(No Model.)

C. E. WNUCK.

COACH GEAR.

No. 415,287. Patented Nov. 19, 1889.

Fig. 1.

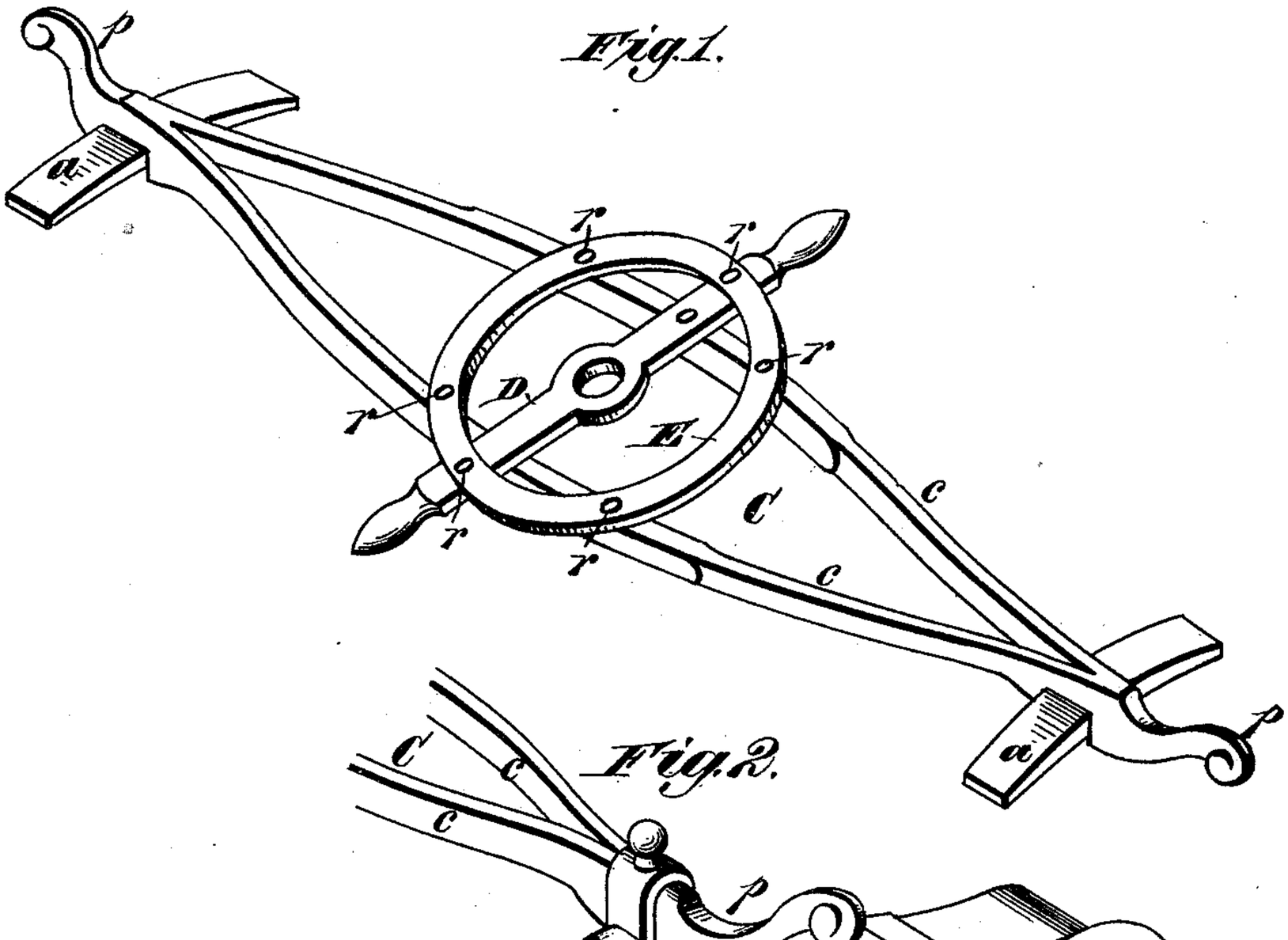
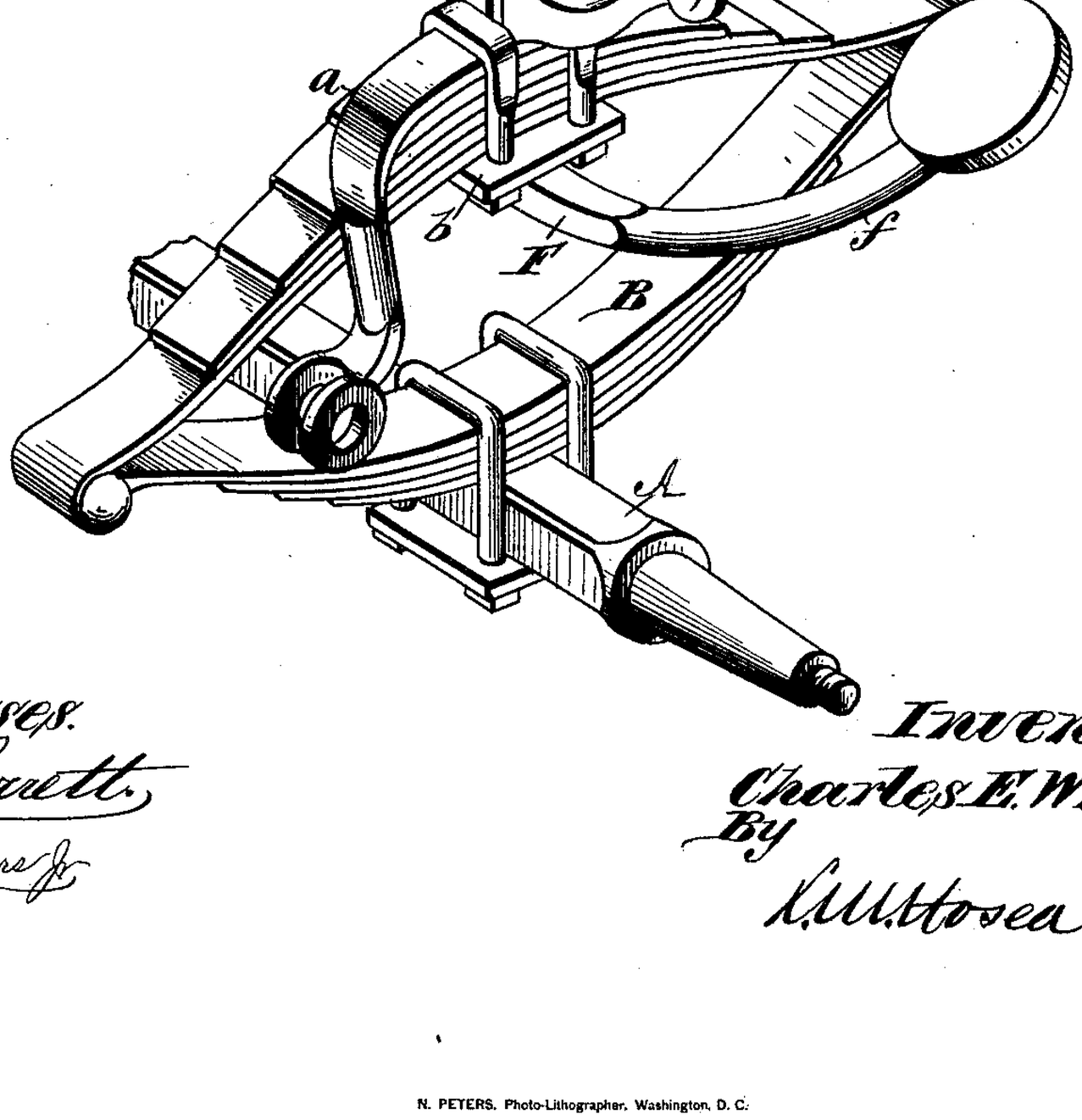


Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

CHARLES E. WNUCK, OF CINCINNATI, OHIO.

COACH-GEAR.

SPECIFICATION forming part of Letters Patent No. 415,287, dated November 19, 1889.

Application filed July 13, 1889. Serial No. 317,496. (No model.)

To all whom it may concern:

Be it known that I, CHARLES EDWARD WNUCK, a citizen of the United States, residing at Cincinnati, county of Hamilton, and State of Ohio, have invented new and useful Improvements in Coach-Gear, of which the following is a specification.

My invention relates to coach-platforms—that is to say, the supporting-gear of the "fifth-wheel" and of the forward end of the coach-body—and is in the nature of an improvement upon that for which Letters Patent No. 340,068 were granted April 13, 1886, to August Wnuck and myself. In said Letters Patent are described a construction of the platform upon which the fifth-wheel connection rests, in the form of a truss of two bow-shaped braces, which were in practice constructed of wood, arranged diagonally in respect to the line of draft, whereby greater strength, security, lightness, and a generally-neater construction of the running and supporting gear of the carriage were attained. This construction having been very generally approved by the trade and the public, I have been led to further improve the same, while still embodying the general principles of the invention as set forth in said former Letters Patent.

In my present improvement I construct the braces constituting the platform of metal and form a spring-support as part of the same, these parts being preferably a wrought iron or steel forging in a single piece, including the ornamental projections terminating the platform beyond the springs. I omit the cross-braces shown in said former patent, and in lieu thereof extend the cleat (which carries the king-bolt) to and beyond the base of the fifth-wheel, to which it is riveted, making a single cross-brace, which, together with the bracing effect of the fifth-wheel brace, gives sufficient strength.

A further feature of my improvement consists in the attachment of the "step" to the under shackle-plate of the spring, as hereinafter pointed out.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved platform complete, but omitting all connecting parts; and Fig. 2, a perspective view of the shackle-connection between the end of the platform-brace and the spring, showing the constructive arrangement of the step and of the parts generally.

Referring now to the drawings, A designates the front axle, B one of the springs, and C the platform, which is formed of two bow-shaped members *c c*, united at the ends, where they terminate in the ornamental scroll projections *p p*, just inside of which, at each end of the platform, is a plate *a*, projecting at both sides laterally and formed to the contour of the upper side of the spring B. All these are preferably formed of a single forging of wrought iron or steel which, of proper quality, possesses sufficient elasticity for the purpose.

The platform as a whole is completed by a single central cross-brace D, perforated for the insertion of the king-bolt and the fixed base E of the fifth-wheel, all being strongly riveted together, as shown at *r*. It will be seen that the disposition of metal constitutes a "truss" having great stiffness in a horizontal plane, in which the base E of the fifth-wheel constitutes diagonal struts, forming, with the central brace D, a net-work of bracing at the center, while the structure permits a certain amount of torsion at the terminals of the platform absorbed by the elasticity of the intervening portions of the members *c c*. Thus the shocks and displacements caused by the passage of either wheel over obstructions is all absorbed in the molecular elasticity of the metal and a much more durable and secure structure had than where the members *c c* are separate pieces of wood, as in the former patent referred to.

The step, which is a necessary adjunct to a platform of this character and ordinarily secured directly thereto, I form as a projecting bracket F upon the bottom clip-plate *b* of the parts uniting the platform with the spring B, as shown in Fig. 2. The advantages of this construction are that the shank *f* of the bracket is shorter and contains less metal, and is thereby stronger, and also that in case of breakage it is more easily removed and repaired without detaching any of the upper parts, by which the finish and general appearance of the parts are always injured. The fastening in this case being at the under side

of the spring, its removal causes no displacement of the other parts exposed to sight, as its position conceals its fastenings to the platform.

I claim as my invention and desire to secure by Letters Patent of the United States—

1. As a new article of manufacture, a platform for coach-bodies, consisting of the two bowed braces *c c* and the ears *a*, all formed in one homogeneous mass of wrought steel or iron, in combination with the member E and the king-bolt brace D, substantially as described.

2. The improved platform-gear embodying the braces *c c* and spring-supporting plates *a*, formed as a homogeneous piece of metal, in combination with the fifth-wheel member E, pivoted thereto, and the center brace D, perforated for the king-bolt and extending across the ring E and pivoted thereto and to the braces *c c*, substantially as set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

CHARLES E. WNUCK.

Witnesses:
L. M. HOSEA,
ELLA HOSEA.