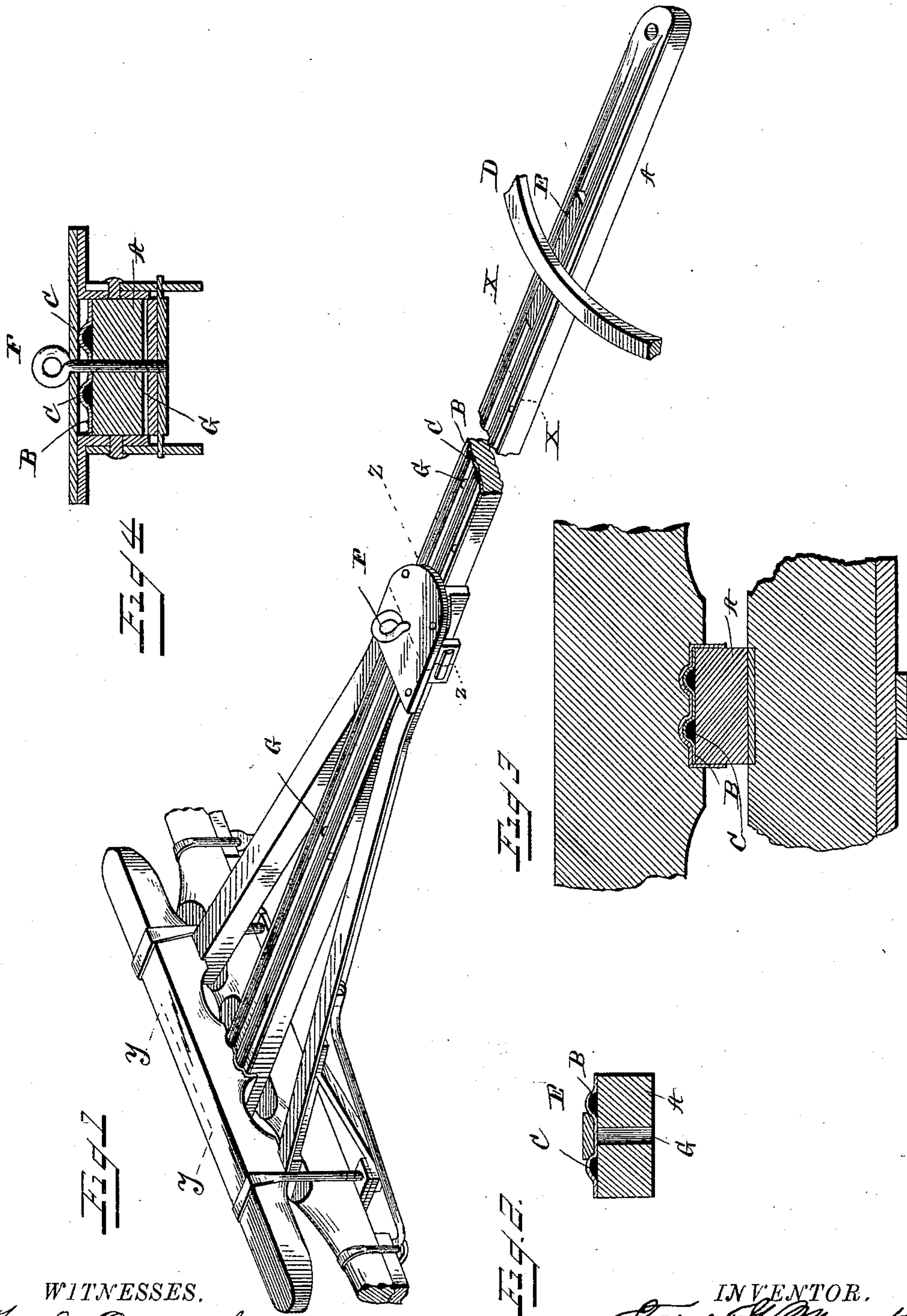


(No Model.)

T. G. MANDT.
REACH FOR VEHICLES.

No. 390,874.

Patented Oct. 9, 1888.



WITNESSES.
F. L. Ourand
Benj. G. Cowl

INVENTOR.
T. G. Mandt
by Louis Daguerre & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

TARGE G. MANDT, OF STOUGHTON, WISCONSIN.

REACH FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 390,874, dated October 9, 1888.

Application filed March 16, 1888. Serial No. 267,329. (No model.)

To all whom it may concern:

Be it known that I, TARGE G. MANDT, a citizen of the United States, and a resident of Stoughton, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in Reaches for Vehicles; 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, which form a part of this specification, and in which—

Figure 1 is a perspective view of so much of the running-gear of a vehicle as is necessary to properly illustrate my present improvement. Fig. 2 is a cross-section of the reach on line *x x*. Fig. 3 is a similar view on line *y y*, and Fig. 4 is a cross-section through the reach-coupling on the broken line denoted by *z z*.

Like letters of reference denote corresponding parts in the several figures.

My invention has relation to that class of running-gear of vehicles in which a wooden reach is provided with a metallic strengthening strip or covering; and it consists in the improved construction and combination of parts of the reach, as will be hereinafter more fully set forth.

The object of my invention is to construct the reach of a vehicle in such a manner as to combine the greatest possible degree of strength and durability with a minimum of weight; and to this end my invention consists in the construction of a compound reach consisting of a lower part or body, A, and a steel re-enforcing plate, B, which said re-enforcing plate is provided with two parallel beads or corrugations, C C, extending from end to end of the wooden part of the reach.

The corrugated re-enforcing plate is fastened to the flat top part of the reach by screws, bolts, rivets, or any other suitable means, and is provided between its corrugations on that part of the reach which comes below the circle D with a chafing-plate, E, for the purpose of protecting the corrugations from wear against the under side of the circle.

This compound reach is coupled to the rear axle and its hounds by any suitable coupling device; but I prefer to employ for this purpose the reach-coupling described in my Letters Patent No. 194,160, dated August 14, 1877. That coupling consists, essentially, of a clamp-

ing-plate fitting between flanges of the reach-plate and adapted to be tightened against the under side of the reach by means of the screw F. By constructing the re-enforcing plate with two parallel beads or corrugations a flat central part or space is left running longitudinally from end to end, through which holes (shown at G) may be punched, the said holes extending down through the wooden part of the reach for the insertion of the coupling-pin or screw F. I desire it to be understood, however, that I do not limit myself to this or any other particular style of coupling or means of connecting the reach to the rear side of the running-gear.

By constructing my compound reach in the manner described, I am enabled to produce a reach combining lightness with exceptional strength and rigidity. As already stated, this construction does not interfere with the usual series of holes for adjusting the length of the reach in coupling the same to the hind part of the vehicle, so that it may be used with advantage on all different classes of vehicles without necessitating changes in the construction of their running-gear to adapt them to my improved reach.

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

1. As an improved article of manufacture, a compound reach for vehicles, consisting of a wooden under part or body re-enforced through its entire length by a plate of iron or steel, and provided with two parallel beads or corrugations extending from end to end of the re-enforcing plate, having a flat central part or space between them through which holes may be formed for the coupling pin, substantially as set forth.

2. The combination, with the compound reach herein described, provided with two parallel beads or corrugations leaving a flat central part or space between them, of the chafing plate fastened upon the top of the reach at any suitable place between the beads or corrugations of the re-enforcing plate, substantially as shown and set forth.

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

TARGE G. MANDT.

Witnesses:

THORVALD C. LUND,
OSWALD F. KROPF.