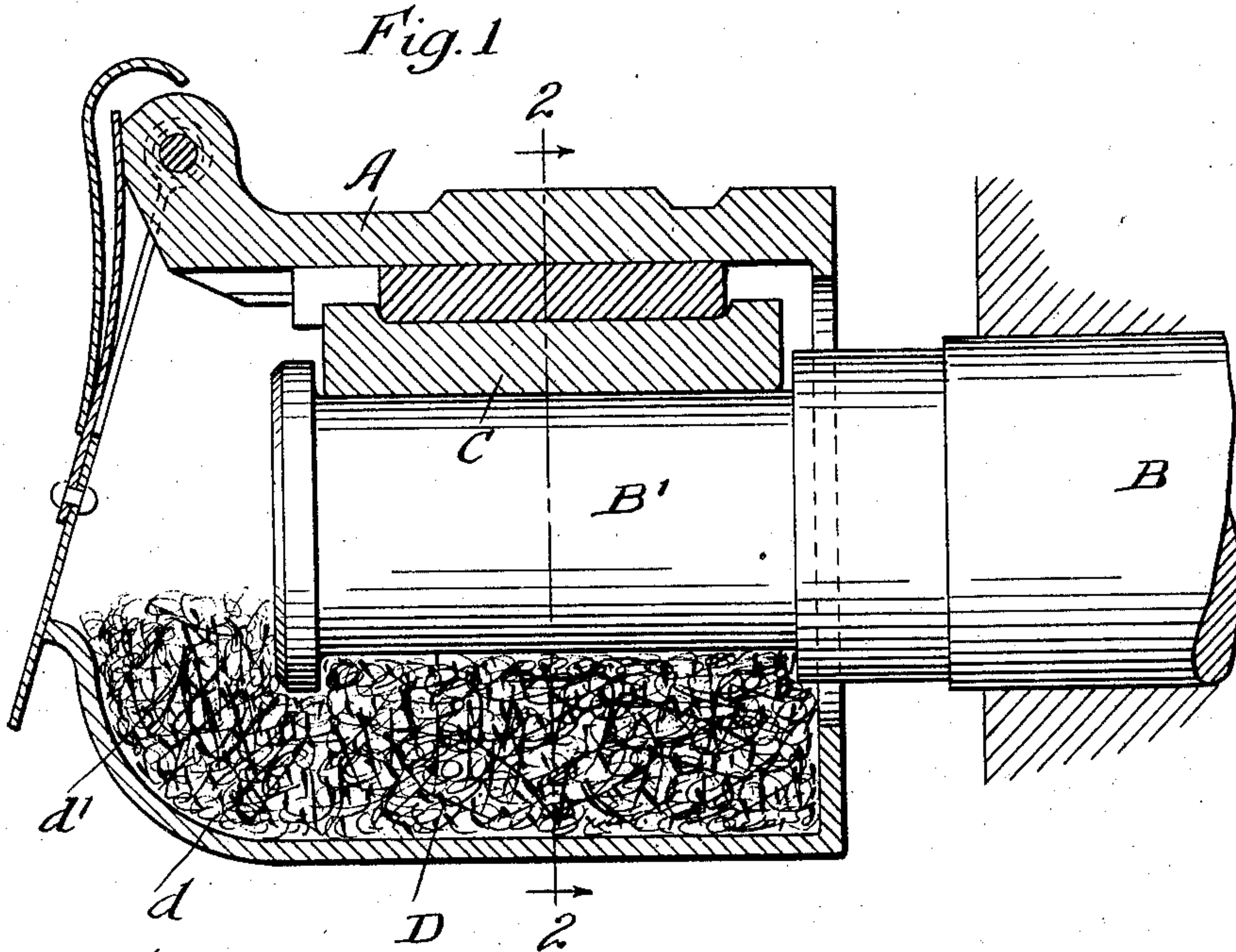


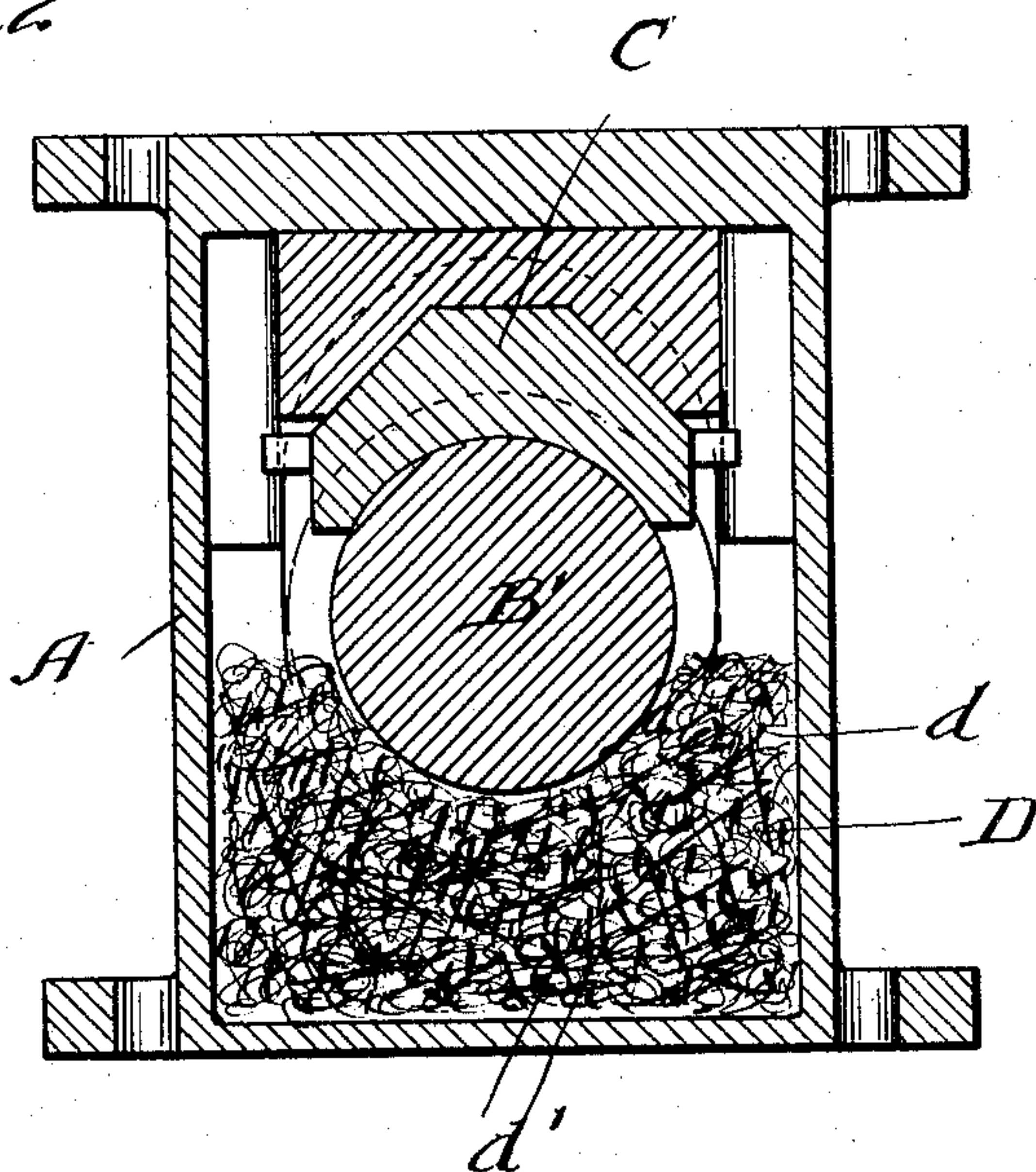
No. 859,738.

PATENTED JULY 9, 1907.

