

No. 724,900.

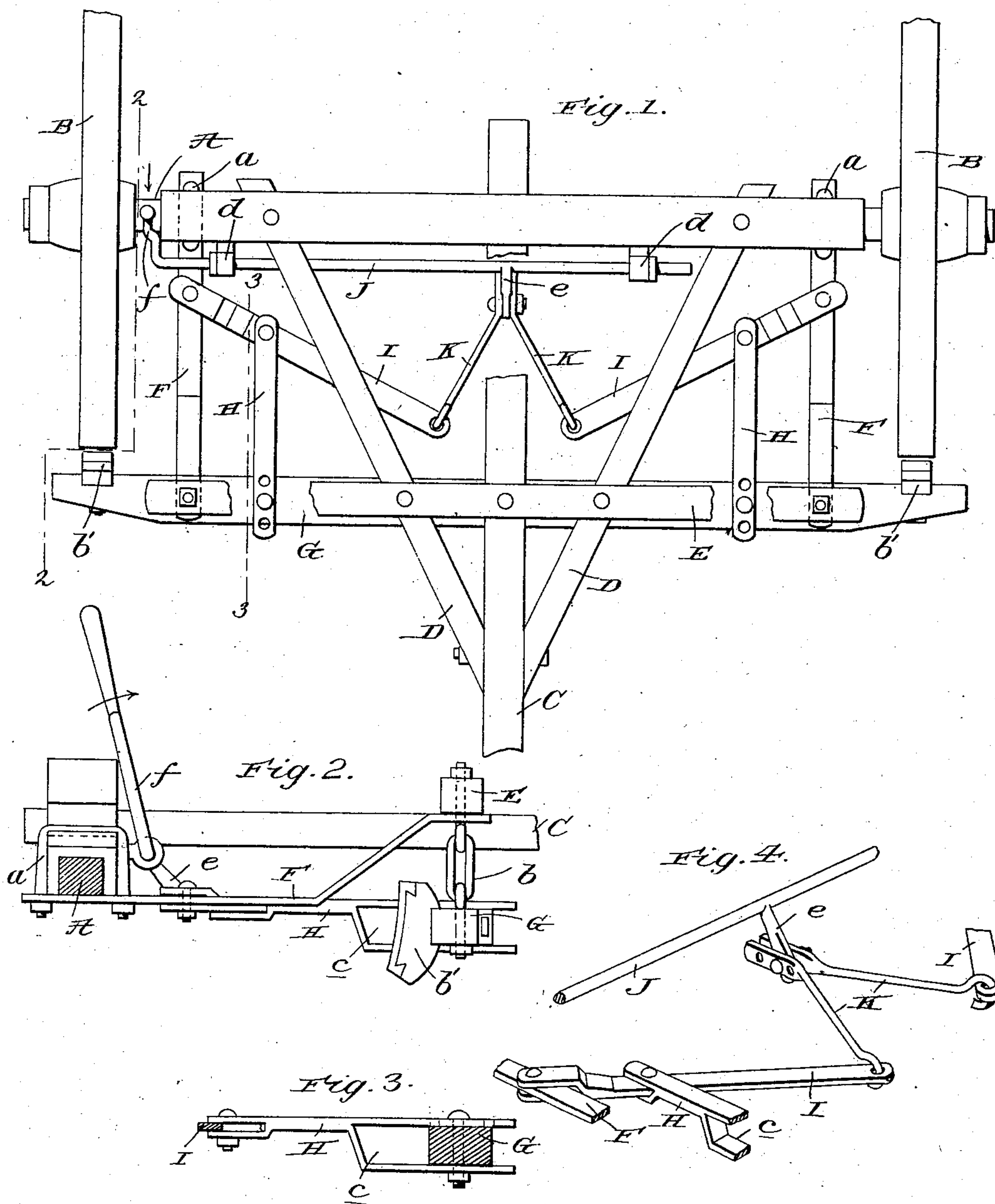
PATENTED APR. 7, 1903.

W. H. LOPER & M. HALLEY.

## WAGON BRAKE.

APPLICATION FILED NOV. 5, 1902.

NO MODEL.



Witnesses  
C. H. Rader  
M. C. Healy

Inventors  
Wm H. Loper &  
Major Hally  
Attorney  
Jas. J. Sherry

# UNITED STATES PATENT OFFICE.

WILLIAM H. LOPER AND MAGOR HALLEY, OF COEUR D'ALENE, IDAHO.

## WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 724,900, dated April 7, 1903.

Application filed November 5, 1902. Serial No. 130,126. (No model.)

*To all whom it may concern:*

Be it known that we, WILLIAM H. LOPER and MAGOR HALLEY, citizens of the United States, residing at Coeur d'Alene, in the county of Kootenai and State of Idaho, have invented new and useful Improvements in Wagon-Brakes, of which the following is a specification.

Our invention relates to improvements in wagon-brakes, and its novelty, utility, and practical advantages will be fully understood from the following description and claim when taken in connection with the accompanying drawings, in which—

Figure 1 is a plan view of a portion of a wagon running-gear equipped with our improved brake. Fig. 2 is a section taken in the plane indicated by the broken line 2 2 of Fig. 1. Fig. 3 is a section taken in the plane indicated by the broken line 3 3 of Fig. 1, and Fig. 4 is a detail broken perspective view illustrating the manner in which the rock-shaft and the levers of our improvements are connected.

Similar letters of reference designate corresponding parts in all of the several views of the drawings, referring to which—

A is an axle of a wagon running-gear provided with wheels B, and C is a bar or pole connected by hounds D to the axle. These parts may be and preferably are of the ordinary well-known construction.

E is a cross-bar, preferably of wood, arranged on and fixedly connected to the tongue and hounds and extending laterally outward therefrom to points adjacent to the rims of the wheels B; F F, bars or straps of metal connected at their rear ends, preferably by shackles *a*, to the axle A, and at their forward ends to the bar E at points adjacent to the ends thereof; G, a brake-beam disposed below and loosely connected by links *b* or other suitable means to the bar E and having shoes *b'* to engage the rims of wheels B; H H, bracket-arms, preferably of metal, bifurcated at their forward ends, as indicated by *c*, to receive the beam G, to which they are fixedly connected and extending at right angles rearwardly from said beam; I I, horizontally-disposed levers pivotally connected at their outer ends to the bars or straps F

and at intermediate points in their length to the bracket-arms H; J, a transverse rock-shaft journaled in suitable bearings *d* on axle A and having a depending crank *e* at an intermediate point of its length and a handle *f* at one end, and K K links interposed between and connecting the crank *e* of shaft J and the inner arms of the levers I.

In virtue of the construction described it will be observed that when the handle *f* and the shaft J are rocked forwardly or in the direction indicated by arrow the brake-beam G will be drawn rearwardly and its shoes *b'* carried against the rims of the wheels B, also that through the medium of the rock-shaft J and the levers E the operator is enabled to exert great leverage on the brake-beam, and hence powerfully apply the shoes thereof against the rims of the wheels, which is materially advantageous, especially when the wagon is descending a sharp grade.

When the handle *f* is released, the brake-beam will gravitate to the position (best shown in Fig. 2) below the bar E, and by so doing return all of the other parts to the positions shown in Figs. 1 and 2. The brake-beam will also serve to normally hold the parts in the position last stated and against casual movement.

It will be further observed that notwithstanding its advantages our improved brake is very simple and inexpensive and is adapted to be quickly and easily applied to the running-gear of an ordinary wagon without entailing change in the construction of the same.

Having described our invention, what we claim, and desire to secure by Letters Patent, is—

In a vehicle, the combination of an axle, wheels on the ends thereof, a longitudinal central bar fixed to the axle, a transverse bar fixed at its middle to the longitudinal central bar, longitudinal bars F arranged adjacent to the wheels, and connected to the axle and the bar E, the rock-shaft J journaled in bearings on the axle, and having the crank *e*, disposed in the longitudinal center of the vehicle, and the handle *f* at its outer end, a transverse, swinging brake-beam disposed below and connected by links to the bar E, levers



fulcrumed at one end on the bars F and extending inwardly therefrom, whereby their inner ends rest adjacent to the crank e, links connecting said levers and crank, and arms  
5 connecting the levers and the beam, all as and for the purpose set forth.

In testimony whereof we have hereunto set

our hands in presence of two subscribing witnesses.

WILLIAM H. LOPER.  
MAGOR HALLEY.

Witnesses:

ALBERT V. CHAMBERLIN,  
PAUL A. STIMKE.