

K. WOLFRAM & A. ELLWEIN.
Improvement in Reach for Vehicles.

No. 129,198.

Patented July 16, 1872.

Fig. 1.

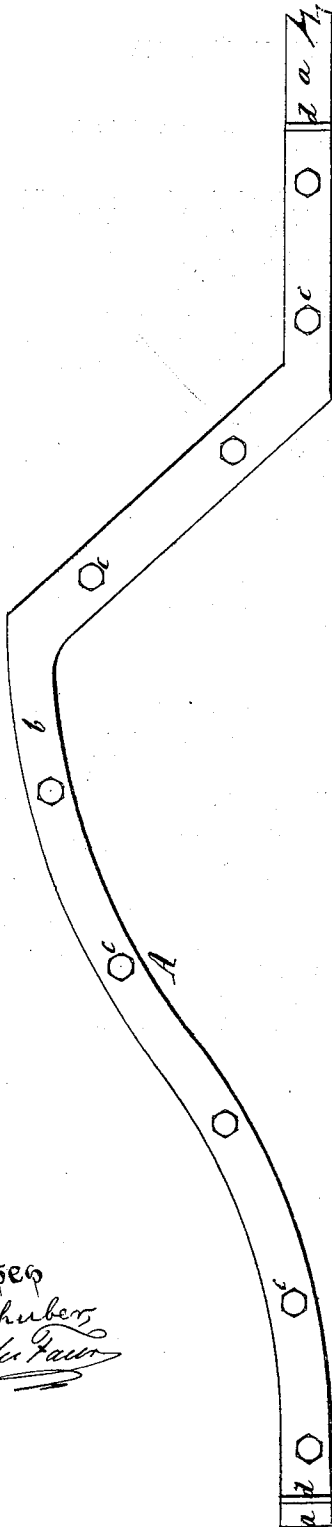
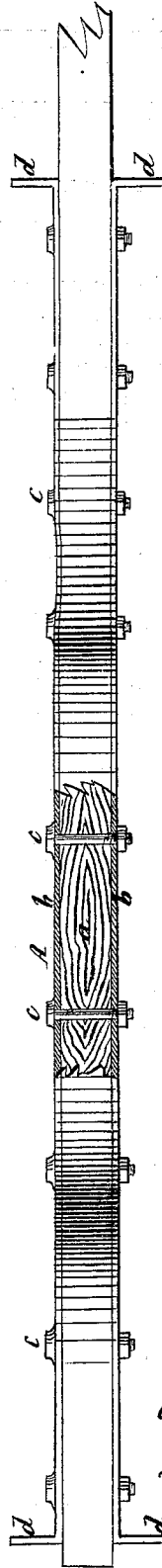


Fig. 2.



Witnesses
C. J. Kastenhuber
A. Faber del. *[Signature]*

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Hauff
their attys

UNITED STATES PATENT OFFICE.

KARL WOLFRAM AND ADAM ELLWEIN, OF NEW YORK, N. Y.

IMPROVEMENT IN REACHES FOR VEHICLES.

Specification forming part of Letters Patent No. 129,198, dated July 16, 1872.

To all to whom it may concern:

Be it known that we, KARL WOLFRAM and ADAM ELLWEIN, both of the city, county, and State of New York, have invented a new and Improved Reach for Vehicles; and we do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a side view of our invention. Fig. 2 is a plan or top view of the same partly in section.

Similar letters indicate corresponding parts.

This invention consists in a reach composed of a piece of wood, which is curved upward so as to allow the front wheels to pass under, and to the sides of which are secured continuous strips of iron, the ends of which are bent out at right angles to form flanges, which serve to connect the reach with the axle of the hind wheels, and with the bolster that rests on the axle of the front wheels, in such a manner that said reach can be readily and conveniently secured in the desired position, and at the same time a reach is produced which combines great strength and lightness, with the quality to allow the front wheels to turn under.

In the drawing, the letter A designates our reach, which is composed of a piece of wood, *a*, to the sides of which are secured strips *b* of

iron, said strips being held in position by a series of screw-bolts, *c*, which pass clear through the wood, as shown in Fig. 2. The piece of wood *a* and also the strips *b* of iron are curved upward, as shown in Fig. 1, so that the front wheels can turn under the reach; and by placing the strips *b* edgewise we impart to our reach the requisite strength against any strain to which the same may be exposed. The ends of the strips *b* are turned out at right angles, so as to form flanges *d*, by means of which our reach can be readily and conveniently secured to the axle of the hind wheels, and also to the bolster which rests upon the axle of the front wheels. By these means a reach is obtained which combines lightness with great strength, and which is so formed that it allows the front wheels to turn under, and which can be readily and conveniently secured in position.

What we claim as new, and desire to secure by Letters Patent, is—

A reach composed of a piece of wood, *a*, curved upward, and strengthened by continuous strips *b* of iron secured to its sides, and provided with laterally-extending flanges *d* at each end, all as herein shown and described.

KARL WOLFRAM.
ADAM ELLWEIN.

Witnesses:

W. HAUFF,
E. F. KASTENHUBER.