(No Model.)

T. H. NEFF.

BEARING BLOCK FOR VEHICLE SPRINGS.

No. 345,392. Patented July 13, 1886.

Fig. 1.

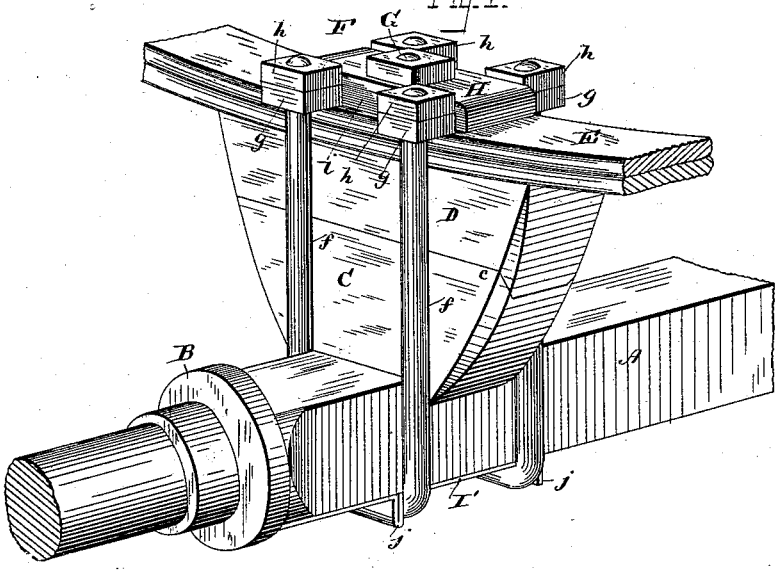


Fig. 2.

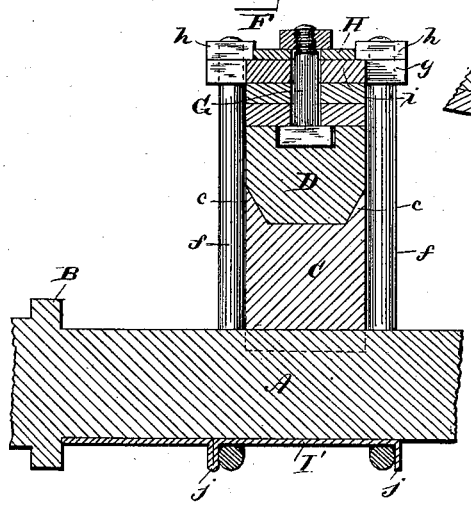
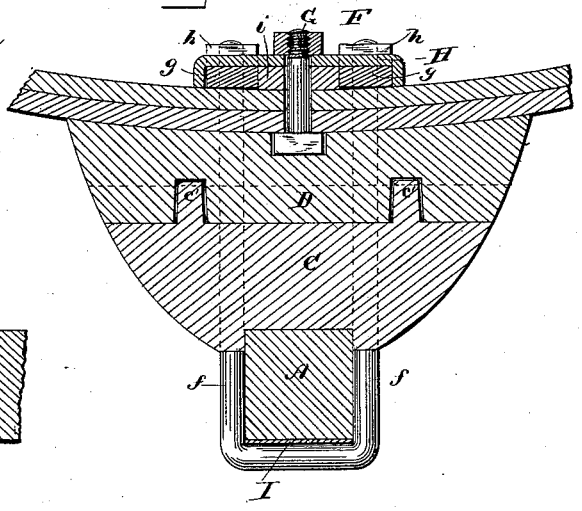


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

THOMAS H. NEFF, OF YORK, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO SAMUEL A. SHROFF, OF SAME PLACE.

BEARING-BLOCK FOR VEHICLE-SPRINGS.

SPECIFICATION forming part of Letters Patent No. 345,392, dated July 13, 1886.

Application filed February 12, 1886. Serial No. 191,718. (No model.)

To all whom it may concern:

Be it known that I, THOMAS H. NEFF, of York, in the county of York and State of Pennsylvania, have invented certain new and useful Improvements in Bearing-Blocks for Wagon and Carriage Springs; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the figures and letters of reference marked thereon.

Heretofore the blocks fastened to the axles of vehicles, to which the springs are attached, have been constructed either wholly of wood or of iron. If the former is employed alone, it is very apt to wear and break at the point where it is attached to the axle, and if the latter, the spring cannot be securely fastened to it, so as to be prevented from rattling by the two clips at the top; and the object of my invention, therefore, is to provide a device whereby all these and other defects present in previous constructions are remedied; and to this end it consists in a certain improved construction, which I will now proceed to describe.

In the drawings, Figure 1 is a perspective view of a portion of the axle and one of the springs of a vehicle with my invention applied thereto. Fig. 2 is a longitudinal, and Fig. 3 a cross-sectional, view of the same.

