

(No Model.)

2 Sheets—Sheet 1.

E. D. BREWER.  
CARRIAGE.

No. 565,833.

Patented Aug. 11, 1896.

FIG. 1.

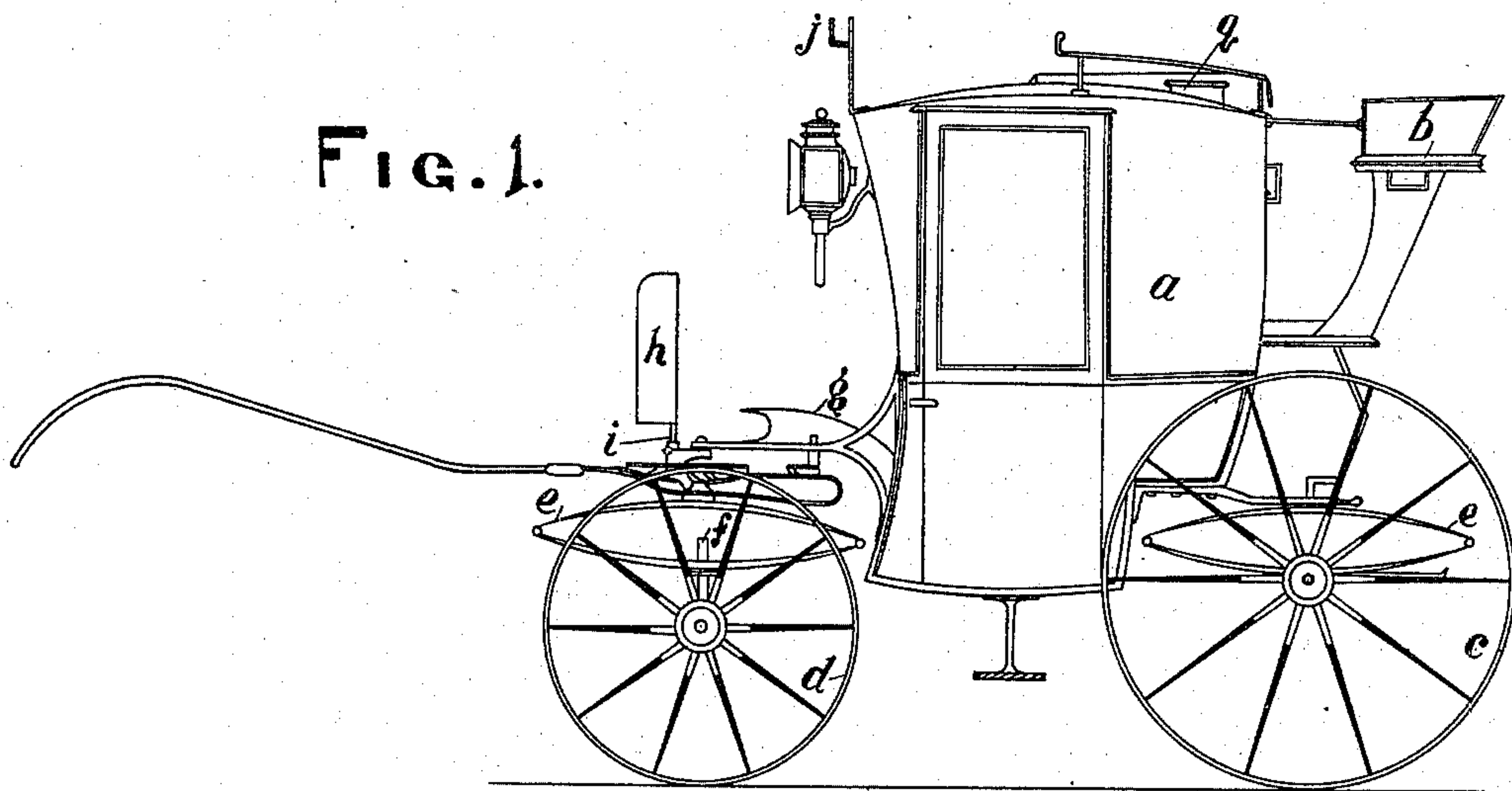
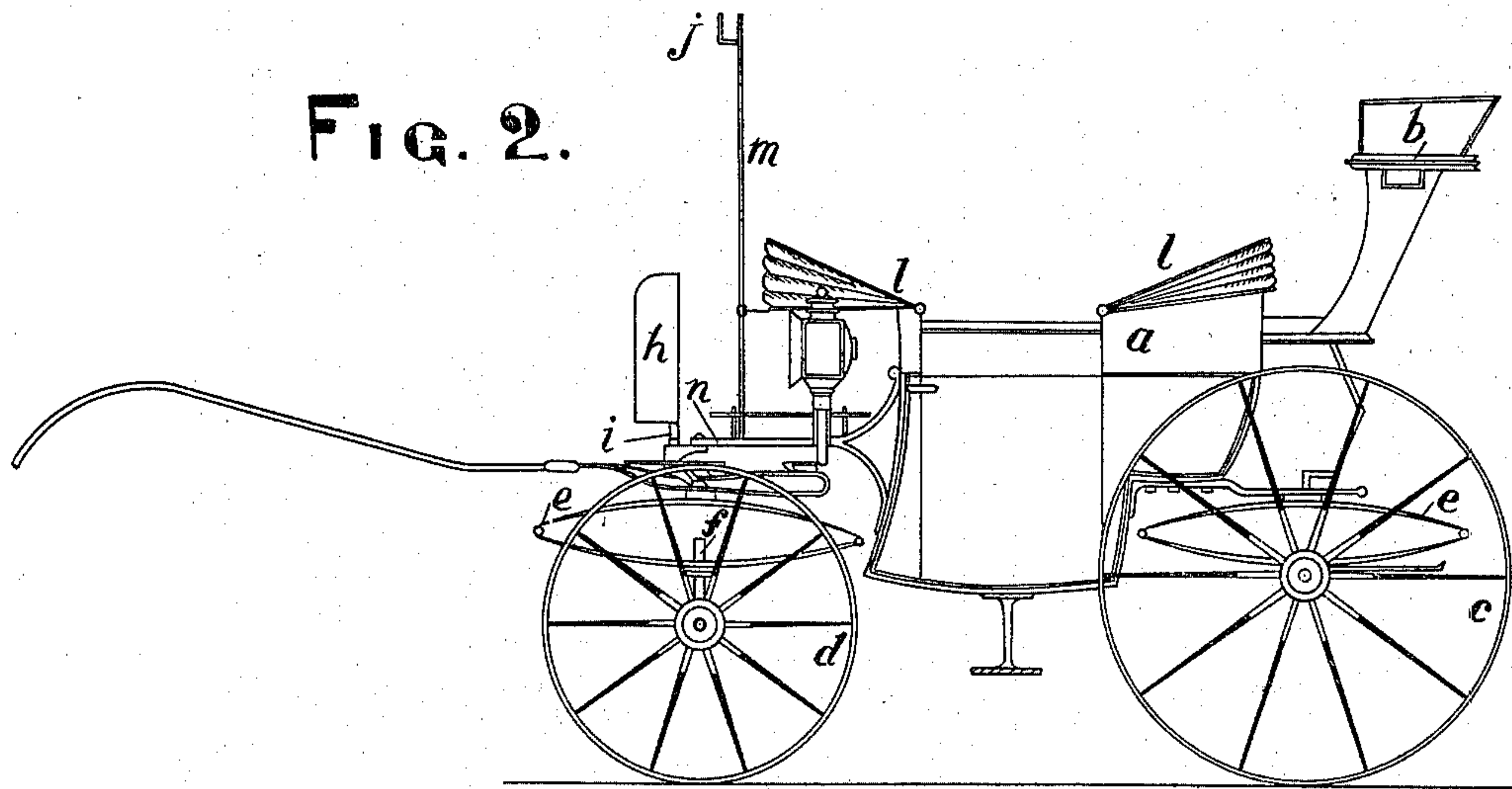


