

T. H. GOURLEY & W. R. LOVELACE.

WAGON-BRAKE.

No. 170,080.

Patented Nov. 16, 1875.

Fig. 1

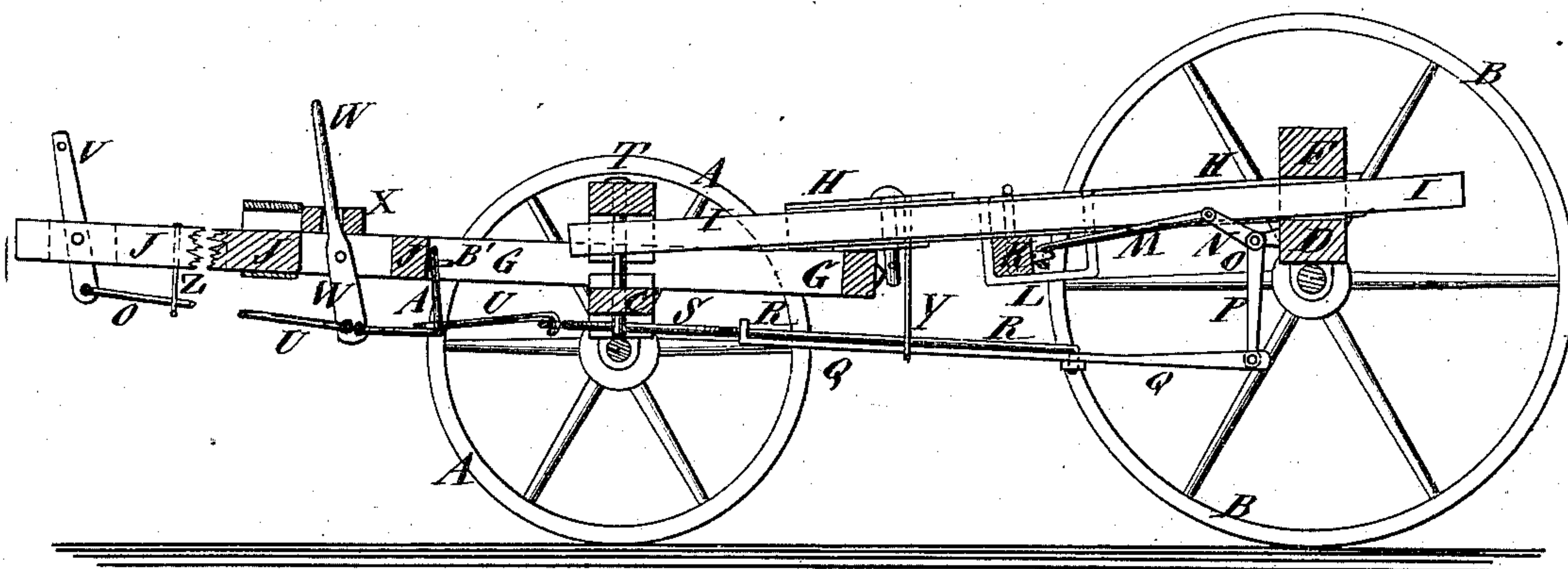
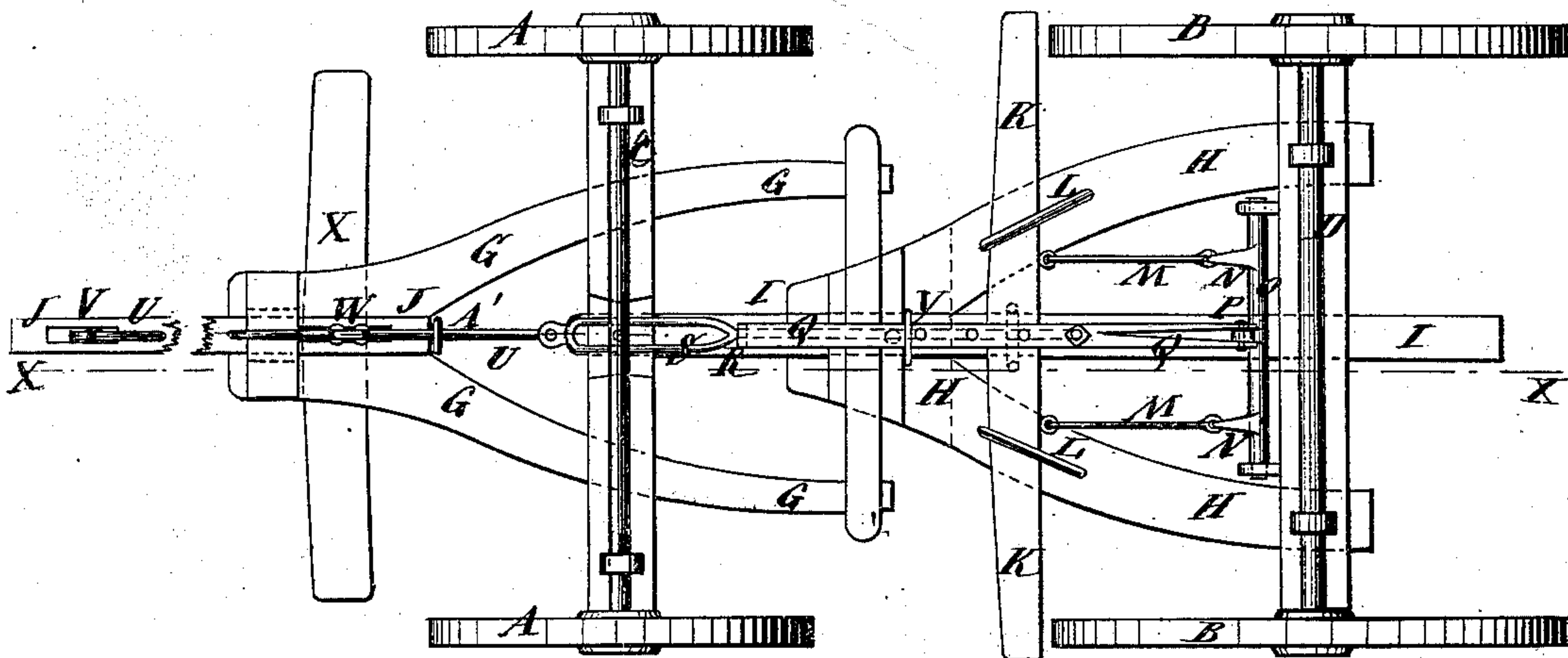


