

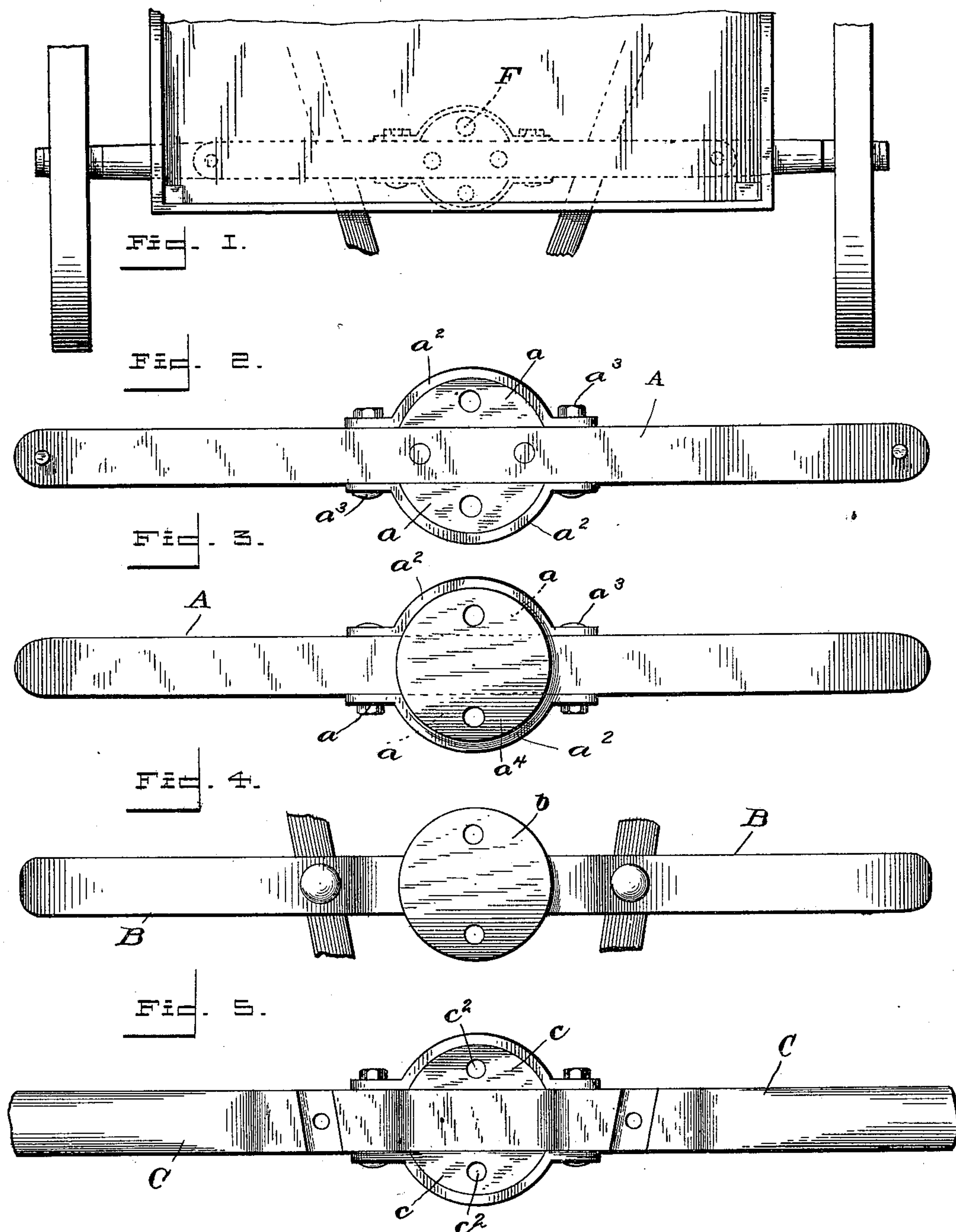
No. 641,771.

Patented Jan. 23, 1900.

