

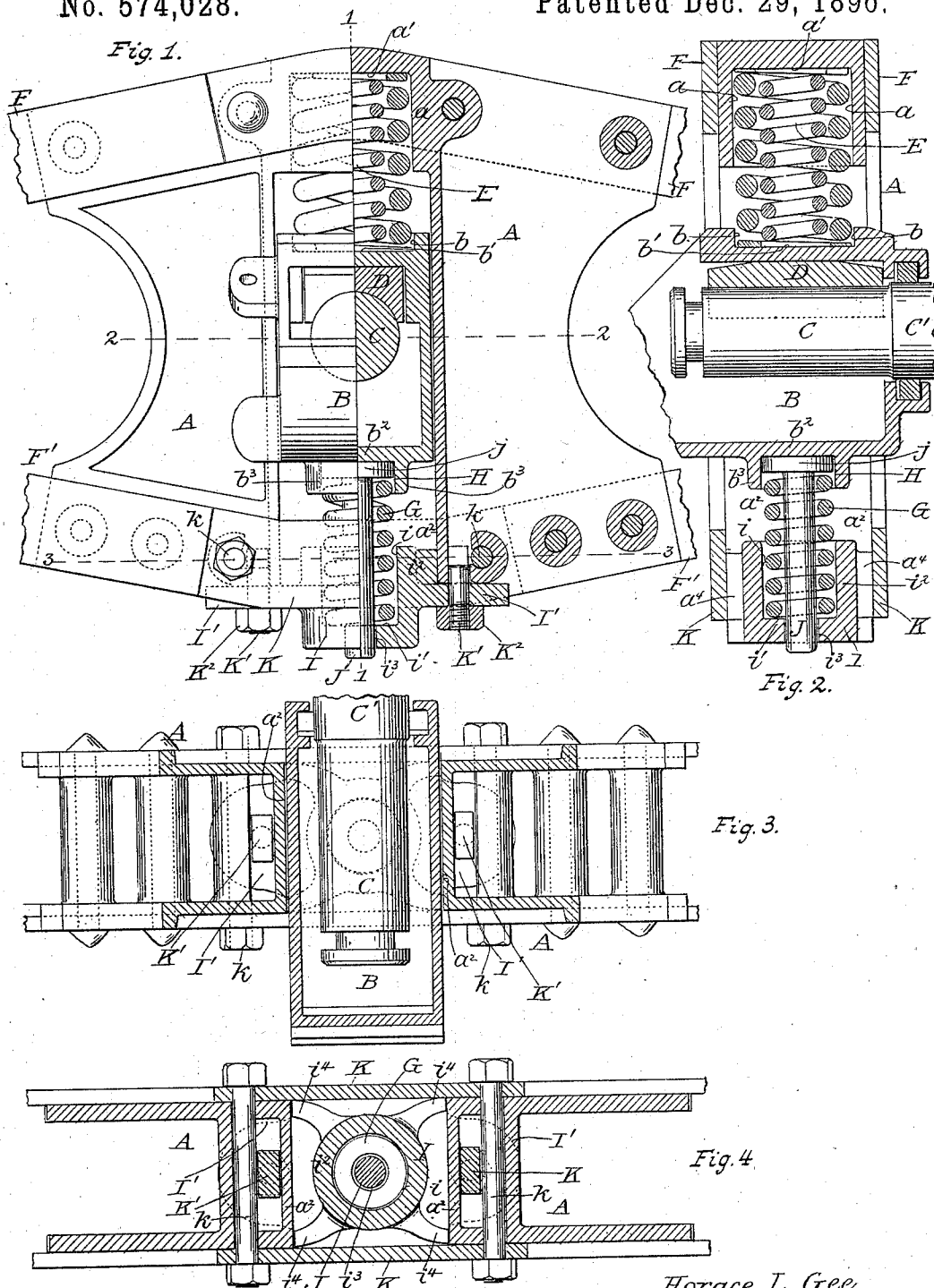
(No Model.)

H. L. GEE.

MEANS FOR SUPPORTING HOUSINGS OF CAR AXLE JOURNALS IN
PEDESTALS.

No. 574,028.

Patented Dec. 29, 1896.



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MEANS FOR SUPPORTING HOUSINGS OF CAR-AXLE JOURNALS IN PEDESTALS.

SPECIFICATION forming part of Letters Patent No. 574,028, dated December 29, 1896.

Application filed July 24, 1895. Serial No. 558,965. (No model.)

To all whom it may concern:

Be it known that I, HORACE L. GEE, a citizen of the United States, residing at Kingston, in the county of Ulster and State of New York, have invented certain new and useful Improvements in Means for Supporting Housings of Car-Axle Journals in Their Pedestals, of which the following is a specification.

My invention relates to an improved means for elastically supporting the housing of a journal of a car-axle in a pedestal of a car-truck; and it consists in the combination of elements and parts hereinafter described, and set forth in the claim.

