

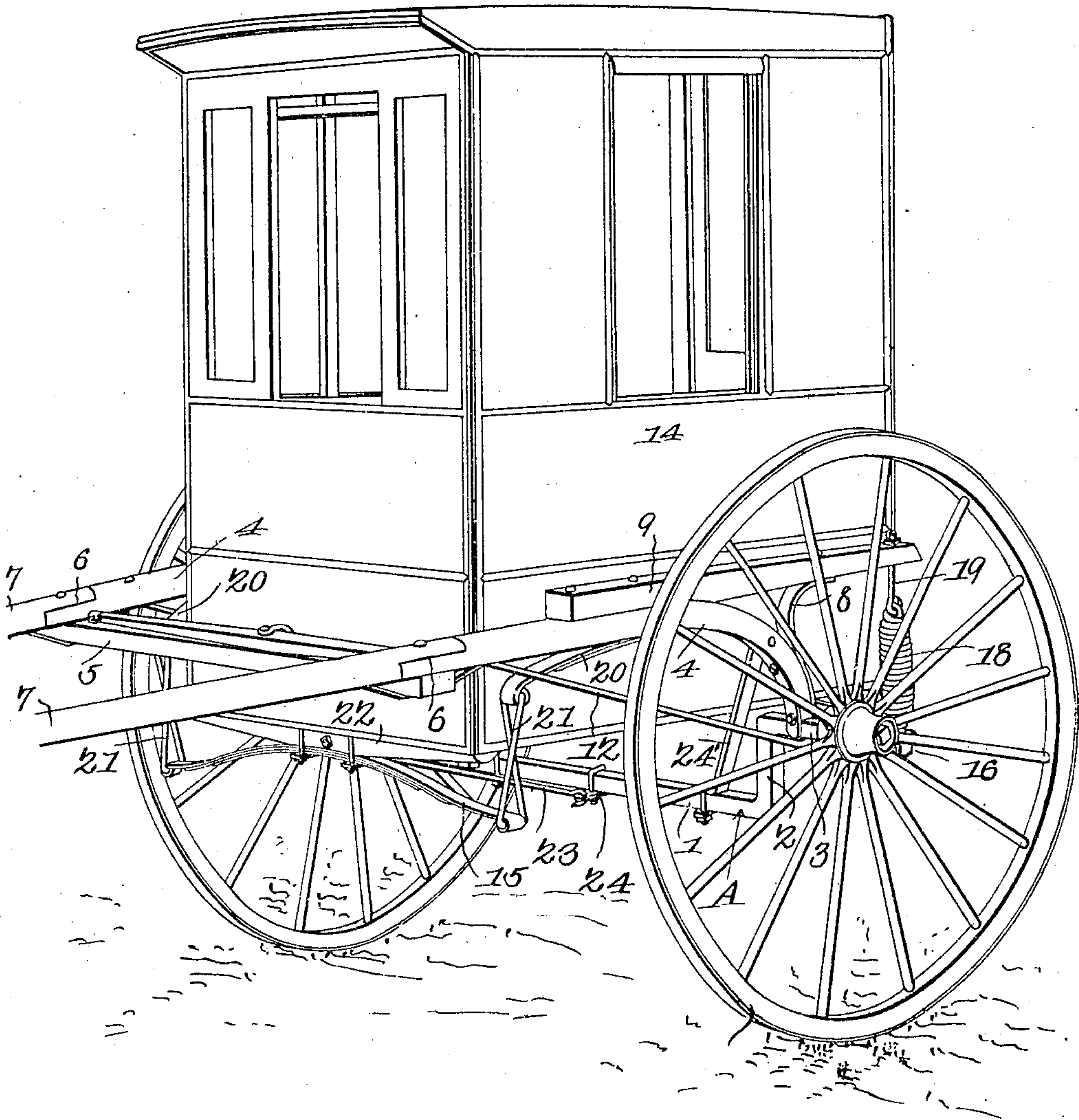
No. 849,660.

PATENTED APR. 9, 1907.

W. O. COVEY.
MAIL CARRIER'S CART.
APPLICATION FILED JAN. 23, 1906.

3 SHEETS—SHEET 1.

Fig. 1.