Similar letters of reference in the several figures indicate the same parts.

A represents the axle of a vehicle constructed with the usual collar, B, near its end, and a short distance from this collar is secured a metal block, C, recessed slightly on its under side, so as to fit the axle, and provided on its upper side with the recess or groove formed by the two upwardly-projecting flanges *c c*, as shown. Within this recess are one or more pins or projections, *c' c'*, which serve to hold the wooden block D, placed over them, and provided with perforations or depressions for the accommodation of the pins or equivalent devices which prevent it from longitudinal movement, while any lateral movement is effectually prevented by the flanges *c c*. This wooden or equivalent block of material D is slightly concave on its upper surface, so as to conform to the shape of the springs, as shown, and is cut away on its lower sides, so as to accommodate the flanges on the metal block and permit a smooth joint therewith.

E represents the spring, formed of two or more leaves, as ordinarily, placed upon the upper surface of the block D, and secured thereto by means of the clips F, consisting of the loops *f*, passing under the axle and extending up on either side of the blocks, and the plates *g*, extending across the top of the springs, having perforations, through which the ends of the loops project, and adapted to be securely held in position by means of the nuts *h* on the screw-threaded ends of the loops. A small plate or block of metal, *i*, provided with a perforation near its center, is placed between these plates, to prevent them from coming toward each other. When these nuts are screwed down tightly, the blocks D and C and the spring will be securely clamped together and to the axle, and the spring, having a bearing upon a wooden or equivalent surface, will not be at all liable to slip, and the metal block C will not wear appreciably on the axle. In order, however, to guard against any slipping of the springs upon the wooden block, and also to form a nut-lock for preventing the accidental displacement of the nuts *h*, I provide a bolt, G, having a square head inserted into a correspondingly-shaped recess in the block D, so as to be prevented from turning, and projecting upward through the spring and plate *i*, which are provided with a perforation for its passage. Upon the top of the plates *g*, and extending at right angles to them, is a plate, H, through which the bolt G passes and projects a short distance sufficient to accommodate a nut mounted thereon. This plate is just wide enough to pass between the nuts *h* when they are screwed down with their sides parallel, and when they are so positioned and the plate is placed in position they will be effectually prevented from working off and becoming lost. The ends of this plate H are bent down over the pieces *g*, so as to prevent their being separated or working apart, as shown.

On the under side of the axle, and between the clips *f* and the axle, is a plate, I', formed of thin metal, and provided with the ribs or corrugations *j j*, one at its end inside the inner clip and the other on the outside of the outer

clip and with its end extending farther outward and abutting against the collar B on the axle. This plate is for the purpose of preventing the clips and blocks from working toward the end of the axle, as the tendency will be to crowd them in that direction.

When all the parts are in position, they will be securely held and prevented from slipping on the axle or on each other, the ends of the plate H preventing the plates forming part of the clips from moving apart, while the plate *i* between them prevents them from moving toward each other.

It will be seen that this improved device can be manufactured cheaply, and also that it will accomplish the desired result.

The wooden blocks, when worn out, can be replaced by new ones very readily by removing the springs and plates and inserting them in the recess in the metal piece D.

I claim as my invention—

1. The combination of the axle and spring, the bearing-block consisting of the metal portion supported on the axle, and the wooden portion mounted upon it, on which the spring rests, and the clips embracing the bearing-block, spring, and axle, and securing them firmly together, substantially as described.

2. The combination of the axle and spring and bearing-block, consisting of the metal portion supported on the axle, having the flanges or projections on its upper side, and the wooden portion mounted upon it, on which the spring rests, and the clips embracing the spring, bearing-block, and axle, and securing them firmly together, substantially as described.

3. The combination, with the axle and spring, of the bearing-block, the clips for securing the spring to the block, consisting of the loop bolts, plates, and nuts, the plate H, for locking the nuts on the loop-bolts, and the bolt for securing said plate in position, substantially as described.

4. The combination, with the axle and spring, of the bearing-block, the clips for securing the spring to the block, consisting of the loop bolts, plates, and nuts, the plate H, for locking the nuts on the loop-bolts, and the bolt having its head in a recess in the bearing-block and projecting through the plate H, and the nut on the bolt for securing the plate in position, substantially as described.

5. The combination, with the axle and spring, of the block for supporting the latter, the clips for securing them to the axle, and the plate having the ribs in contact with the clips and its end abutting against a stop on the axle, whereby the clips are prevented from moving, substantially as described.

6. The combination, with the axle and spring, of the bearing-block, the clips for securing the spring to the block, consisting of the loop bolts, plates, and nuts, the plate having its ends turned over the edges of the loop-plates, and a device for securing said plate in position, substantially as described.

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