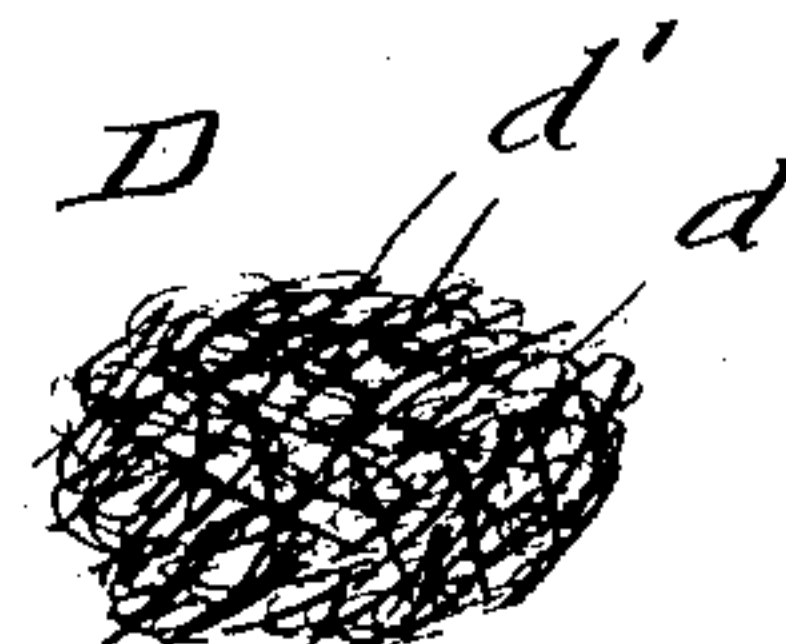
J. BURTON.  
CAR AXLE JOURNAL BOX PACKING.  
APPLICATION FILED MAR. 25, 1907.