Witnesses

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William O. Covey,

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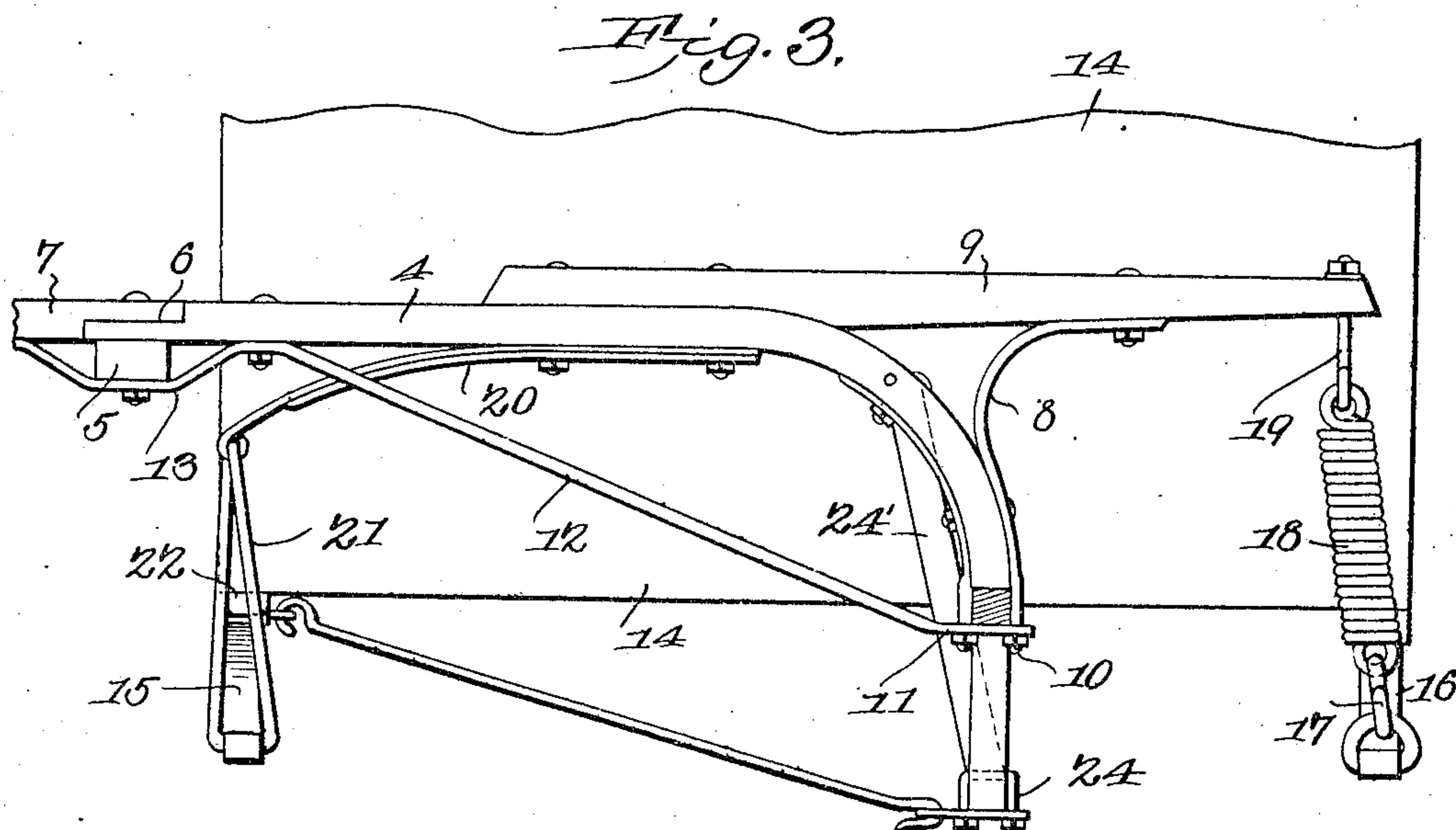
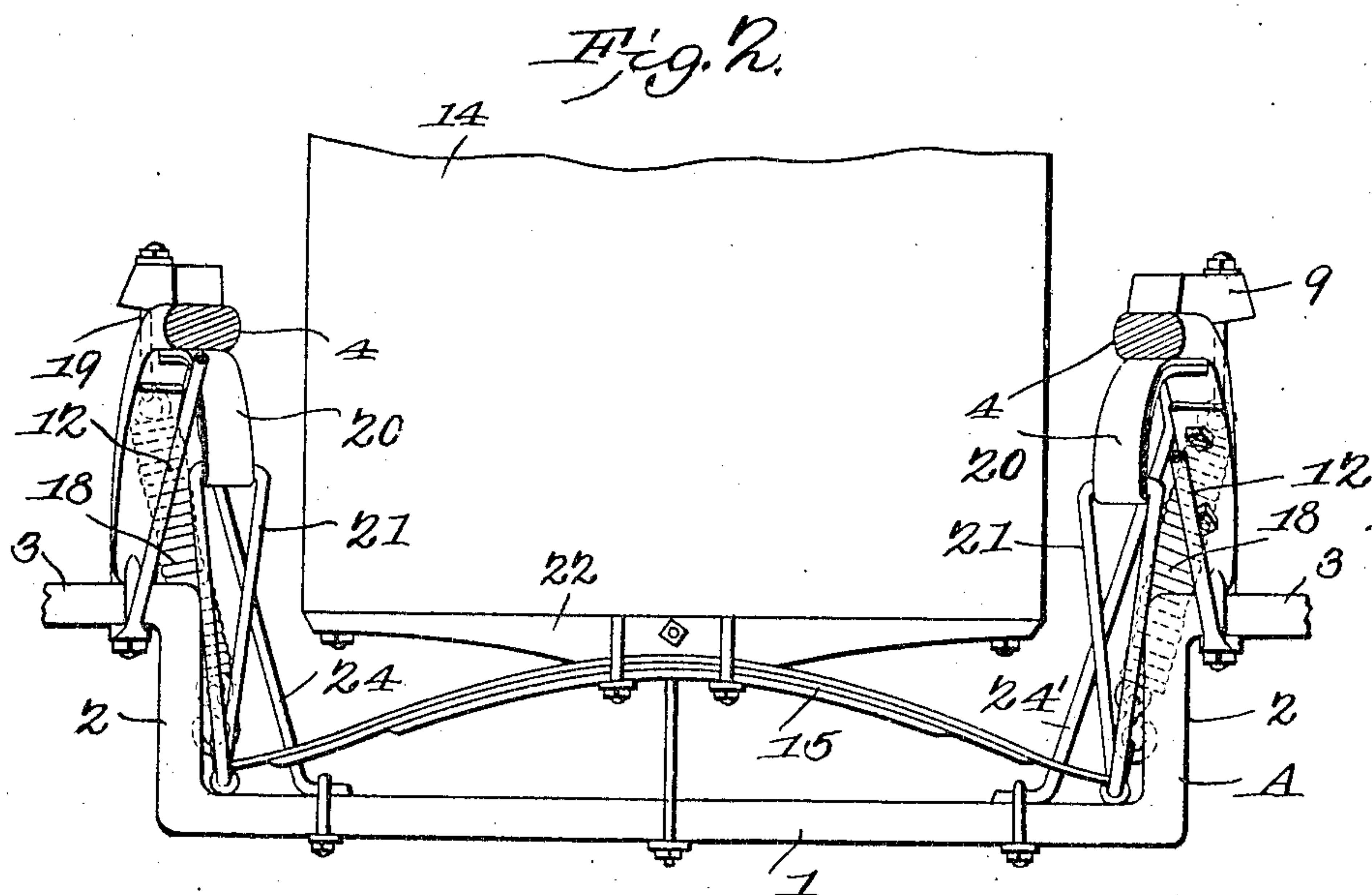
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3 SHEETS--SHEET 2.