FIG. 2.



Witnesses:

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by Whitman & Milkenham,  
Attys.

(No Model.)

2 Sheets—Sheet 2.

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FIG. 3.

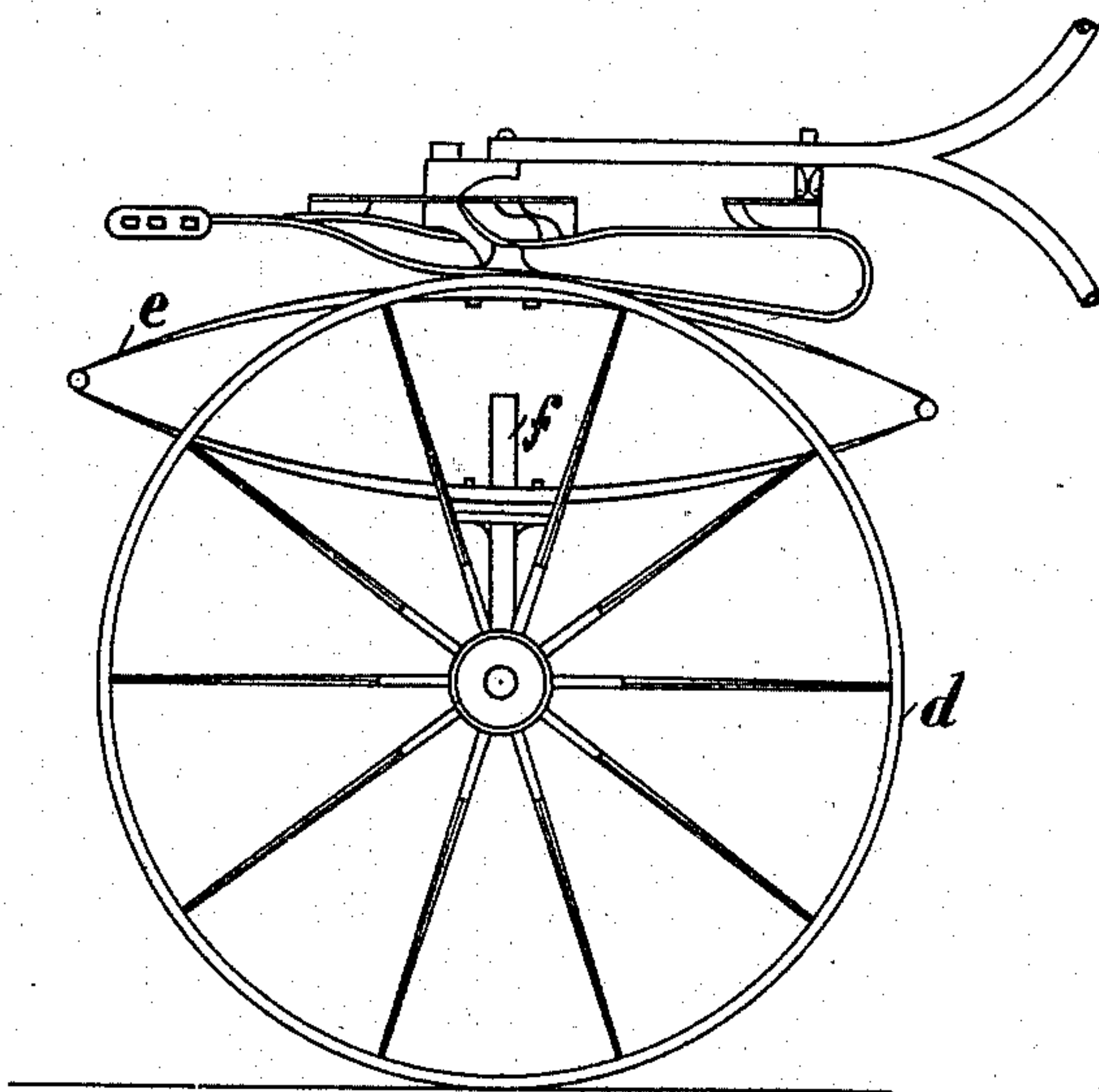
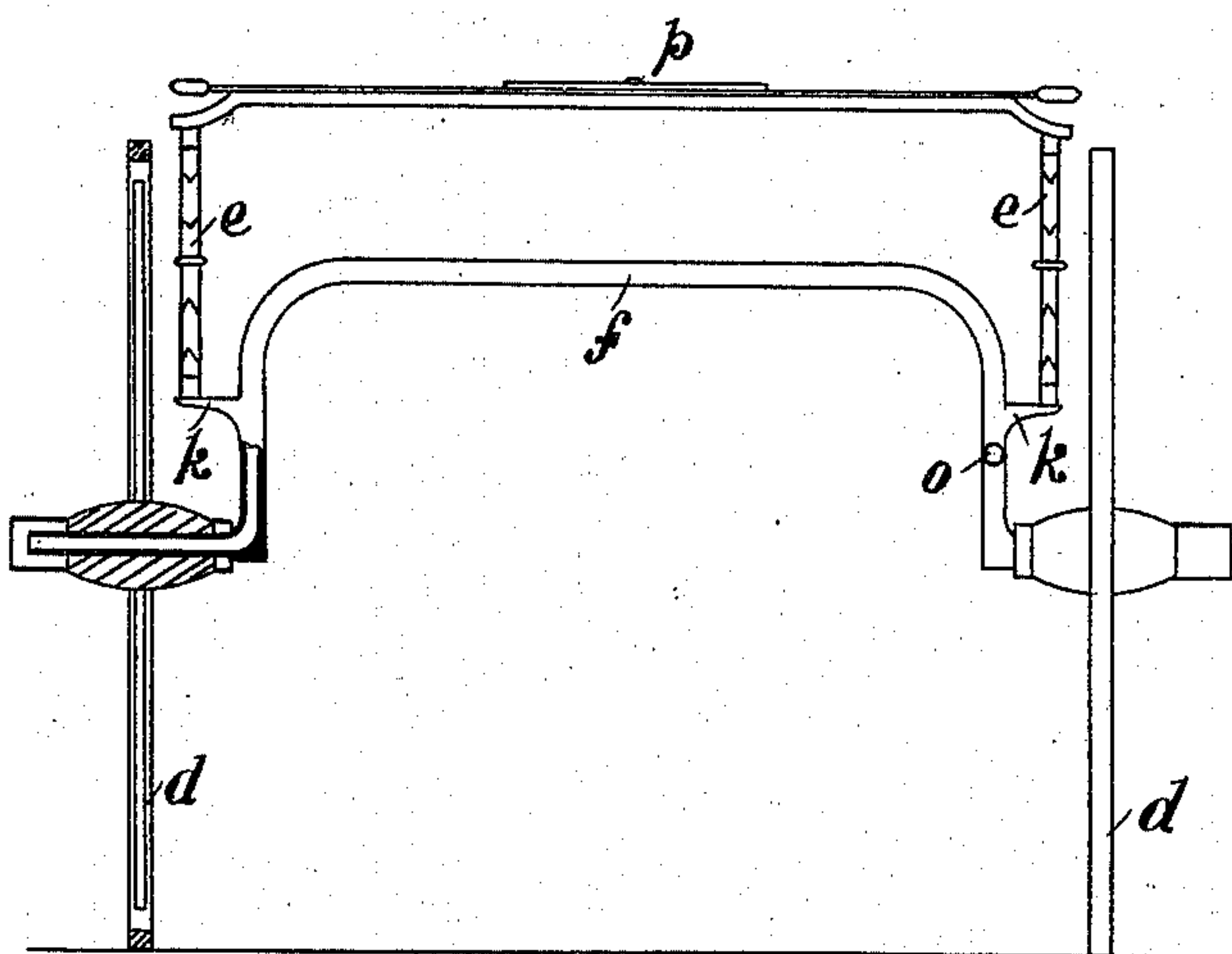


