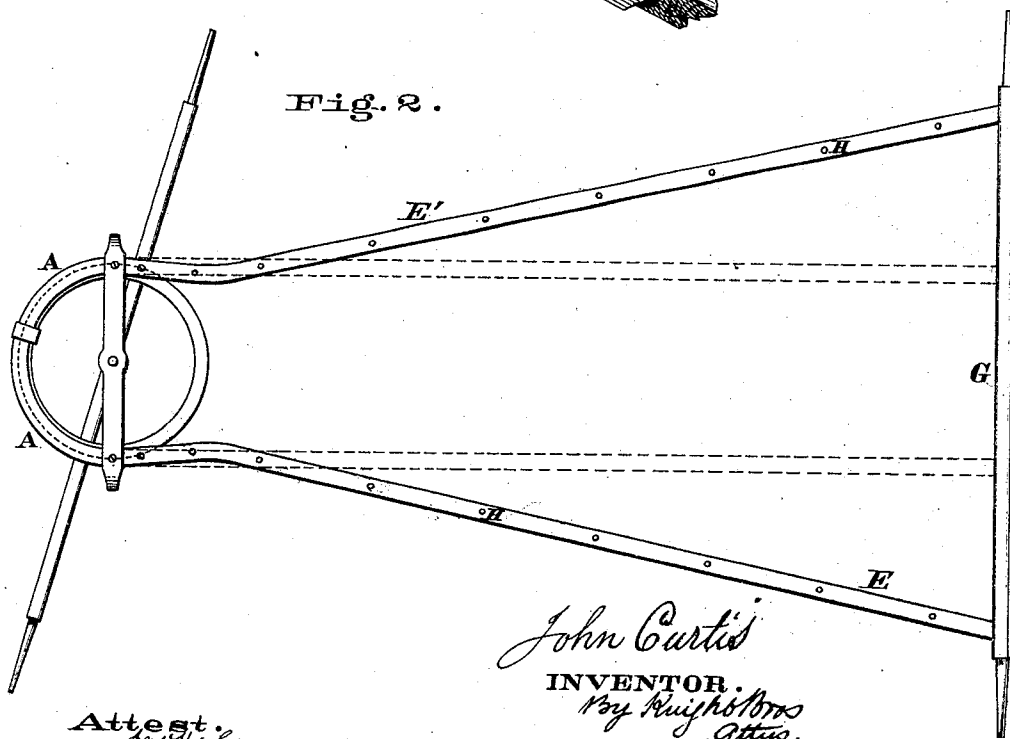
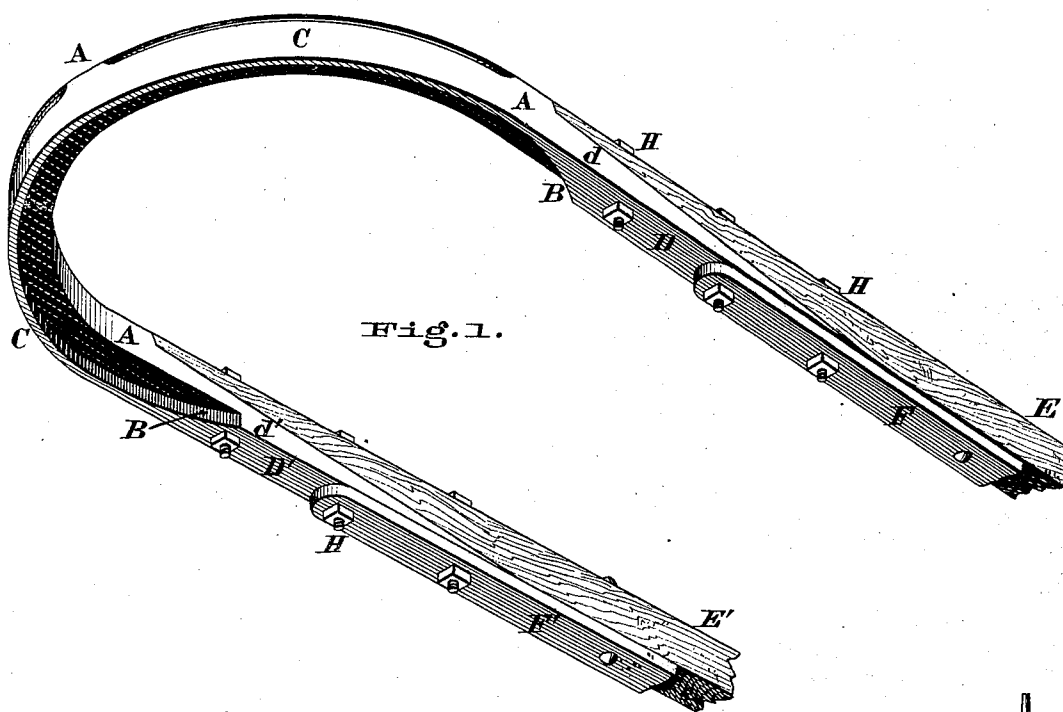