Witnesses

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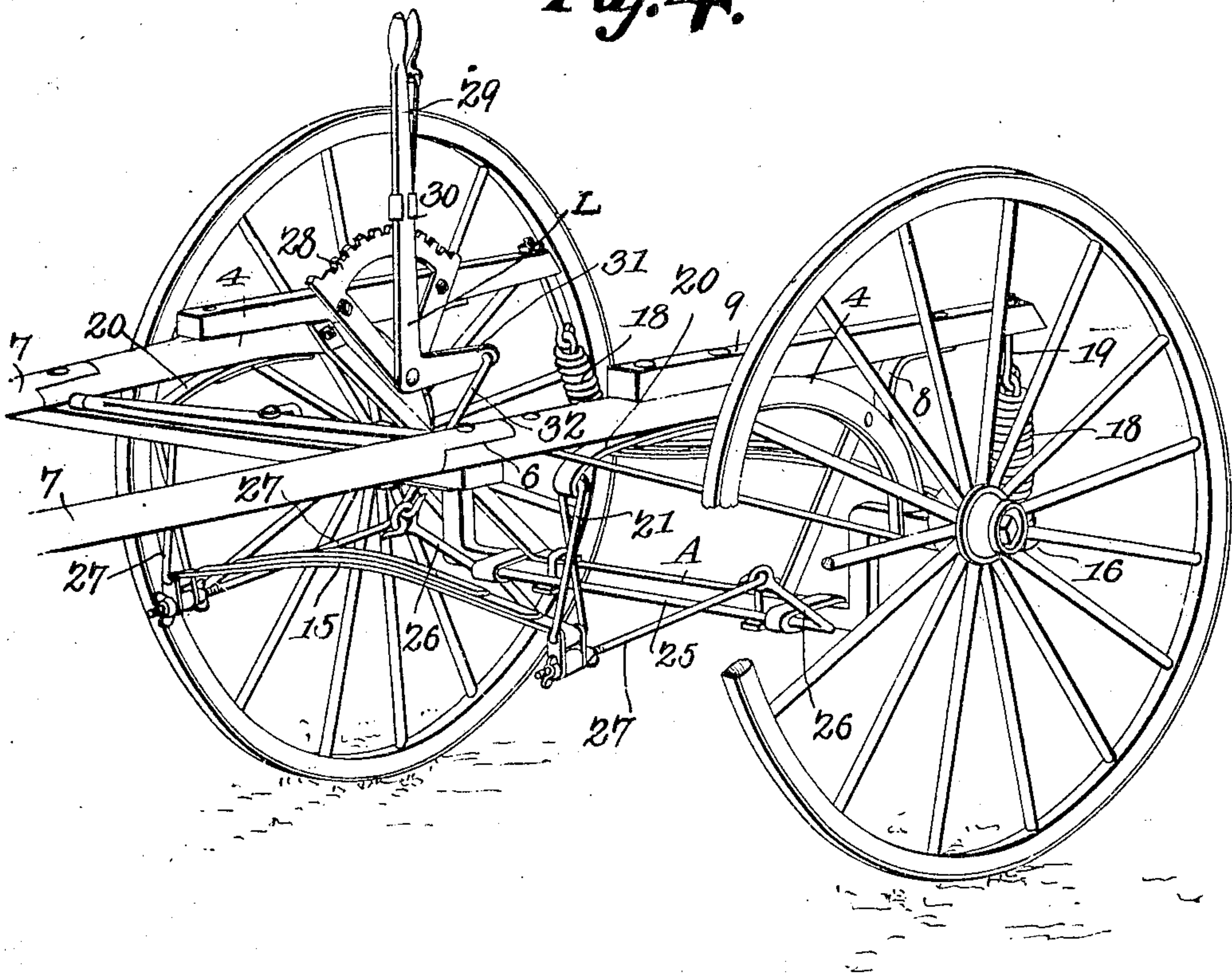
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3 SHEETS—SHEET 3.

Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM O. COVEY, OF APPLETON CITY, MISSOURI.

MAIL-CARRIER'S CART.

No. 849,660.

Specification of Letters Patent.

Patented April 9, 1907.

Application filed January 23, 1906. Serial No. 297,490.

To all whom it may concern:

Be it known that I, WILLIAM O. COVEY, a citizen of the United States, residing at Appleton City, in the county of St. Clair and State of Missouri, have invented a new and useful Mail-Carrier's Cart, of which the following is a specification.

This invention relates to carts or vehicles adapted especially for use of mail-carriers upon rural routes; and the objects of the invention are to simplify and improve the construction and operation of the running-gear and to present a device of this class which shall be light, easy-running, free from horse motion, and able to withstand the rough usage to which vehicles of this class are frequently subjected.