*Fig. 2*



*Fig. 3*



Witnesses:

Wm. Geiger  
A. W. Munday

Inventor:  
John Burton

By Munday, Evans, Adcock & Clarke  
Attorneys



# UNITED STATES PATENT OFFICE.

JOHN BURTON, OF CHICAGO, ILLINOIS.

## CAR-AXLE JOURNAL-BOX PACKING.

No. 859,738.

Specification of Letters Patent.

Patented July 9, 1907.

Application filed March 25, 1907. Serial No. 364,327.

To all whom it may concern:

Be it known that I, JOHN BURTON, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Car-Axle Journal-Box Packing, of which the following is a specification.

My invention relates to car axle journal box packing.

Heretofore car axles have been packed with cotton waste, the lower portion of the journal being packed full of the cotton waste and the same, by its absorbent and capillary action serving to hold or retain the oil or lubricant in the journal box, to feed or supply it to the journal portion of the axle and to the brass or bearing, and to more or less exclude dust, sand, dirt and cinders from contact with the journal or wearing surfaces. This cotton waste is expensive, ordinarily about six cents per pound, and requires to be frequently renewed in the journal boxes, and unless very carefully packed into the journal box so that it will bear snugly against the axle, is liable to become defective in operation in keeping the journal box properly lubricated and dirt and sand excluded owing to lack of sufficient resiliency of its fibers, thus resulting in a hot box and consequent delay of trains.

The object of my invention is to provide a simple, cheap, efficient and durable car axle journal box packing, having the required absorbent and capillary action to feed or supply the oil or lubricant to the journal or bearing surfaces, to hold or keep the oil or lubricant in the journal box, to effectually exclude sand, dirt, dust, cinders &c., from the journal or wearing surfaces of the axle and brass, and the fibers of which will, at the same time, be sufficiently resilient to keep the packing in efficient working condition and proper coöperative relation to the journal box and to the journal or wearing portion of the axle and the brass.

I have discovered, and herein my invention consists, that by combining with the journal box, the car axle and the brass or bearing, a packing of macerated flax fiber (produced by running the stems of the flax plant through breakers and separating therefrom the major or greater portion of the woody fiber), the difficulties heretofore experienced with the ordinary cotton waste packing is entirely overcome, and that the macerated flax fiber packing has the necessary absorbent and capillary action to properly feed or supply the oil or lubricant to the wearing surfaces of the journal, and that it will effectually exclude dust, dirt, sand, cinders, etc., from wearing surfaces of the journal, and that it possesses

a degree of resiliency which enables or causes it to maintain itself in effective coöperative relation with the journal portion of the axle which it partially surrounds, both in feeding or supplying the oil or lubricant and in excluding all forms of grit, such as dirt, dust, sand, cinders, &c., and that it also possesses much more enduring wearing qualities than the cotton waste heretofore employed.

In the accompanying drawing, forming a part of this specification, Figure 1 is a side elevation, partly in central vertical section, of a car journal box and packing therefor embodying my invention; Fig. 2 is a vertical section on line 2—2 of Fig. 1, and Fig. 3 is a detail view showing a small portion of my absorbent, capillary-acting, grit excluding, resilient macerated flax fiber car axle journal box packing, the same showing an admixture with the finer fibers of flax of coarser fibers of quasi semi flax and wood or stem part of the flax plant.

In the drawing A represents the journal box, B the car axle, B' the journal portion thereof, C the brass and D my absorbent, capillary-acting, grit excluding, resilient, macerated flax fiber packing. This car axle journal box packing D of macerated flax fiber, comprises finer portions *d* of flax fiber and somewhat coarser portions *d'* of mixed or quasi flax and wood fiber from portions of the stem of the flax plant adjacent to the true flax fiber portion thereof. These coarser mixed fibers *d'* while not interfering with the absorbent and capillary action of the other fibers *d*, or the grit excluding qualities of the packing as a whole, serve to impart to the packing a greater resilience than it would otherwise possess, and thus to add greatly to its efficiency in operation, both in respect to wear and durability, and by way of keeping the packing snugly in position against the journal portion B' of the car axle.

I claim:

1. The combination with the journal portion of the car axle, of the brass or bearing, the journal box, and an absorbent capillary-acting, grit excluding, resilient, macerated flax fiber packing having intermixed with the true flax fibers coarser fibers of semi or quasi flax and wood, substantially as specified.

2. A packing for car axle journal boxes, consisting in absorbent, capillary-acting, grit excluding, resilient, macerated flax fiber having finer fibers of flax and coarser fibers of a semi-woody nature, substantially as specified.

JOHN BURTON.

Witnesses:

WILLIAM A. GEIGER,  
H. M. MUNDAY.