

(No Model.)

C. L. MILLS.  
BED BOTTOM SPRING.

No. 277,322.

Patented May 8, 1883.

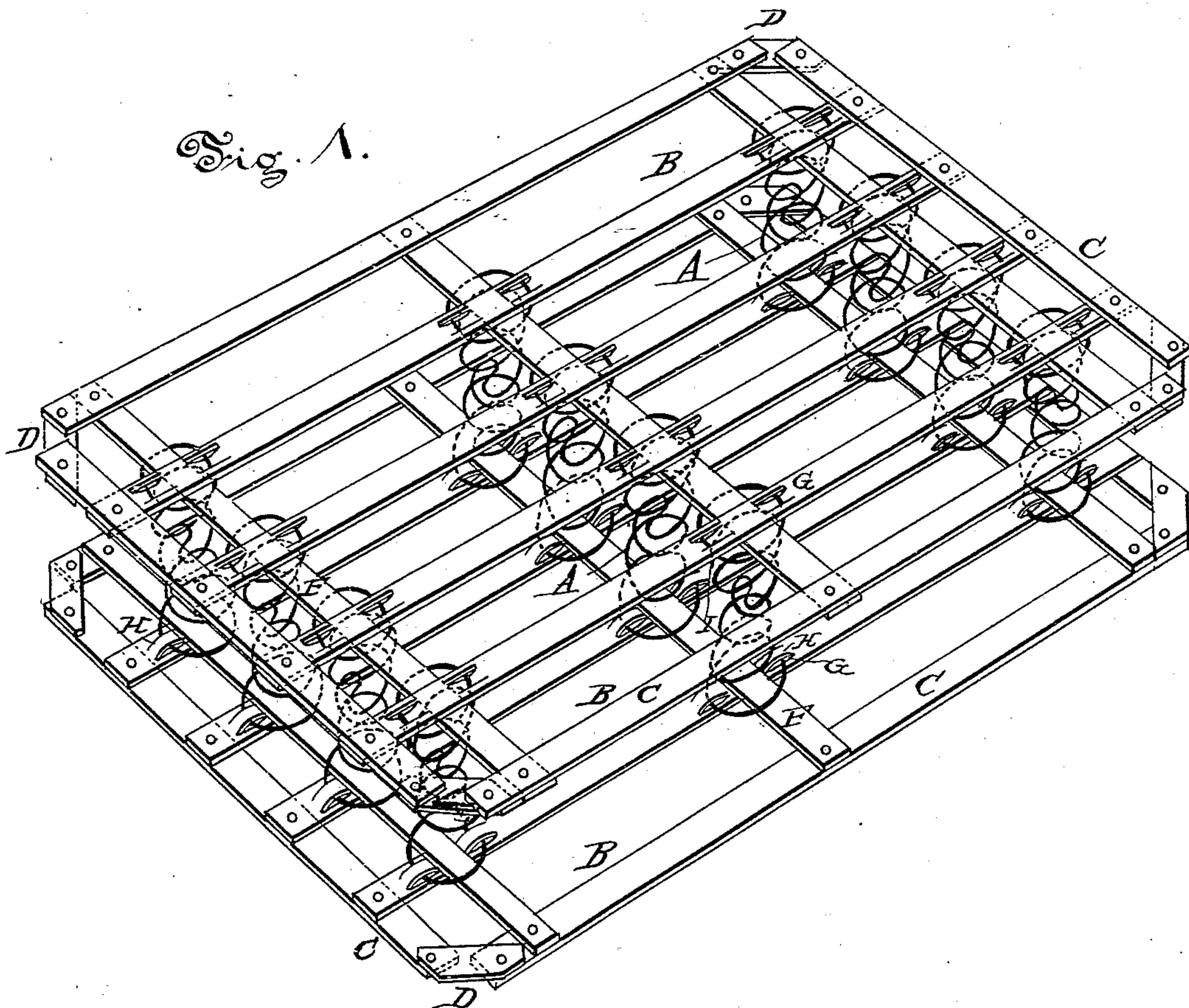


Fig. 2.