The primary objects of my invention are to provide devices and elements and combinations of the same whereby a housing of a car-axle journal may be elastically supported within its pedestal by two opposing or reacting springs of greater length when contracted and in service than heretofore could be employed with pedestals of vertical extension heretofore used and by which the major-half portions of the two opposing or reacting springs most distant from the housing and supported within the pedestal may be reinforced against lateral movement resulting heretofore from the endwise thrusts of the housing by the action of the axle when in running service and also against an excessive sidewise pressure of the housing against the inner sides of the limbs of the pedestal and thereby reducing the friction between the housing and pedestal.

Other objects and advantages of the invention will appear in the following description and the novel features thereof will be pointed out in the claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is an elevation, part in section, illustrating my invention. Fig. 2 is a vertical sectional view taken at line 1 in Fig. 1. Fig. 3 is a horizontal sectional view taken at line 2 in Fig. 1, and Fig. 4 is a sectional view taken at line 3 in Fig. 1.

Like letters refer to like parts throughout the several views.

In the drawings, A is a pedestal of a car-

truck, which pedestal may be made with any preferred form of construction.

B is the housing contained within the jaw-opening of the pedestal.

C is a journal of a car-wheel axle C', the wheels of which are not shown.

D is the brass or box between said axle-journal and housing.

E is the load-supporting spring interposed between the pedestal and the upper side of the housing B and seated in recessed seats provided in the lower side of the upper end portion of the pedestal and in the upper side of said housing.

F is the upper frame member (section thereof shown) of a truck-frame, which member is shown by full lines in Fig. 2 and by full and dotted lines in Fig. 1, and is secured to the upper end flange or flanges of the pedestal by means of bolts or rivets.

F' F' are the lower frame members of the truck-frame, secured to the lower ends of the limbs of the pedestal by means of suitable bolts or rivets.

G is a tension-spring, made preferably of tempered coiled steel and having an outside diameter of body about three inches or more or less, as may be found to be advantageous for giving this spring such stiffness to its body as may be required to render it strong to resist lateral strains which may be imposed on it when in active service in a running-truck.

All of the above-mentioned parts are so well known as not to require any particular description, except as to some differences which will be hereinafter specifically pointed out.

H is a recessed seat preferably integral with the bottom b^2 of the housing B, which seat is bounded by a downwardly-projected wall b^3 , which is capable of receiving the upper end portion of the tension-spring C to hold with the outer sides of the same, whether with or without the head of a central guide-bolt between, as may be preferred.

I is the tension-spring support, having integral with it lugs I', by means of which, together with bolts K' and their nuts K², this spring-support may be rigidly secured to the lower ends of the limbs of the pedestal A. The drawings illustrate the new elements

which are embodied and are integral with this tension-spring support, and they show it to be provided with a centrally-located spring-holding cup i , having its bottom i' below the plane of the lower sides of the lugs $I' I'$ and forming a seat for the lower end of the said spring, while the side walls i^2 serve as a reinforcing element for sustaining the spring in a vertical position and from deflection when in active service. It is also shown to be provided with a central perforation i^3 , calculated to receive the lower end portion of a central guide-bolt J , which may pass through the bore of the body of the tension-spring for stiffening the same when this invention is to be employed in trucks of cars intended to be run at high speed or on roads having heavy grades or sharp curves. This spring-support is also shown to be provided with abutments i^4 , calculated to have bearing against the side walls $a^2 a^2$ of the jaws of the pedestal and the tie-pieces $K K$, secured to the lower ends of the members or horns of the pedestal for preventing said spring-support shifting in any direction.

J is a central guide-bolt provided with a broad head j , which latter is seated in the recessed seat H , formed with the housing B , while its body passes through the bore of the tension-spring G and its lower end portion through the central perforation i^3 of the spring-support I . In some cases this guide-bolt may be omitted, if preferred, yet in most cases I prefer to employ it for supplementing the reinforcing element of the side walls i^2 of the spring-receiving cup i of said spring-support.

$K K$ are tie-pieces secured by their ends by means of bolts $k k$ to the lower ends of the horns of the pedestal for securely holding the said horns of the pedestal from spreading when the truck of which it forms a part is loaded. This tension-spring G and its supporting-piece I may be modified in their form, as may be found to be advantageous for em-

bodying this spring in trucks of cars for elastically supporting the housing within the pedestals of the truck, without departing from the spirit of this invention.

When the truck (not shown) embodying tension-springs G , as above described, is in active service, these springs react against the load-bearing springs E and impose on each such a degree of tension as to cause them to carry the load, whether light or heavy, without jolting or sudden shocks or vibrations, as heretofore attending trucks of old construction, while at the same time the endwise thrusts of the car-axles of the truck will be opposed by the elastic elements derived from the use of these tension-springs, as above described.

Having described my invention, what I claim is—

The combination with a housing, of an axle-journal, contained within a pedestal of a car-truck, and a load-supporting spring interposed between the pedestal and said housing and having its end portions seated in recessed seats provided respectively with the pedestal and housing, of a recessed seat integral with the lower side of said housing, a spring-support secured to the lower ends of the horns of the pedestal, and provided with a spring-receiving cup-form seat, and a central perforation in the bottom of said seat, of a tension-spring held under tension and contracted between said housing and spring-support, and the central guide-bolt having its head end within the lower side seat of the housing, and its body portion working in the central bore of the tension-spring with its lower end working through the central perforation in the seat of the spring-support, substantially as and for the purposes set forth.

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