With these and other ends in view, which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations, and modifications within the scope of the invention may be made when desired.

In the drawings, Figure 1 is a perspective view of a mail-carrier's cart constructed in accordance with the principles of the invention. Fig. 2 is a sectional front elevation. Fig. 3 is a side elevation, the axle being cut in section and the wheels removed. Fig. 4 is a perspective view of the running-gear, showing a modified construction.

Corresponding parts in the several figures are indicated throughout by similar characters of reference.

The axle A is of that variety which includes a drop-arch 1, the side members of which, 2 2, have lateral extensions 3 3, forming spindles upon which the wheels 4 are supported for rotation. Securely connected with the members 3 3 adjacent to the side members 2 2 of the arch are thill members 4 4, which are in the nature of stubs, the front ends of which are connected by a cross-bar 5 and provided with notches or recesses 6, af-

fording seats for the rear ends of the thills proper, 7. This construction is preferably resorted to when the vehicle is to be used in connection with shafts and a tongue interchangeably, inasmuch as by simply removing the thills a cross-bar carrying a tongue may be substituted in the place thereof. This, however, has not been illustrated, inasmuch as such substitution is well known in the art.

Each thill is provided with a backstay 8, coöperating therewith to support a rearward extension-bar 9, which is bolted upon the thill-stub and upon said backstay. The latter, which is bolted upon the rear side of the downwardly-extending terminal of the stub, terminates in a threaded portion which constitutes one of the clip-bolts 10, whereby the stub is connected with the axle. The clip-plate 11 is formed at the rear end of a brace-rod 12, which extends forwardly and is bolted upon the under side of the thill-stub in rear of the cross-bar 5, said brace being also provided with a forwardly-extending loop 13, engaging and supporting the under side of the cross-bar 5.

The vehicle box or body 14 is supported at its front and rear ends upon arched springs 15 and 16, the ends of which latter are connected, by means of links 17, with strong coiled or helical springs 18, which are suspended, as by means of hooks 19, from the rear ends of the extension-bars 9.

Firmly bolted upon the under sides of the thill-stubs 4 are leaf-springs 20, the front ends of which are connected, as by means of twisted links 21, with the ends of the arched spring 15, that supports the front part of the vehicle-body which is thereby suspended. The bolster-block 22, which is secured upon the under side of the front portion of the vehicle-body and which forms a seat for the spring 15, is connected by a hook-brace 23 with a clip-plate 24 upon the axle-arch for the purpose of limiting the tendency of the vehicle-body to swing or vibrate.

Braces, as 24', are preferably employed for the purpose of connecting the axle with the thill-stubs in order to strengthen and reinforce the latter.

Under the modified construction illustrated in Fig. 4 of the drawings the axle is provided with bearings for a rock-shaft 25, having terminal cranks 26, which are con-

nected, by means of links 27, with the ends of
 the front spring 15. Bolted or otherwise
 secured upon the extension-bar 9 of the thill-
 stub at one side of the running-gear is a quad-
 rant 28, upon which is pivoted a bell-crank
 lever L, one arm of which is extended to
 form a handle 29, provided with a stop mem-
 ber 30, adapted to engage the quadrant for
 the purpose of retaining the lever at various
 adjustments. The other arm 31 of the bell-
 crank is connected by a link 32 with one of
 the cranks 26 of the rock-shaft 25, which lat-
 ter may thus be oscillated in its bearings.
 When the mechanism just described is used,
 the brace 23 is dispensed with, since by this
 mechanism, which acts as a brace, the vehicle
 box or body may be secured against vibra-
 tion. By the mechanism illustrated in Fig.
 4, however, the box or body is capable of be-
 ing swayed or moved in a forward or rear-
 ward direction, as may be desired, and of be-
 ing secured in various positions with relation
 to the axle. The vehicle may thus be accu-
 rately balanced, and the load may be taken
 off the neck of the draft-animal while going
 down long grades or when standing at a rack,
 thus relieving the animal of unnecessary
 strain and making the vehicle easier riding.