Fig. 2



WITNESSES:

C. Neveu  
A. F. Terry

INVENTOR:

T. H. Gourley  
W. R. Lovelace

BY

M. M. L.

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

THOMAS H. GOURLEY AND WILLIAM R. LOVELACE, OF TALBOTT, TENN.

## IMPROVEMENT IN WAGON-BRAKES.

Specification forming part of Letters Patent No. **170,080**, dated November 16, 1875; application filed November 30, 1874.

*To all whom it may concern:*

Be it known that we, THOMAS H. GOURLEY and WILLIAM R. LOVELACE, of Talbott, in the county of Jefferson and State of Tennessee, have invented a new and useful Improvement in Automatic Wagon-Brake, of which the following is a specification:

Figure 1 is a vertical longitudinal section of the running-gear of a wagon to which our improved brake has been applied, taken through the line *x x*, Fig. 1. Fig. 2 is an under-side view of the same.

Similar letters of reference indicate corresponding parts.

The invention will first be fully described, and then pointed out in the claim.

A represents the fore wheels. B represents the hind wheels. C is the fore axle. D is the rear axle. E is the forward bolster. F is the rear bolster. G are the forward hounds. H are the rear hounds. I is the reach, and J is the tongue, all of which parts are constructed and arranged in the ordinary way. K is the brake-bar, which is supported by and moves back and forth in keepers L, attached to the under side of the rear hounds H. To the rear side of the brake-bar K, and equally distant from its center, are pivoted the forward ends of two rods, M, the rear ends of which are pivoted to the ends of two crank-arms, N, attached to the end parts of a roller, O, that works in bearings attached to the rear axle D. To the center of the roller O is rigidly attached a downwardly-projecting arm, P, to the lower end of which is pivoted the rear end of a bar or rod, Q, which passes forward beneath the reach and hounds to a point a little in the rear of the forward axle C, has its forward end bent upward and perforated to receive the rod R, and has a number of holes formed in its body to receive the hook formed upon the rear end of the said rod R. The forward end of the rod R is slotted, or has a link, S, formed upon or attached to it, which passes through the forward axle C, or through an opening between the forward axle and bolster, and re-

ceives the king-bolt T. To the forward end of the link S is pivoted the rear end of the rod U, which passes forward beneath the tongue J, and its forward end is pivoted to the lower end of the short lever V. The lever V passes up through a short slot formed in the forward part of the tongue J, and is pivoted to said tongue. The upper end of the lever V is designed to be connected with the neck-yoke or harness of the team, so that the operation of holding back may apply the brake to the wheels. W is the hammer-bolt, which passes down through a slot in the rear part of the tongue J, and is pivoted to said tongue. The lower end of the lever-bolt W is pivoted to the tongue-rod U, and upon its upper end is placed the double-tree X. By this arrangement, when draft is applied to the double-tree X, the brake will be withdrawn from the wheels. The middle part of the extension-rod Q R is supported by a loop or keeper, Y, attached to the forward part of the rear hounds H, and the middle part of the tongue-rod U is supported by a loop or keeper, Z, attached to the tongue J. A' is a link, connected with the rod U a little in the rear of the hammer-bolt W, and in such a position that it may be hooked upon a pin or hook, B', attached to the rear end of the tongue J, and which will confine the rod U, so that the wagon may be backed without applying the brake.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The combination of the link A' and pin or hook B' with the tongue J, the lever V, the tongue-rod U, the pivoted hammer-bolt W, the slot or link S, the extension-rod R Q, the armed roller P O N, the connecting-rods M, and the brake-bar K, substantially as herein shown and described.

THOMAS H. GOURLEY.  
WILLIAM R. LOVELACE.

Witnesses:

M. A. ROBERTS,  
J. S. BETTIS.