

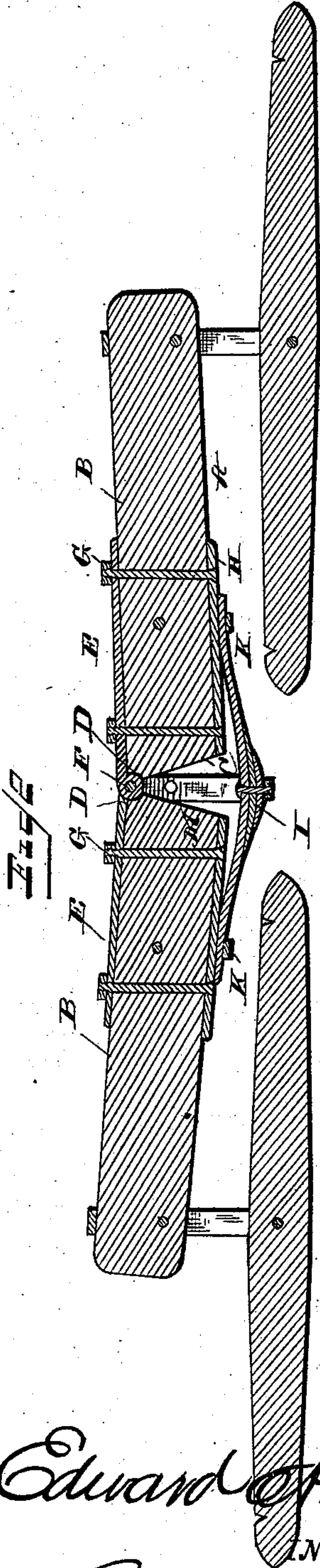
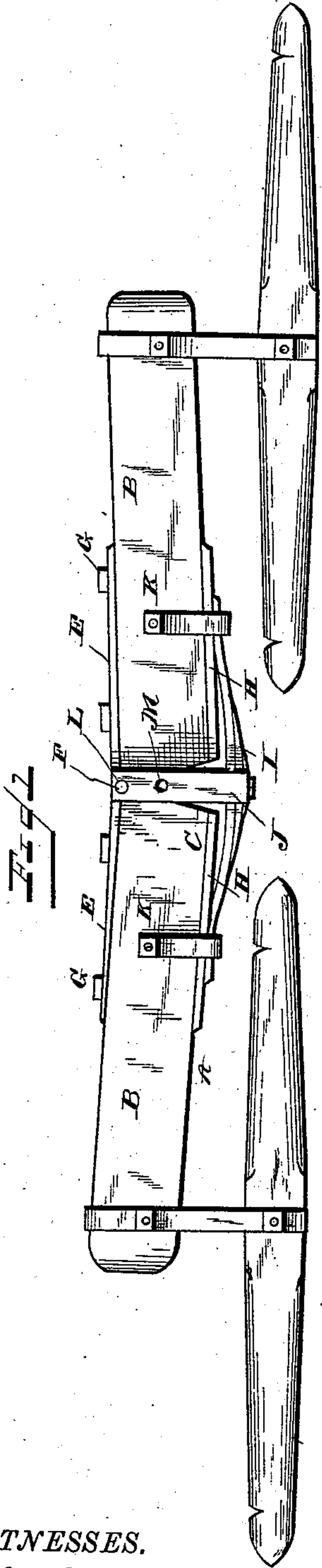
(No Model.)

E. A. THIEM.

DOUBLETREE.

No. 380,230.

Patented Mar. 27, 1888.



WITNESSES.

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# UNITED STATES PATENT OFFICE.

EDWARD A. THIEM, OF SANDUSKY, OHIO.

## DOUBLETREE.

SPECIFICATION forming part of Letters Patent No. 380,230, dated March 27, 1888.

Application filed November 21, 1887. Serial No. 255,764. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD A. THIEM, of Sandusky, in the county of Erie and State of Ohio, have invented certain new and useful  
5 Improvements in Doubletrees; 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,  
10 which form a part of this specification, and in which—

Figure 1 is a top plan view of my improved doubletree, and Fig. 2 is a horizontal sectional  
15 view of the same.

