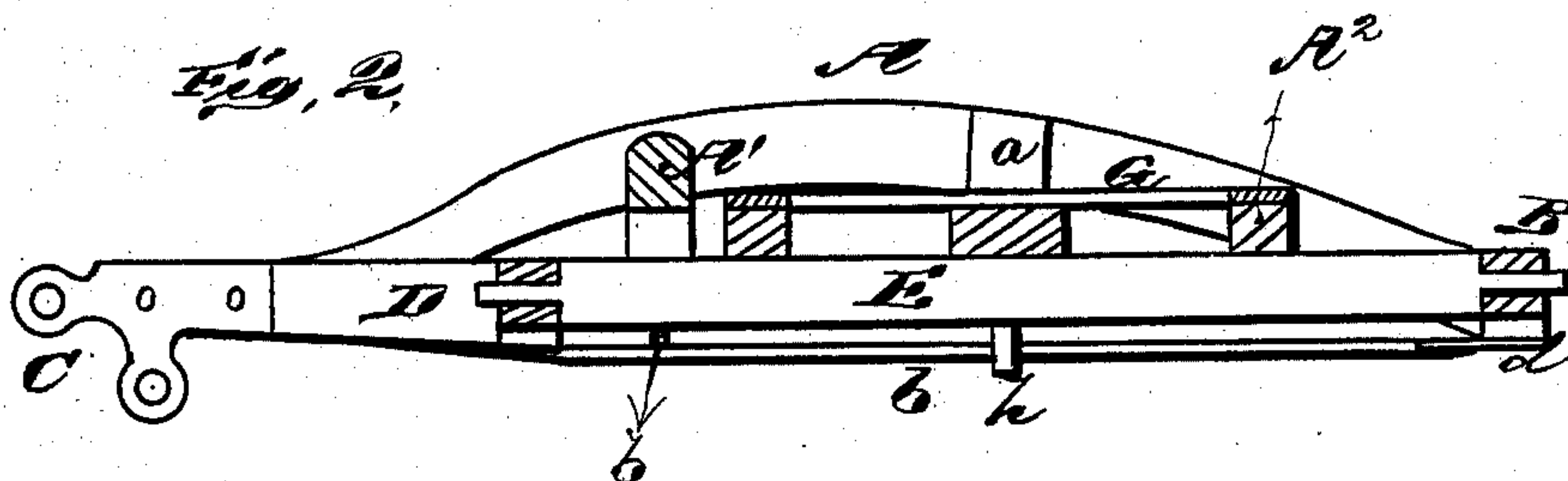
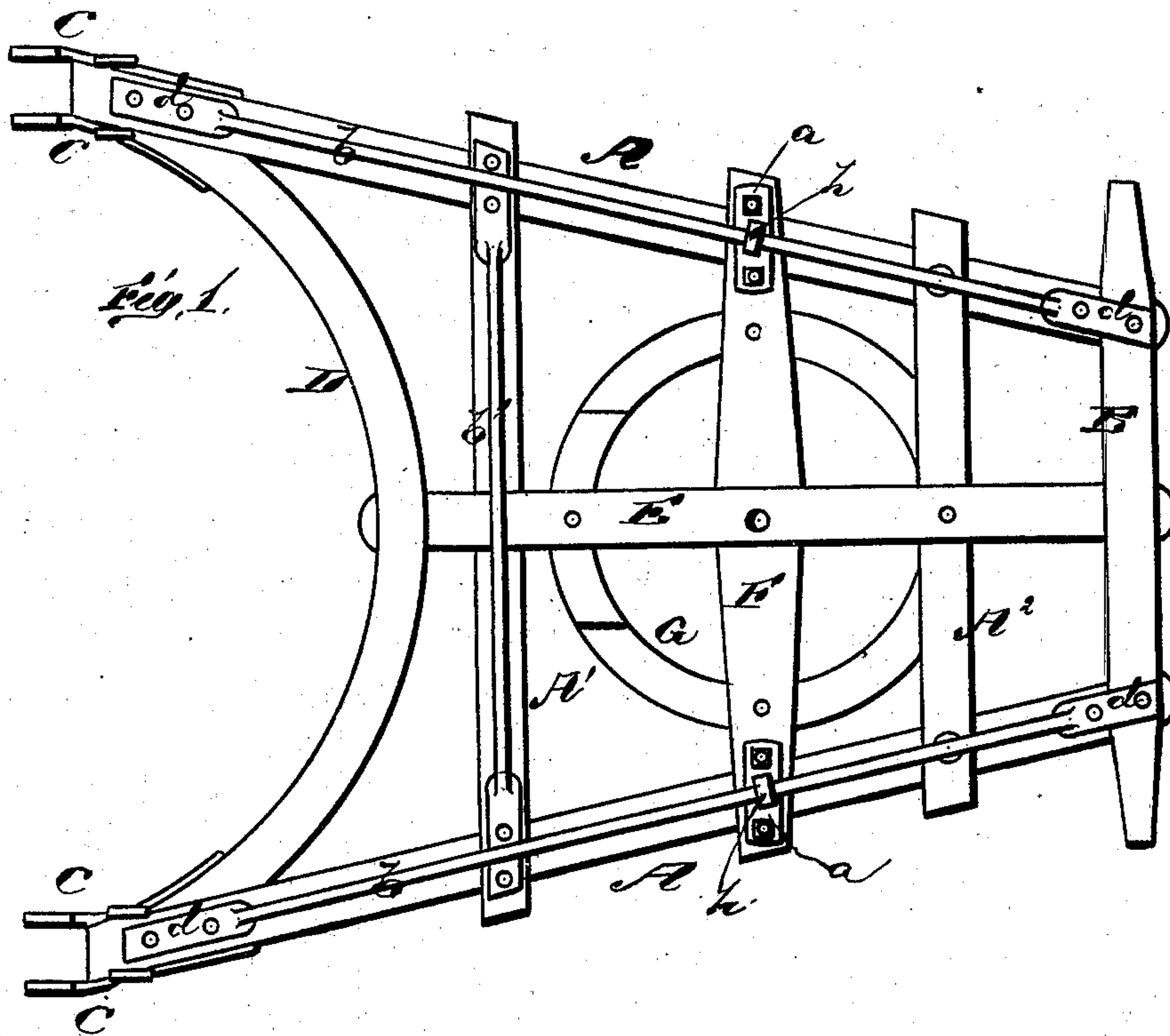


