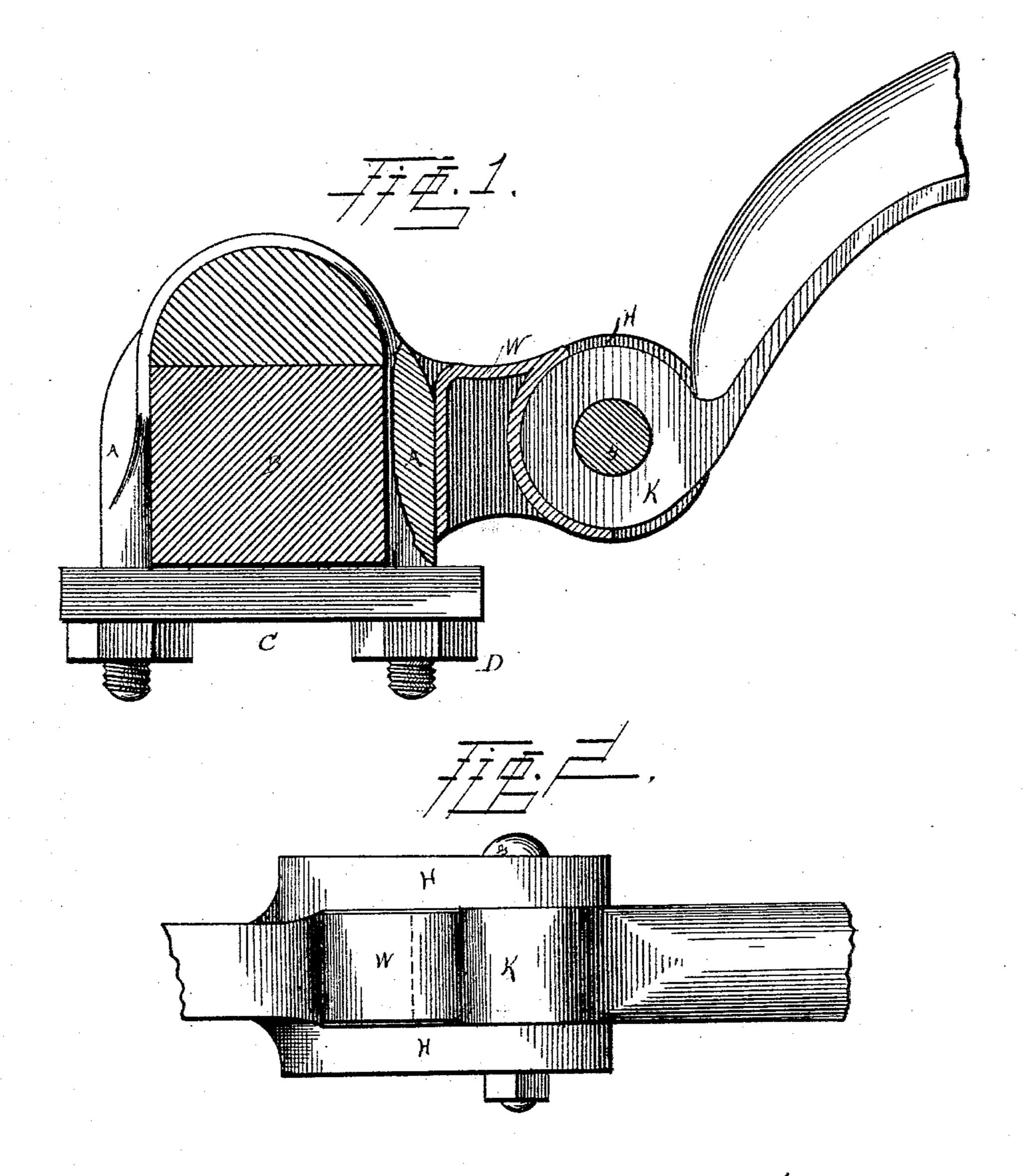
(No Model.)

## J. M. HAAS.

ANTI-RATTLER FOR THILL COUPLINGS.

No. 300,251.

Patented June 10, 1884.



WITNESSES:

Red & Dutenich. J. 9. Holomte, James Mo. Heaas

INVENTOR.

Jew J. Momas Turner

ATTORNEY

N. PETERS, Photo-Lithographer, Washington, D. C.

## United States Patent Office.

JAMES MILO HAAS, OF WABASH, INDIANA, ASSIGNOR OF TWO-THIRDS TO LOUIS H. FOUGERES AND GEORGE W. BLAIR, BOTH OF SAME PLACE.

## ANTI-RATTLER FOR THILL-COUPLINGS.

SPECIFICATION forming part of Letters Patent No. 300,251, dated June 10, 1884.

Application filed February 2, 1884. (No model.)

To all whom it may concern:

Be it known that I, James M. Haas, a citizen of the United States, residing at Wabash, in the county of Wabash and State of Indiana, have invented certain new and useful Improvements in Automatic Anti-Rattlers for Shafts or Thills; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to certain improvements in thill-couplings; and it has for its objects to prevent the rattling of the parts, as more fully hereinafter set forth. These objects I attain by the means illustrated in the accompanying drawings, in which—

Figure 1 represents a vertical sectional view of my invention; Fig. 2, a top view of the same; and Fig. 3, a perspective view of the spring employed to prevent rattling, detached.

The letter B indicates the axle of the vehicle, and A the clip, having the usual lugs or ears, H, and secured to the axle by means of the clip-bar C and nuts D. K indicates the thill-iron, and G the bolt by means of which it is secured between the lugs of the clip. These parts may all be constructed in the ordinary or any approved manner.

The letter W indicates a metallic spring of peculiar construction, which is bent so as to form a broad side, a, to bear against the in-

side of the clip, a curved upper portion, b, conforming to the curve of the upper edges of the lugs, the said portion b extending well over the upper part of the rounded portion of 40 the eye, from which point the metal is bent backward at a sharp angle and curved so as to extend around the curved portion of the eye of the thill to a point directly under the bolt, as clearly shown in the drawings. This 45 construction it will be perceived gives a strong spring-bearing to the thill-iron and holds it against any possibility of rattling without intermediate rubber or other elastic springs.

I am aware that rubber springs incased 50 with metal have been used between the thill and clip in thill-couplings, and this I do not claim.

I am aware that a flat bow-spring has heretofore been used by inserting between the eye 55 of the shaft and the axle-clip, and I do not claim said bow-spring, broadly; but

What I do claim is—

The combination, with the clip and the thill-iron, of the spring having a broad bear- 60 ing setting against the inside of the clip, a curved top extending well over the eye of the thill-iron, and extending backward at a sharp angle and curved to form a bearing for the thill, substantially as specified.

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

JAMES MILO HAAS.

Witnesses:

CHAS. F. MOORE, L. H. FOUGERES.