Similar letters of reference denote corresponding parts in both the figures.

My invention has relation to that class of doubletrees which are formed of two parts  
20 hinged together at their adjacent ends; and it has for its object to arrange a spring in such a manner that the free ends of the doubletree are permitted to give or yield.

To this end my invention consists in the peculiar construction and combination of parts  
25 of the same, as will be hereinafter more fully set forth.

In the accompanying drawings, the letter A denotes a doubletree, formed of two parts, B B,  
30 each of which is beveled, as shown at C, on its inner forward end, and formed with a curved recess, D, on the rear inner end opposite the beveled portion.

E E represent two suitable members of a  
35 hinge, which are secured together by that class of hinge-joint known as a "rule-joint," the parts being secured together by a pivotal bolt, F, and secured to the rear edge of the doubletree by bolts G, the ends of which project  
40 through to the forward edge of the doubletree and by means of which two bearing-plates, H, are secured firmly thereto.

I indicates a spring consisting of one or more leaves secured by means of a stirrup, J, to the  
45 forward edge of the doubletree, and bears with its ends upon the bearing-plates H, and is retained thereon against vertical displacement by bails or keepers K, secured to the doubletree.

50 The stirrup J, hereinbefore mentioned, is secured firmly to the projecting ends L of the

pivotal bolt F of the hinge, and is formed with registering apertures M, through which the pivotal bolt of a vehicle is adapted to be inserted when my doubletree is secured in operative position. 55

It will be seen that by forming the curved recesses D in the rear inner ends of the two parts forming a doubletree a snug seat is provided for the rule-joint of the hinge, and that  
60 by beveling the forward inner ends, as set forth, the ends of the whiffletree are permitted to yield a certain distance—that is, until the beveled ends meet. It will further be seen that by the employment of the bearing-plates all  
65 the wear of the ends of the spring is taken off the doubletree.

While I have described my device more particularly as applied to a doubletree, it is obvious that the construction can be readily applied to a singletree without departing from the spirit of my invention. 70

From the foregoing description, taken in connection with the accompanying drawings, the operation and advantages of my device  
75 will be so readily seen that further description of the same is not deemed necessary.

I am aware that it is not new to construct doubletrees in two parts hinged together and to arrange a spring in such a manner as to permit the free ends of the doubletree to yield or give; neither do I claim such construction broadly; but 80

What I do claim, and desire to secure by Letters Patent of the United States, is— 85

1. A spring-doubletree constructed of two parts, the rear inner ends of which are formed with curved recesses and the forward inner ends beveled, a rule-jointed hinge, and a pivotal bolt, in combination with a spring and a stirrup, the ends thereof being connected to the projecting ends of a pivotal bolt, substantially as set forth. 90

2. A spring-doubletree constructed of two parts, the rear inner ends of which are formed with curved recesses and the forward inner ends beveled, a rule-jointed hinge, and a pivotal bolt, in combination with a spring, a stirrup secured at its ends to the projecting ends of the pivotal bolt, and bails or keepers for retaining the ends of said spring against vertical displacement, substantially as set forth. 100

3. A spring-doubletree consisting of two parts, the rear inner ends of which are formed with curved recesses and the forward inner ends beveled, a rule-jointed hinge, and a pivotal bolt, in combination with a spring, a stirrup secured at its ends to the projecting ends of the said pivotal bolt, and bearing-plates, substantially as set forth.

4. A spring-doubletree consisting of two parts, the rear inner ends of which are formed with curved recesses and the forward inner ends beveled, a rule-jointed hinge, and a piv-

otal bolt, in combination with a spring, a stirrup secured at its ends to the projecting ends of the said pivotal bolt, bails or keepers, and bearing-plates, substantially as set forth. 15

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

EDWARD A. THIEM.

Witnesses:

JOHN BAUER,  
WALTER W. BOWEN.