

(No Model.)

2 Sheets—Sheet 1.

H. S. NELSON.

RUNNING GEAR FOR WAGONS.

No. 305,468.

Patented Sept. 23, 1884.

Fig. 1.

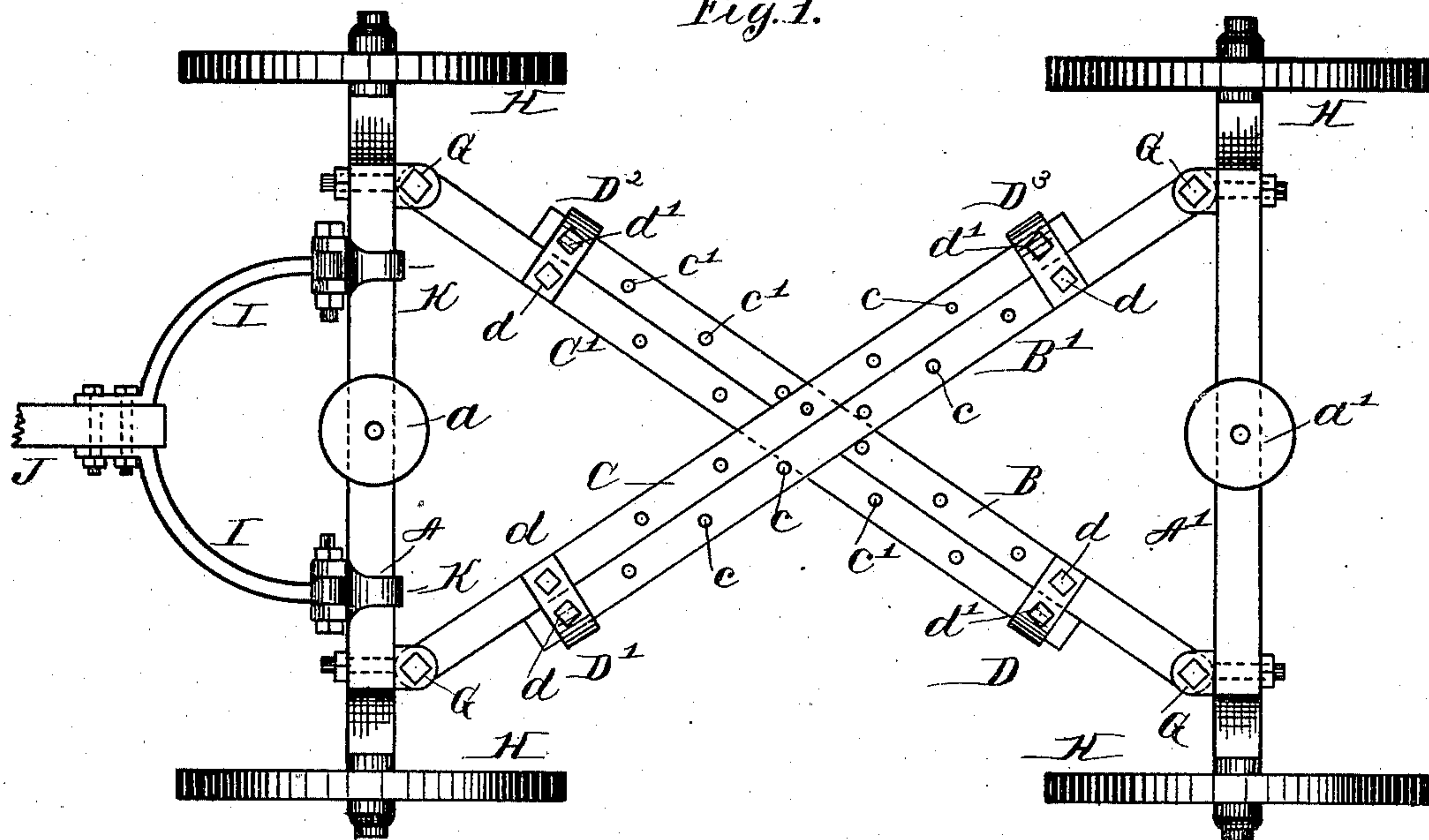
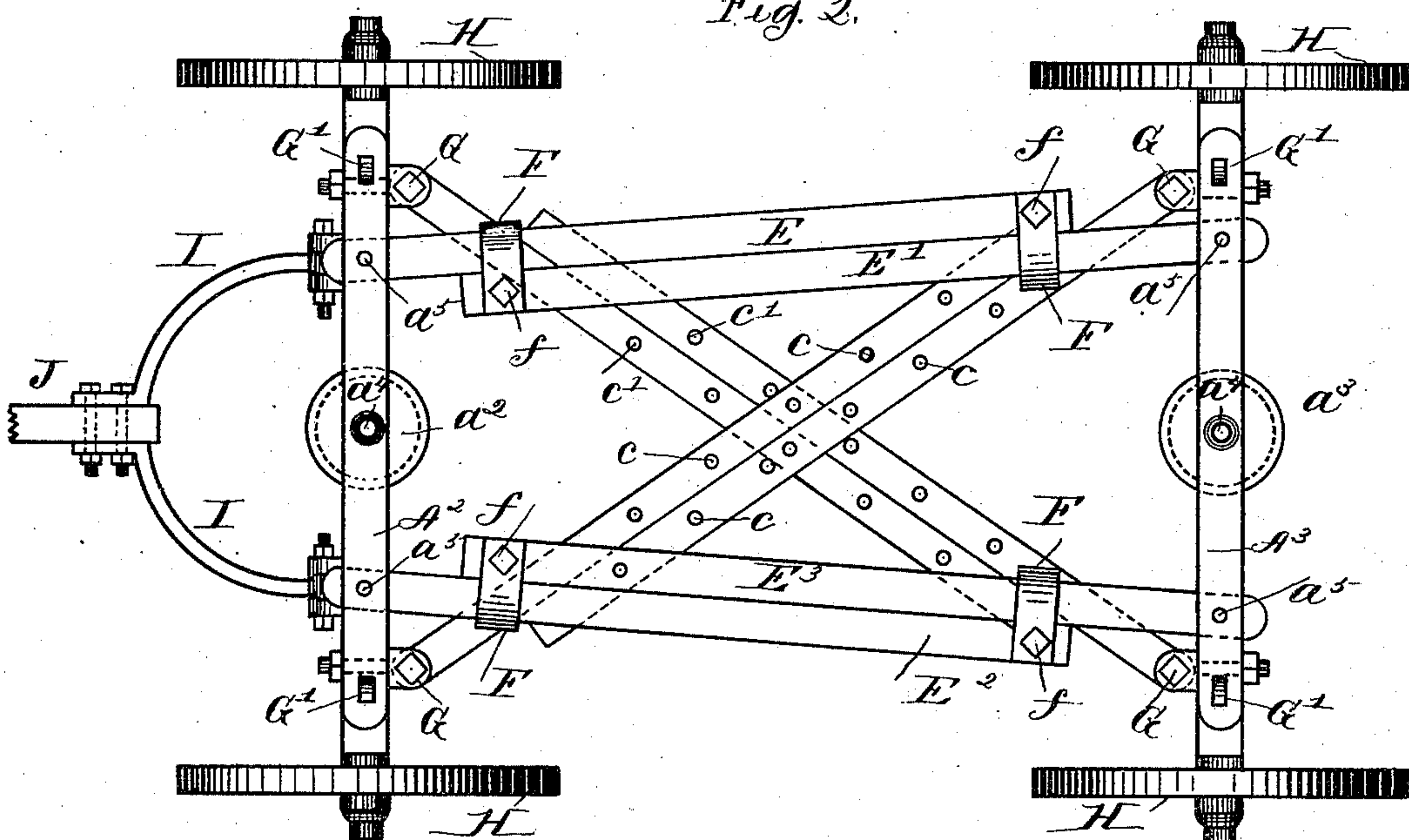