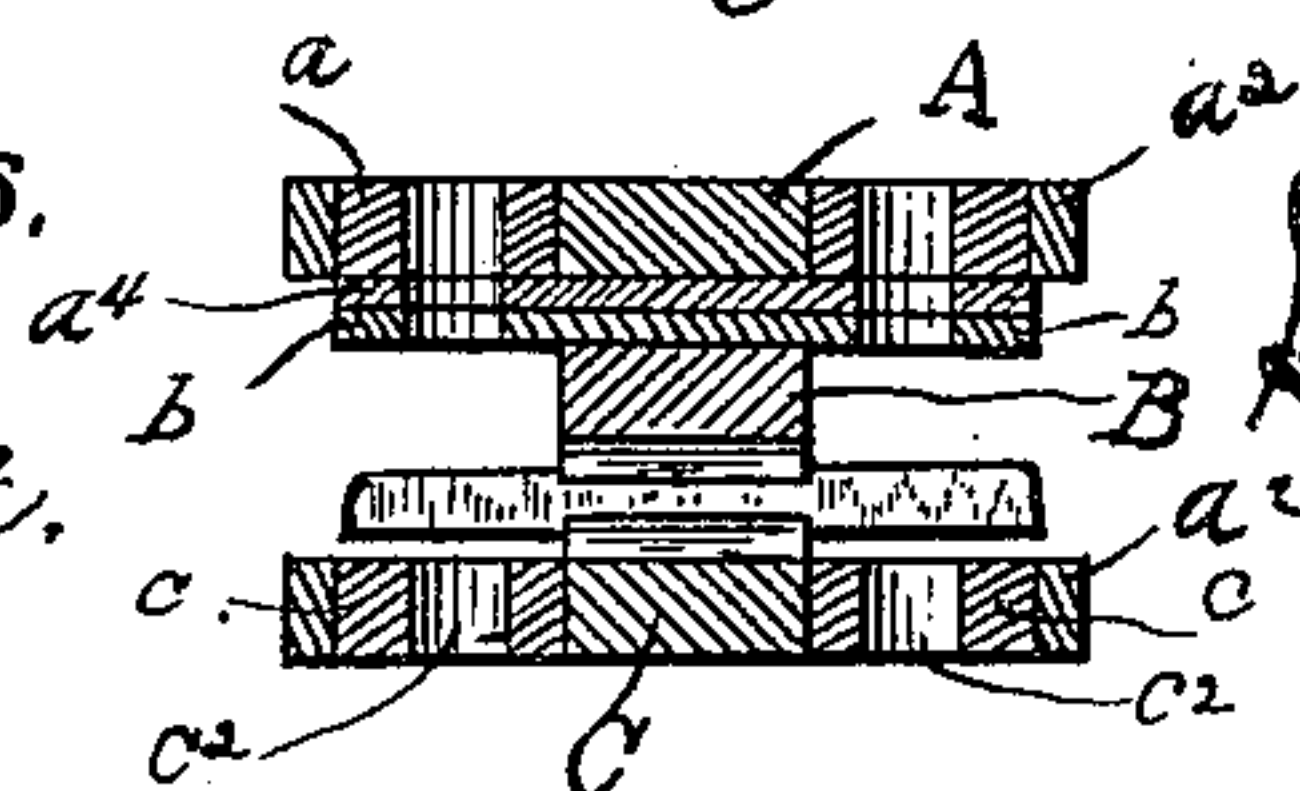
S. M. HARRIS.  
WAGON RUNNING GEAR.

(Application filed June 8, 1897.)

(No Model.)



Witnesses:  
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# UNITED STATES PATENT OFFICE.

STEPHEN M. HARRIS, OF CHENEY, WASHINGTON.

## WAGON RUNNING-GEAR.

SPECIFICATION forming part of Letters Patent No. 641,771, dated January 23, 1900.

Application filed June 8, 1897. Serial No. 639,835. (No model.)

*To all whom it may concern:*

Be it known that I, STEPHEN M. HARRIS, a citizen of the United States, residing at Cheney, in the county of Spokane and State of Washington, have invented certain new and useful Improvements in Wagon Running-Gear; 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 of reference marked thereon, which form a part of this specification.

This invention relates to running-gear of wagons.

The object of the invention is to provide a running-gear by which the disadvantages of constructions of this kind as at present made will be obviated.

In the ordinary construction of wagons the bolster, the axle, and the parts arranged between the axle and the bolster are usually provided with openings centrally through them, through which passes the king-bolt, by which independent turning of the bolster and axle is permitted.

My invention consists in the novel construction and arrangement of parts substantially as set forth, whereby the disadvantages of the described arrangement of the parts is avoided, the life of the wagon increased, and the solidity of the parts insured.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of a wagon constructed in accordance with my invention. Fig. 2 is a plan view of the bolster separated from the running-gear. Fig. 3 is an inverted plan view of the bolster. Fig. 4 is a plan view of the cross-piece of the hounds. Fig. 5 is a plan view of the axle of the wagon, and Fig. 6 is a transverse sectional view.

In the drawings, A represents the bolster, which in general form is the same as that ordinarily used. In constructing a wagon in accordance with my invention the bolster is provided both on its front and rear sides with separate blocks  $a$ , which are retained in place on the bolster by suitable bands  $a^2$ , which

bands are held in place by bolts  $a^3$  passing through the bolster and retaining the bands in place. The bands are readily detachable from the bolster in order to permit of their removal in order to substitute new blocks for those which may become worn in use. Each block is provided with an opening passing entirely through it from top to bottom and which is designed to receive the king-bolt F. The lower face of the bolster is provided with a plate  $a^4$ , which rests upon and turns on a corresponding plate  $b$ , attached to the cross-piece B of the hounds. Both the plates are provided with openings through which the king-bolt passes. The axle C has attached to it in any suitable manner, preferably in the same way as the bolster, blocks  $c$ , having openings  $c^2$  therein, the openings in these blocks being arranged immediately below the openings in the blocks  $a'$ .

The construction described is adapted for use in heavy two-horse wagons where a tongue is employed; but a similar construction may be used in single-horse vehicles by providing the axle with a plate corresponding to that on the cross-piece of the hounds.

In the use of the gear, as described, the king-bolt is passed through either the forward or rear series of openings in the blocks described and retained in place until the holes become worn sufficiently to leave objectionable play between the parts. After such wearing the king-bolt is shifted to the other corresponding set of openings and retained there until the parts through which it passes also become worn. When this takes place, the blocks attached to the bolster and axle, respectively, are removed and new blocks substituted. The advantage of this construction will be at once apparent to one skilled in the art, as by this use a minimum amount of play between the parts of a wagon may be preserved, and in case of wearing new blocks may be substituted for those first used at a very inconsiderable expense.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a wagon running-gear the combination with the bolster and axle of two blocks at-

tached respectively to the forward and rear  
sides of the bolster and axle, the blocks being  
independent of each other and each provided  
with openings for the reception of a king-bolt,  
5 and a strap for each block surrounding the  
same and detachably connected to the axle  
and bolster, whereby a king-bolt may be  
placed in either block and either block may

be removed independently of the other, sub-  
stantially as described. 10

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

STEPHEN M. HARRIS.

Witnesses:

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