FIG. 4.

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# UNITED STATES PATENT OFFICE.

ERNEST DALTON BREWER, OF LONDON, ENGLAND.

## CARRIAGE.

SPECIFICATION forming part of Letters Patent No. 565,833, dated August 11, 1896.

Application filed September 13, 1895. Serial No. 562,449. (No model.) Patented in England September 12, 1893, No. 17,149; in France October 3, 1894, No. 241,828, and in Belgium October 3, 1894, No. 112,090.

*To all whom it may concern:*

Be it known that I, ERNEST DALTON BREWER, a subject of the Queen of Great Britain and Ireland, residing at Caroline Cottage, Caroline street, Old Kent Road, London, England, have invented Improvements in Carriages, (for which I have obtained a patent for part of the said invention in Great Britain, dated September 12, 1893, No. 17,149; also in France, No. 241,828, dated October 3, 1894; also in Belgium, No. 112,090, dated October 3, 1894,) of which the following is a specification.

My invention relates to improvements in carriages or wagons; and it consists in certain novel features and combinations to be used in the construction of carriages having four wheels, hereinafter described and claimed.

Reference is had to the accompanying drawings, wherein the same parts are indicated by the same letters throughout the several views.

Figure 1 shows a side elevation of a carriage constructed according to my invention. Fig. 2 shows a similar view of a carriage having a different form of top or cover. Fig. 3 is an enlarged detail view showing a front elevation, partly in section, of the front axletree, and illustrates my arrangement of the springs and axle; and Fig. 4 is a side elevation of Fig. 3.

In Fig. 1, *a* represents the body of the carriage. *b* represents the driver's seat. *c* represents the back wheels of the carriage. *e* represents the springs. *f* represents the front axletree, which is of a peculiar cranked form, as hereinafter more fully described. *g* represents a mud-guard. *h* represents the dashboard, which is fitted to the perch-bolt *i*, and is made a fixture to the front part of the running-gear, the perch-bolt being reversed and the dashboard *h* attached thereto, thus causing the dashboard to turn with the front wheels and follow the movements of the horse. *j* represents a support for the reins. In Fig. 1 this support is mounted upon a short rod on the top of the carriage, but in Fig. 2, where the cover of the carriage folds back fore and aft, the support for the reins is mounted upon a longer rod *m*, which rod is mounted upon

the platform *n* in front of the body of the carriage, as shown.

In Fig. 2, *l* represents the hoods of the cover of the carriage, which may be folded back, as shown, when desired to form an open carriage.

The platform *n* in front of the body of the carriage may be used for carrying luggage when desired.

Referring now more particularly to Figs. 3 and 4, *f* represents the front axletree, which is bent or cranked upward, as shown immediately inside of the hub of the wheel. A step or support *k* is formed upon the outer side of each of the two upright portions of the cranked axle, as shown, and upon these steps the front springs of the vehicle rest and are held by suitable clips. These steps *k* project outward above the hub of the wheel, and thus allow the springs to be set much wider apart than would otherwise be possible. In the form of carriages wherein the front wheels are set much nearer together than the back wheels the springs would interfere with the horse's legs should he be hitched very close, and when the horse is hitched far forward the load is harder to pull.

My invention is intended to render it possible to hitch the horse very close to the carriage, and thus render the load easier to draw.

By having the front axle bent or cranked upward, as shown, this gets the axle out of the way of the horse's legs when hitched close, and by my peculiar construction the springs may be set as far apart as possible, thus making it easy to hitch the horse very close to the carriage and at the same time avoid any danger of his feet or legs striking against either the springs or the axle, which with fractious horses would render a runaway and its attendant disasters very liable.

For purposes of lubricating I make the spindles of the axle hollow, and also the axle itself for a short distance, as shown to the left in Fig. 3, and provide a hole or inlet which is closed by a screw-cap or plug *o*, as shown to the right in said figure, through which hole or inlet the oil or other lubricant is poured into the chamber within the axle. Perforations are formed in the spindle of the axle,

through which the lubricant will run, and thus automatically lubricate the bearings.

The ordinary devices are used for attaching the shafts (not shown) to the carriage.

5 Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

10 In a carriage, the combination with the rear wheels thereof; the body; a seat for the driver mounted above the rear axle behind said body, and a platform for luggage in front of said body; of the front axle bent upward to form two vertical portions immediately inside of

the spindle thereof and having a step or projection formed on the outside of each of said 15 vertical portions, the said step or projection extending outward above the spindle; springs mounted upon said steps, means for supporting the front platform of said vehicle upon said springs, and means for attaching a pair of 20 shafts thereto, substantially as and for the purposes described.

ERNEST DALTON BREWER.

Witnesses:

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