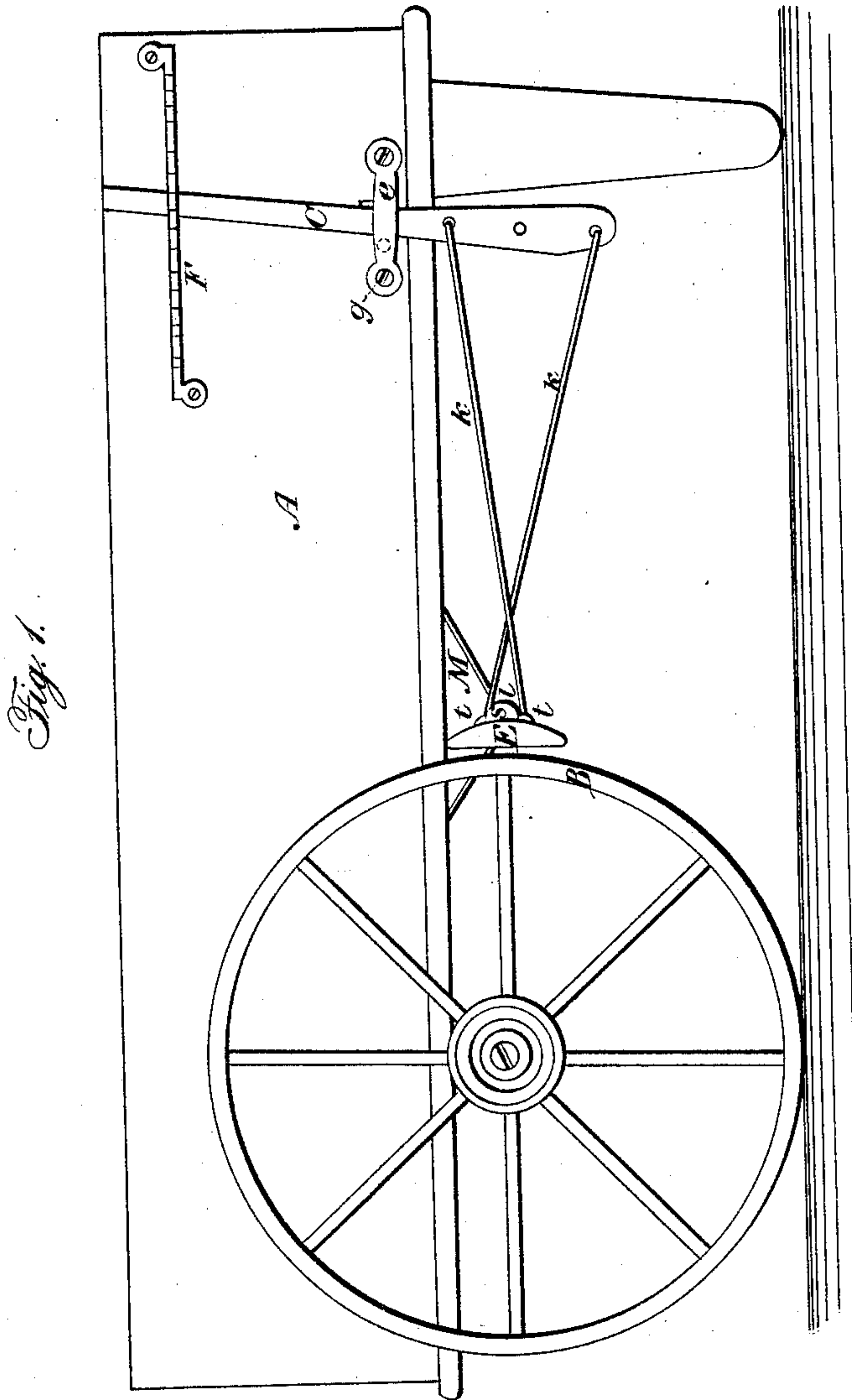


KIRKMAN & GRAY.

Wagon-Brake.

No. 62,638.

Patented Mar. 5, 1867.



Witnesses:

F. Schmaehl
A. H. Estlin

Inventor:

D. Kirkman
E. H. Gray
J. H. Alexander & Co
attys

United States Patent Office.

D. J. KIRKMAN AND E. H. GRAY, OF WINCHESTER, ILLINOIS.

Letters Patent No. 62,638, dated March 5, 1867.

IMPROVEMENT IN WAGON BRAKE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, D. J. KIRKMAN and E. H. GRAY, of Winchester, Scott county, Illinois, have invented certain new and useful improvements in Brakes for Wagons; and we hereby declare that the following is a true, full, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1, in the drawings, which make a part of this specification, represents a side elevation of a two-wheel vehicle with the brake attached.

The letter A designates the body, and B the wheels. C represents a metal bar occupying nearly a vertical position on the outer side of body A and near its front end. Near the bottom of the body A is the stirrup e, which is securely fastened to the said body. The stirrup e is intended as a guide or support for the metal bar C, which is provided with two projections at its opposite edges. The stirrup e is furnished with a pulley, g, (in dotted lines,) the office of which will be hereinafter described. The lower end of bar C extends below the bottom of the wagon, and is perforated to receive the two metal rods k, which cross each other, and at their opposite ends are hooked in the eyes t on the brake bar S. On each end of the bar S is fastened the block E. The bar S is kept in position by the cleats M and the metal strap i, which is passed under the bar S, and securely fastened at its ends to cleat M. F represents a serrated metal plate, the ends of which are fastened to the body A, near the front end of A. The serrated edge of F is placed on its inner side, and sufficiently removed from the wagon body A to admit of the free play of the bar C, which operates in the space between the plate F and the side of A.

In operating my machine, when it is desired to apply the brake to arrest the motion of the wheels, the bar C will be pushed forward, and by the action of the rod k the bar S will be moved towards the wheels so that the blocks at each end of S will press against them and retard or arrest their motion at the option of the operator. In order to relieve the wheels from the pressure of the brake, the bar C will be drawn back to vertical position, and then suffered to fall until the lower projection on bar C and strikes against the pulley g, which, with a revolving motion, throws the upper projection on bar C against the opposite side of stirrup e, where it is caught and held firmly, while the upper end of bar C will cut against one of the teeth in plate F.

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

The bar C, in combination with the serrated plate F, stirrup e, the rods K K, the cleat M, furnished with strap i, and the bar S, the whole constructed and arranged and operating as and for the purpose herein set forth.

In testimony that we claim the foregoing as our own, we hereby affix our signatures in the presence of two witnesses.

D. J. KIRKMAN,
E. H. GRAY.

Witnesses:

T. H. KIRKMAN,
WILLIAM BALSLEY.