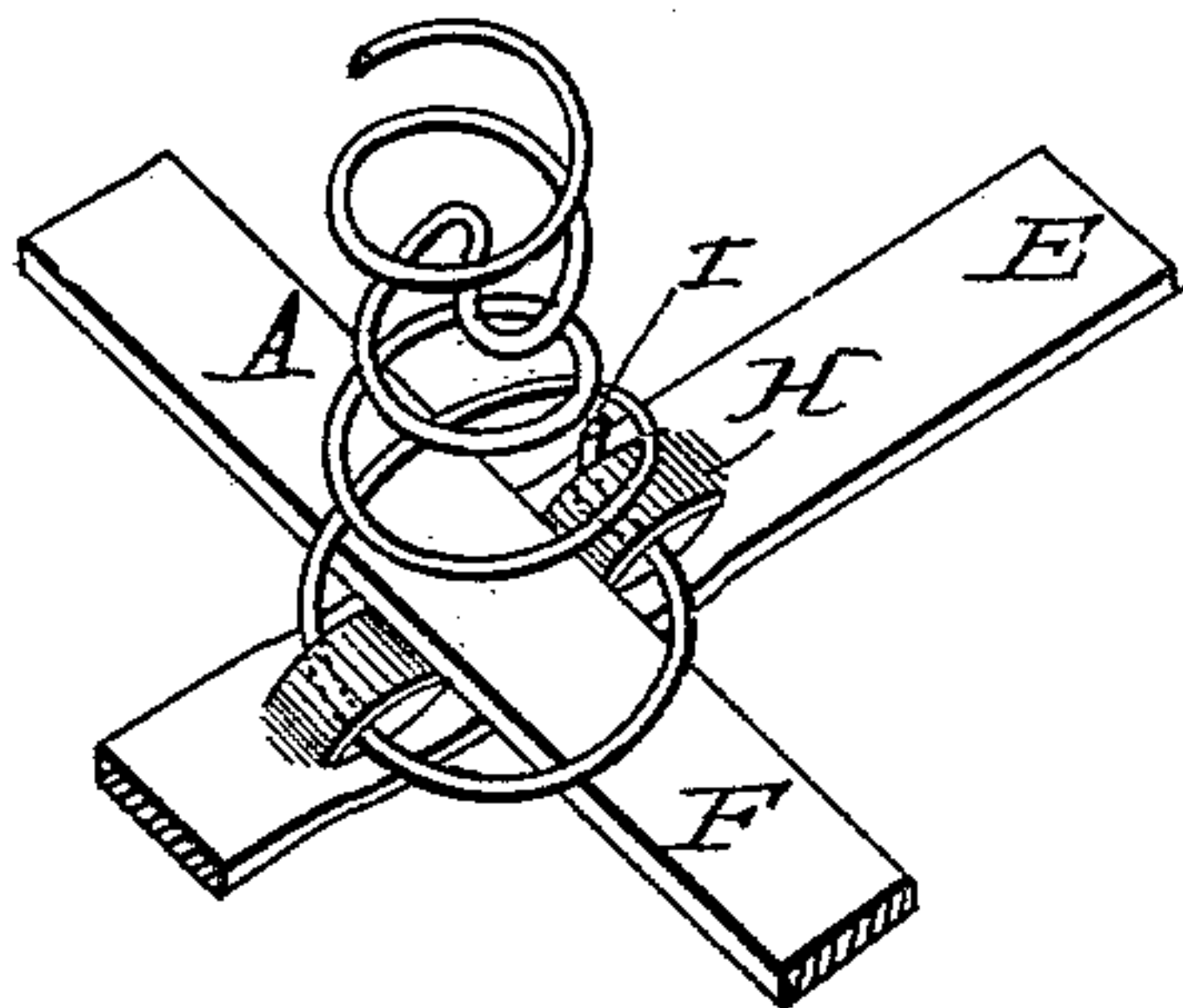
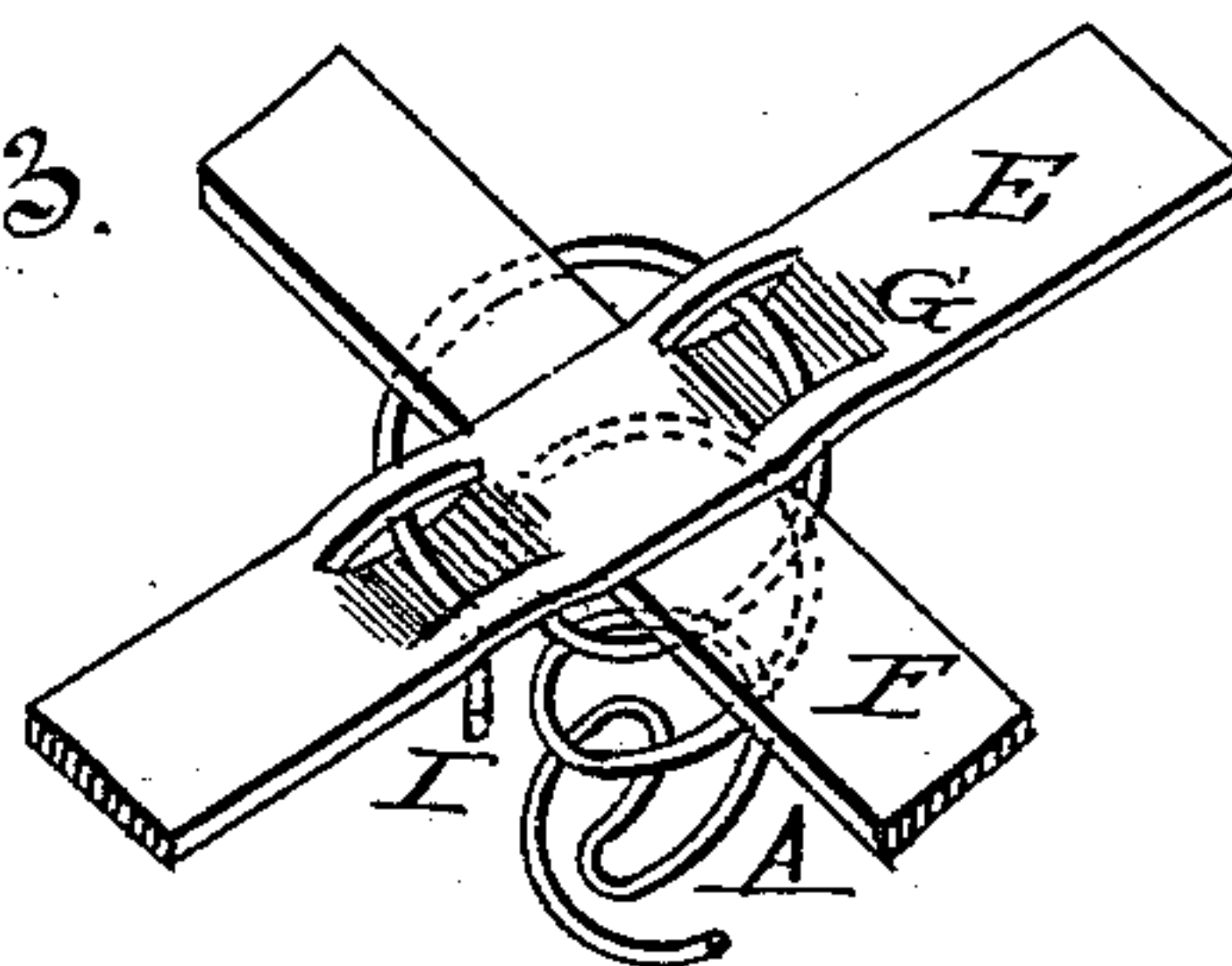


