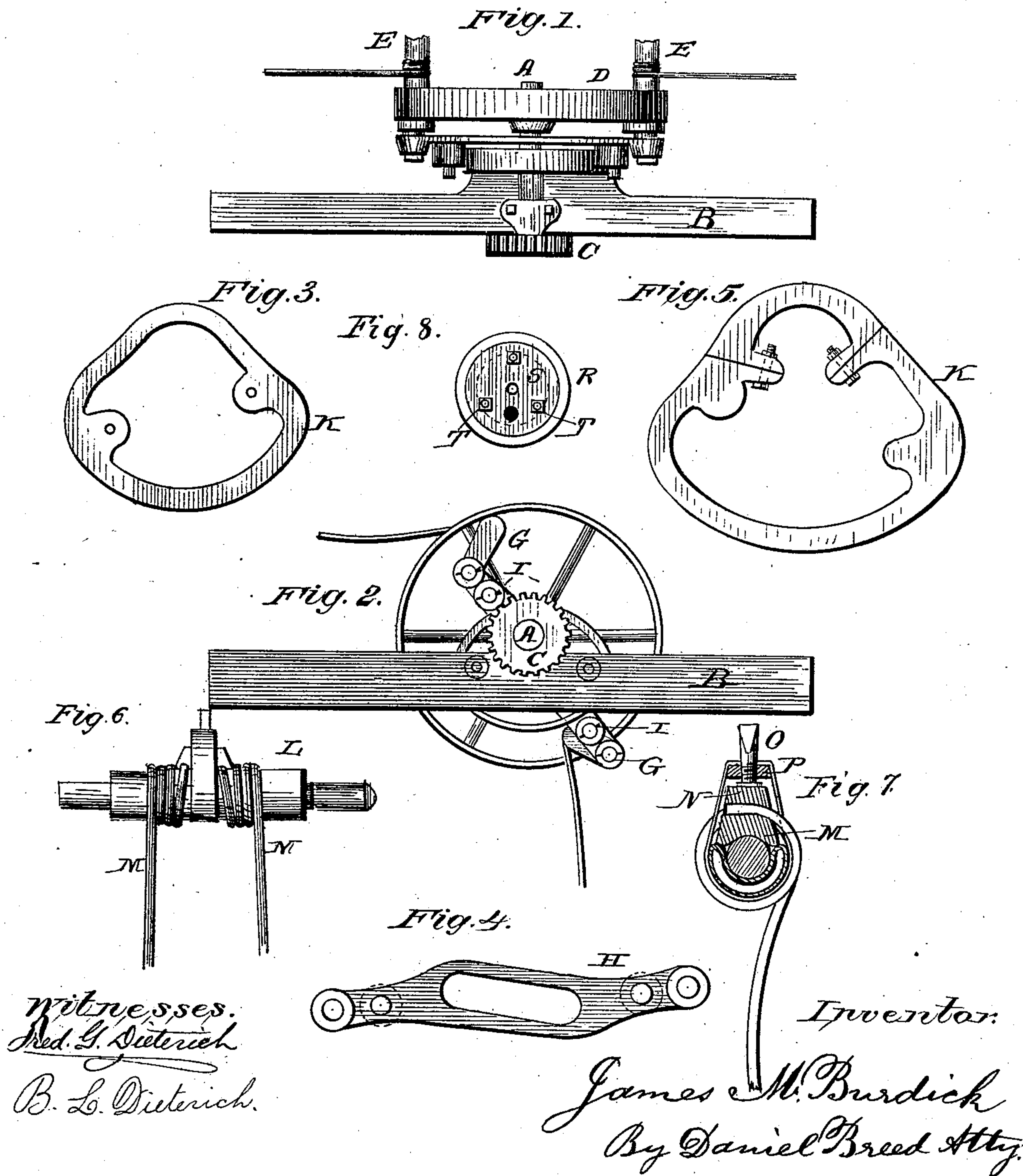


J. M. BURDICK.
Hay-Tedder.

No. 226,711.

Patented April 20, 1880.



UNITED STATES PATENT OFFICE.

JAMES M. BURDICK, OF BROWNSBURG, PENNSYLVANIA.

HAY-TEDDER.

SPECIFICATION forming part of Letters Patent No. 226,711, dated April 20, 1880.

Application filed December 8, 1879.

To all whom it may concern:

Be it known that I, JAMES M. BURDICK, of Brownsburg, in the county of Bucks and State of Pennsylvania, have invented certain new and useful Improvements in Hay-Tedders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

In the drawings, Figure 1 is a top view of part of the frame of a hay-tedder to which is attached one end of the tedder-reel with my improvements. Fig. 2 is a side view thereof. Figs. 3 and 5 are detached views of the cam. Fig. 4 is a detached view of the slotted cross-bar. Figs. 6 and 7 are detached views of devices for holding the forks on the fork-rods.

My invention consists, first, of two rollers connected by a cross-bar and traveling on opposite sides of a cam, for the purpose of operating two sets of forks; and, secondly, of novel devices for connecting the forks to the fork-rods.

In the construction of my improved hay-tedder the reel-axle A is journaled upon the bar B, and receives motion by means of the gear-wheel C, in the usual manner. This axle A carries a disk, D, which forms one end or head of the reel, near the rim of which are journaled the fork-rods E.

The first part of my improvements consists in vibrating the fork-rods E of the tedder by means of cranks G, which are connected together by a cross bar or rod, H, the ends of which are pivoted on the wrists of the opposite cranks. Upon this bar H are two rollers, I, having a rubber tread, working loosely on their axes, which may be made adjustable in slots in the bar. These rollers move on the surface of an irregular-shaped cam, K, fixed on the tedder frame or bar B, and eccentric relatively to the shaft A of the reel.

I prefer to make the cam in two parts, as seen in Fig. 5. This cam is symmetrical, and the two rollers, bearing on opposite sides, hold each other to their work, and thus balance the strain and work with great ease.

The second feature of my improvements relates to holding the forks on the fork-rods.

In Figs. 6 and 7 are shown the forks and fork-rods detached.

The fork-rod E is inserted into a pipe or tube, L, around which the forks M are coiled. This tube L is cut away and block M' inserted, with a bearing on the cut edges of the tube, as seen in Fig. 7. Then the end or heel of the coil is caught by a second block, N, and firmly clamped in place by the set-screw O and clip P. This forms a simple, very light, and easily-adjusted fastening to hold the forks to the fork-rods.

Fig. 8 represents one of the rollers I, consisting of a ring or disk of rubber, R, securely held between two disks or plates of metal, S S, by means of rivets or bolts T.

Having described my invention, what I claim is—

1. The cross-bar or connecting-rod H, pivoted to the cranks G, and provided with two rollers, I, traveling and bearing on the two sides of the cam K, for the purpose of vibrating the fork-rods and fork, substantially as set forth.

2. The combination of the tube or sleeve L, cut away at one side, as shown in Fig. 7, with the clip P, screw O, two blocks, M' and N, and forks M, substantially in the manner and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 28th day of October, 1879.

JAMES M. BURDICK.

Witnesses:

C. C. B. JOHNS,
ALEX. B. JOHNSON.