JOHN CURTIS.

Improvement in Carriages.

No. 119,579.

Patented Oct. 3, 1871.



Attest.
Jas H. Gayman
Witness.

John Curtis
INVENTOR.
By *Wright & Sons*
Attys.

UNITED STATES PATENT OFFICE.

JOHN CURTIS, OF CINCINNATI, OHIO.

IMPROVEMENT IN CARRIAGES.

Specification forming part of Letters Patent No. 119,579, dated October 3, 1871.

To all whom it may concern:

Be it known that I, JOHN CURTIS, of Cincinnati, Hamilton county, Ohio, have invented certain Improvements in Carriages, of which the following is a specification:

This invention relates to the class of devices patented by me March 26, 1867, reissued August 10, 1869; and the present improvement consists in substituting for the bent and rabbeted portion of the perch-bar a curved plate of malleable iron which is adapted to receive the lower member of the fifth-wheel, and which plate has attached to its ends by bolts, rivets, and welding, or otherwise, strips of wood and iron bars, which extend rearward and are secured to the hind axle of the carriage, the details of these features being hereinafter fully described. This improvement retains all the advantages of a reversed fifth-wheel, as in my original patent.

Figure 1 is a perspective view, showing the under side of the curved and rabbeted malleable iron plate, and a portion of its accessories; and Fig. 2 is a plan on a reduced scale, showing the front and rear axle of the carriage and its connections.

A represents a malleable-iron plate having on its under side a rabbet, B, which is adapted to receive the lower member of a fifth-wheel, the latter being similar in its shape and connections to the one described in the aforesaid reissued patent. The curved portion C of said plate is semicircular, while its sides D D' are straight, and are preferably converged toward the rear of the carriage, although they may be parallel or divergent. The sides proper of the plate extend any suitable distance—say from six to ten inches—from the semicircular portion; and their upper surfaces are chamfered, as at *d d'*, for the attachment of similarly-chamfered front ends of wooden strips E E', which constitute the perches of the

vehicle. Bolted or welded to the under side of the portions D D' of the malleable-iron plate A are bars F F', which, like the strips E E', have their rear ends secured to the hind axle G. The wooden strips are united to the chamfered portions of plate A, and also to the flat bars F F', by bolts or rivets H. The arrangement of head-block and springs, being the same as that shown in the aforesaid patents, requires no further description here.

The great advantage which this arrangement of devices possesses over the bent wooden strips shown in my old patents consists in the cheapness of construction and ease of application, as the metallic plate and short connecting perches can be furnished at a much less cost than the long bent wooden ones shown in my said patent; besides which the utmost uniformity of shape in the working faces of the fifth-wheel is obtained. The plate has been spoken of as made of malleable iron, but it is evident that it can be constructed of any other suitable metal, such as wrought-iron, brass, &c.; and, if preferred, it can be either silver or nickel-plated, and thereby add to the appearance of the vehicle. These plates can be sold by the dealers in carriage hardware and others so as to be placed in the hands of the public, and attached to any ordinary four-wheeled vehicle, even by persons of limited experience.

I claim—

As a new article of manufacture, the metallic plate A B C D D' *d d'*, when constructed as herein described, and for the purpose explained.

In testimony of which invention I hereunto set my hand.

JOHN CURTIS.

Witnesses:

GEO. H. KNIGHT,
R. A. ATHEY.

(22)