Fig. 2.



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(No Model.)

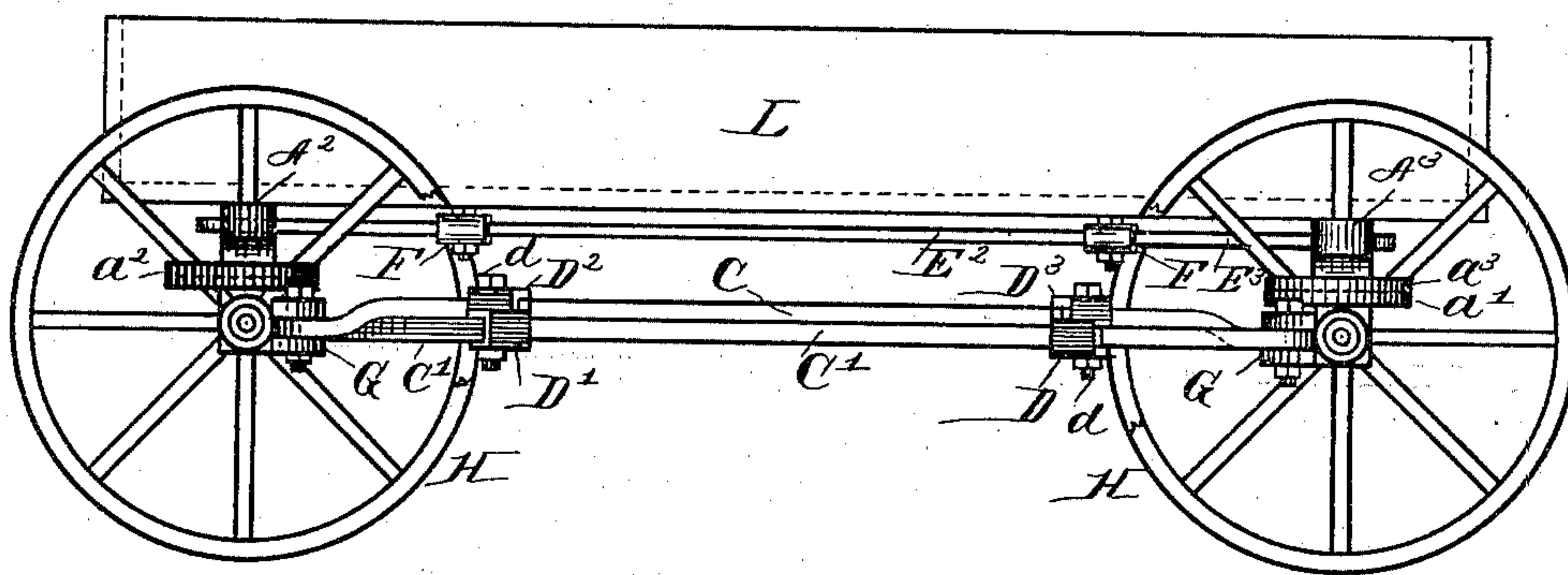
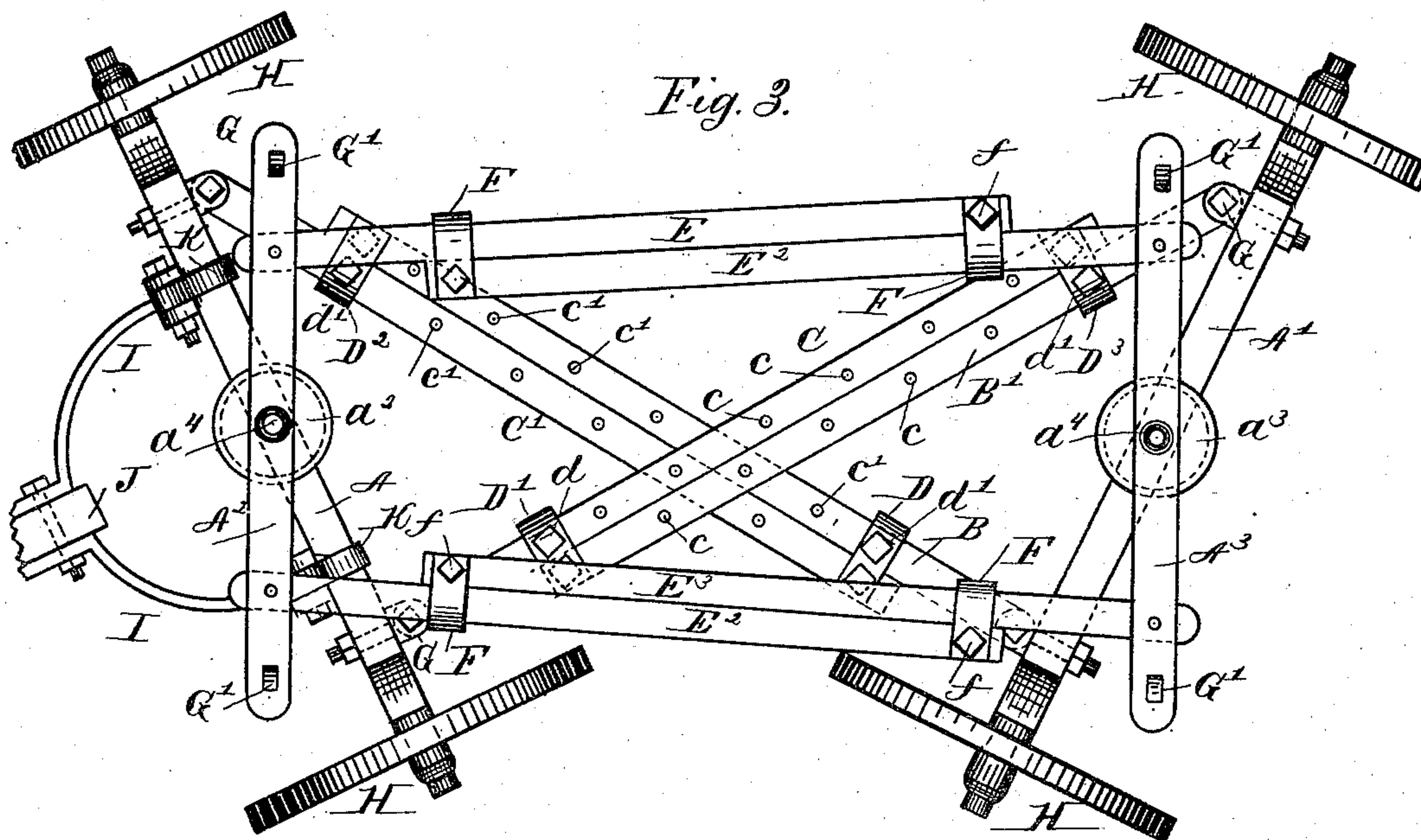
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UNITED STATES PATENT OFFICE.