Fig. 3.



WITNESSES:

*A. G. Dieterich*  
*Witness*

*Charles L. Mills*  
INVENTOR.

By *Louis Bagges & Co.*  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

CHARLES L. MILLS, OF BROOKLYN, NEW YORK.

## BED-BOTTOM SPRING.

SPECIFICATION forming part of Letters Patent No. 277,322, dated May 8, 1883.

Application filed March 26, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES L. MILLS, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Bed - Bottom Springs; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of a bed-bottom provided with my improved spring, and Figs. 2 and 3 are detail views of the spring and its fastening.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to bed-springs; and it consists in the improved construction of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, the letters A indicate the springs, which are double helical and have one half wound in one direction, whereupon the wire is bent across the top of that half of the spring and wound in the opposite direction in the other half, as plainly shown in the drawings.

By this construction the spring is very evenly balanced, and will compress more, as the tendency of one half to lean one way will be

overcome by the other half's tending to lean in the opposite direction, and the spring will compress more compactly than any other double helical spring, the coils of the upper half fitting upon the coils of the lower half as the spring is compressed.

I prefer to mount my springs between the frames shown and designated by B in the drawings, consisting of flat straps of metal E and F, crossing each other, united at the corners by short straps D, and connected at their crossing-points by the ends I of the springs being inserted through bails H, formed by longitudinal slits G in the straps, although it follows that the springs may be used in any construction of bed-bottom and be secured in any desirable manner.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The spring A, wound one half in one direction, bent across the top of the half-spring, and wound for the other half in the opposite direction, as shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

CHARLES L. MILLS.

Witnesses:

ALFRED J. HUNT,  
WILLIAM H. GARDNER.