in which—

Figure 1, is an end view of the frame, and springs, showing the raised hinge. Fig. 2, is a plan view of the frame, the lower frame and springs shown in dotted lines. Fig. 3, is an end view of the mattress folded up. Fig. 4, is an end view of the mattress when spread out.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the construction—in Fig. 1, A is the top frame; B, the raised or angular hinge joint; C, the bottom frame; D, the bottom strips; E, the springs.

In Fig. 2, A, the frame; B the raised or angle seat for hinge; E, the springs; G, cross braces to sustain frame A when it is raised and to keep it always rigid.

In Fig. 3, F, represents the mattress folded up to half its size, also the position of the hinge shown in dotted lines.

In Fig. 4, F, shows the mattress spread out, ready for use.

In its construction I finish on the frame a perfect mattress so as to have all the advantages of elasticity, without the change in the mattress by becoming hard from use and uncomfortably matted, which is the case in all other mattresses. In order to accomplish this I stretch across the frame a net, or lattice of twine, and then, on the top of this, stretch a canvas bottom, thus making a firm foundation on which to put the mattress, which is composed of the materials commonly used for such purposes. This is neatly trimmed and stuffed so as to present a perfect mattress. I then finish the entire frame so that when done I present a complete mattress ready for use, and which will fold from top to bottom, leaving the mattress part folded together between the two parts of the frame by means of hinge B.

I am aware that spring mattresses are not new, as many attempts have been made to get one that would answer the purpose, and to do so I have made many attempts. I have

found it almost impossible to get it to stand the change in its position when folded, and spread open. Therefore it became necessary to have the arrangement of the hinge different from any hinge or device. I had ever since applied, as it is of great importance that when the mattress is folded, that the frame be kept open far enough to admit the finish needed.

By the triangular piece B placed on frame A, as a double inclined plane, the strap hinge being attached to it, it will be seen that as the frame is folded, the joint of the hinge is kept in a straight line with the center. The frame is raised when folded over, high enough to admit of all the trimming within or between the hinge, or frame A, as shown in Fig. 3. The frame has across its corner braces G which aid in keeping the frame always rigid, and which prevent it from losing its position when being folded and opened. The frame is also trimmed and stuffed ready for use, and is a truly valuable mattress as it is capable of being folded from head to foot, and thus put in less space for transportation, &c.

Having the whole trimmed as a perfect mattress, it gives a great advantage over all other bed bottoms as they are all more or less for harboring bed bugs. This is utterly obviated by my frame being finished so that the bugs have no place for hiding. It will be found a very cheap and excellent mattress answering all the purposes of a spring bottom, and a mattress, which is a very desirable point gained.

The mattress when in use is as represented in Fig. 4, and when folded as in Fig. 3. In either case being trimmed and ready for use.

In this arrangement of my invention, I can present a good, cheap, and healthy mattress, an object greatly to be desired.

Having thus fully described the construction and operation of my invention what I claim as new, and desire to secure by Letters Patent, is;

The inclined seats of the hinge B on which seats, the hinge is fastened, for the purpose of folding the mattress in the manner set forth, and the purposes specified.

WM. WELLS.

Witnesses:

T. G. CLAYTON,  
JOS. C. CLAYTON.