H. L. KINGSLEY.  
Platform-Gear for Wagon.

No. 205,398.

Patented June 25, 1878.



WITNESSES  
*E. H. Bates.*  
*James J. Sheehy.*

INVENTOR.  
*Horace L. Kingsley.*  
*Fillmore, Smith & Co.*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

HORACE L. KINGSLEY, OF RACINE, WISCONSIN.

## IMPROVEMENT IN PLATFORM-GEARS FOR WAGONS.

Specification forming part of Letters Patent No. **205,398**, dated June 25, 1878; application filed April 27, 1878.

*To all whom it may concern:*

Be it known that I, HORACE L. KINGSLEY, of Racine, in the county of Racine and State of Wisconsin, have invented a new and valuable Improvement in Spring-Wagon Gears; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a bottom-plan view of my spring-wagon gear, and Fig. 2 is a longitudinal vertical sectional view of the same.

The nature of my invention consists in certain improvements in a gear for platform spring-wagons, as will be hereinafter more fully set forth.

The annexed drawings, to which reference is made, fully illustrate my invention.

A A represent two arched side beams, having their back ends connected to a head-block, B, and their front ends provided with clip-irons C C, for shaft or pole attachment, and also for attachment to the springs. These arched side beams are closer together at their rear ends than at the front, and their front ends are connected by a rearwardly-curved bar, D, the ends of which are strengthened by the inner clip-plates C.

E is a center bar connecting the head-block B and curved bar D. Across the center of the bar E, on top, is placed a cross-bar, F, the ends of which are fastened to the under sides of the arched beams A by means of ordinary clips *a a*.

The arched side beams A A are further connected by arched beams  $A^1 A^2$ , running across over the bar E, as shown.

Each side bar A is provided with a straight

truss-rod, *b*, fastened, by plates *d d*, to its ends on the under side. This truss-rod passes through a standard or support, *h*, attached to the bottom plate of the clip *a*. The arched beam  $A^1$  is provided with a similar truss-rod, *b'*, as shown. G represents the circle on top.

The arched beams used in this gear may be either sawed to shape or bent, made of wood or made of iron, if desired.

In the gear of this class as now ordinarily used the side bars are straight, as well as their cross-bars, and the ends of the cross-bars rest on top of the side bars.

Gears of this kind have their bearings upon the springs at their extreme ends upon the under side, while it sustains the load or weight of the load upon its upper side and directly in the center. Consequently, however well ironed, a straight gear will sag in the center. This difficulty is entirely obviated in my invention by the use of the arched side beams.

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

1. The combination of the arched side beams A A and the arched cross-bars  $A^1 A^2$ , having their ends below the side beams, as herein set forth.

2. The within-described platform-wagon gear, consisting of the arched side beams A A, with arched cross-bars  $A^1 A^2$ , and truss-rods *b b'*, head-block B, curved bar D, connecting-bars E F, and circle G, all constructed substantially as and for the purposes herein set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

HORACE L. KINGSLEY.

Witnesses:

ERASTUS C. PECK,  
M. D. WELCH.