HANSON STEFFEN NELSON, OF CLEAR LAKE, IOWA.

RUNNING-GEAR FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 305,468, dated September 23, 1884.

Application filed May 28, 1884. (No model.)

To all whom it may concern:

Be it known that I, HANSON S. NELSON, of Clear Lake, in the county of Cerro Gordo and State of Iowa, have invented certain new and useful Improvements in Wagons; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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 letters of reference marked thereon, which form a part of this specification.

The object of this improvement is an adjustable double-acting coupling for the axles and bolsters of a wagon, which can be conveniently extended for adapting the wagon to different kinds of loads, and to making easier, shorter, quicker turns than is practicable with the wagons in general use. These results are attained by the mechanism illustrated in the drawings herewith filed as part hereof, in which the same letters of reference denote the same parts in the different views.

Figure 1 is a top view showing the adjustable axle-coupling. Fig. 2 is a top view showing both the axle and bolster coupling. Fig. 3 is a top view showing the axles and coupling in position for turning. Fig. 4 represents a side elevation of my improvement with a wagon-bed attached.

A A' are the axles, provided with metal disks or swivel-plates $a a'$, having central perforations for the reception of the connecting bolts or pins a^4 , and secured to the axles by screws or other suitable means.

B B' and C C' are the couplings, made, preferably, of metal, diagonally and flexibly connected to the front and rear axles in a way to clear each other by means of eyes in their ends, and slotted eyes G, transversely bolted to the axles, as shown.

D D' D² D³ are metal loops or stirrups, secured by means of bolts $d d'$ to and around the couplings B B' C C', either in the order shown in Fig. 1 or as shown in Fig. 3, for a purpose hereinafter set forth.

E E' E² E³ are the bolster-couplings, made, preferably, of metal, and secured to the bolsters by any suitable means.

F F are sliding metal loops or stirrups, rigidly secured to the ends only of the couplings E E' E² E³.

G G' represent the usual upright standards, affixed to the bolsters for securing the position

of the wagon-bed L; and a^3 represents metal disks or swivel-plates, suitably secured to the bolsters A² A³, and may be made slightly larger than the disks $a a'$, secured to the axles A A', and provided with flanged rims for closing the jointures of and keeping sand and dirt from getting between and causing undue wear of the disks.

J represents an ordinary wagon-tongue, connected by curved metal extensions I and clips K or other suitable means to the axle A.

When the loops D D' D² D³ are arranged as shown in Fig. 3, the couplings B B' and C C' may be extended by undoing the bolts d' , when the loops will slide on the parts B C, and the wheels may be moved as far apart as desired, and the parts secured in position by means of their perforations $c c'$, and the bolts d' or both bolts $d d'$, may be removed and the positions of the loops changed, as desired, for making the coupling longer or shorter, as occasion may require. When the wheels are moved apart, the bolster-couplings E E' E² E³ will slide through the loops F F a corresponding distance and hold the bolsters in proper relative position with each other and the axles. The diagonal axle-couplings will facilitate the turns of the wagon by moving the rear axle in an opposite direction to that taken by the front axle, as fully shown in Fig. 3. When necessary to use the bed L, the running-gear may be adjusted as shown in Fig. 4.

Having explained the construction and operation of my improvement, what I claim as new, and desire to secure by Letters Patent, is—

In the running-gear of a wagon, the combination of axles A A', provided with slotted eyebolts G, connected thereto, as shown, the adjustable diagonal couplings B B' C C', secured to each other edgewise by laterally-projecting loops D D' D² D³ and bolts $d d'$, and the bolsters A² A³, provided with couplings E E' E² E³, secured to each other edgewise by means of and arranged to slide in loops F, as described, for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

HANS. STEFFEN NELSON.

Witnesses:

H. A. GROVES,
P. KNUTSON.