This improved running-gear, as will be
 seen from the foregoing description, is ex-
 tremely simple, and it may be manufactured
 at a moderate expense. The vehicle-body
 will be supported thereby in such a manner
 as to be capable of yielding freely to the
 movement of the springs, the motion, even
 in traversing rough roads, being noticeably
 light and free from jolting and horse motion.
 This latter feature is especially desirable in
 view of the fact that long distances frequently
 have to be traveled over by the occupant of
 the vehicle, who will thus be relieved of a
 very objectionable sensation which usually ac-
 companies the use of two-wheeled vehicles.

Having thus described the invention, what
 is claimed is—

1. A wheel-supported axle, thill-stubs con-
 nected therewith, backstays extending rear-
 wardly from said stubs, and extension-bars
 supported at their front ends upon said stubs
 and at their rear ends upon the backstays.

2. A wheel-supported axle, thill-stubs con-
 nected therewith, backstays connected with
 and extending rearwardly from the stubs,
 extension-bars supported upon the stubs and
 backstays, a vehicle-body, and suspension
 means connecting said body with the thill-
 stubs and the extension-bars.

3. A wheel-supported axle, thill-stubs con-
 nected therewith, bars extending rearwardly
 from the thill-stubs, a vehicle-body, and sus-
 pension means connecting said body with the
 thill-stubs and the extension-bars, said
 means comprising parallel leaf-springs and
 devices connecting the ends thereof with the
 stubs and bars.

4. A drop-arch axle, thill-stubs connected
 therewith, leaf-springs connected with the
 stubs, bars extending rearwardly from the
 latter, helical springs suspended from the ex-
 tension-bars, and a vehicle-body connected
 at its rear end with the helical springs and at
 its front end with the springs upon the thill-
 stubs.

5. A drop-arch axle, thill members con-
 nected therewith, bars extending rearwardly
 from the thill members, leaf-springs secured
 upon the under sides of the latter, helical
 springs suspended from the extension-bars, a
 vehicle-body provided with arched springs
 at its front and rear ends, links connecting
 the ends of the rear spring with the helical
 springs, and twisted links connecting the
 ends of the front spring with the springs
 upon the under sides of the thill members.

6. In a vehicle of the class described, a
 drop-arch axle, thill members connected
 therewith, backstays extending rearwardly
 from the thill members, extension-bars sup-
 ported upon the thill members and back-
 stays, springs connected with the thill mem-
 bers and the extension-bars, a vehicle-body
 having supporting-springs, and suspending
 means connecting the latter springs with the
 springs upon the thill members and the ex-
 tension-bars.

7. A drop-arch axle, thill members con-
 nected therewith and having rearward ex-
 tension-bars, a vehicle-body, springs and
 suspension means connecting said vehicle-
 body with the thill members and the exten-
 sion-bars, and a hook-brace connecting the
 vehicle-body with the axle.

8. A drop-arch axle having laterally-ex-
 tending spindle members, thill-stubs con-
 nected with said spindle members, and re-
 inforcing-braces connecting the thill-stubs
 with the arched portion of the axle.

9. A drop-arch axle, a vehicle-body sus-
 pended above the axle, and brace means con-
 necting the suspending means with the axle,
 said means including a device for changing
 the position of the body with relation to the
 axle.

10. A drop-arch axle, a vehicle-body sus-
 pended above the axle, and means connecting
 the suspending means adjustably with the
 axle to regulate the position of the body with
 relation to the axle.

11. A drop-arch axle, a vehicle-body sus-
 pended above the axle, a rock-shaft support-
 ed upon the axle and having cranks, links
 connecting the cranks with the suspending
 means, and means for adjusting the rock-
 shaft and for retaining it at various adjust-
 ments.

12. A drop-arch axle, thills connected
 therewith and having rearward extension-
 bars, a vehicle-body, suspending means con-
 necting the body with the thills and the ex-
 tension-bars, a rock-shaft journaled upon the

axle and having cranks, links connecting the cranks with the suspending means, an adjusting-lever, a link connecting said lever with one of the cranks upon the rock-shaft, and means for securing the lever at various adjustments.

5 In testimony that I claim the foregoing as

my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM O. COVEY.

Witnesses:

W. H. SAGESER,
JOHN COVEY.