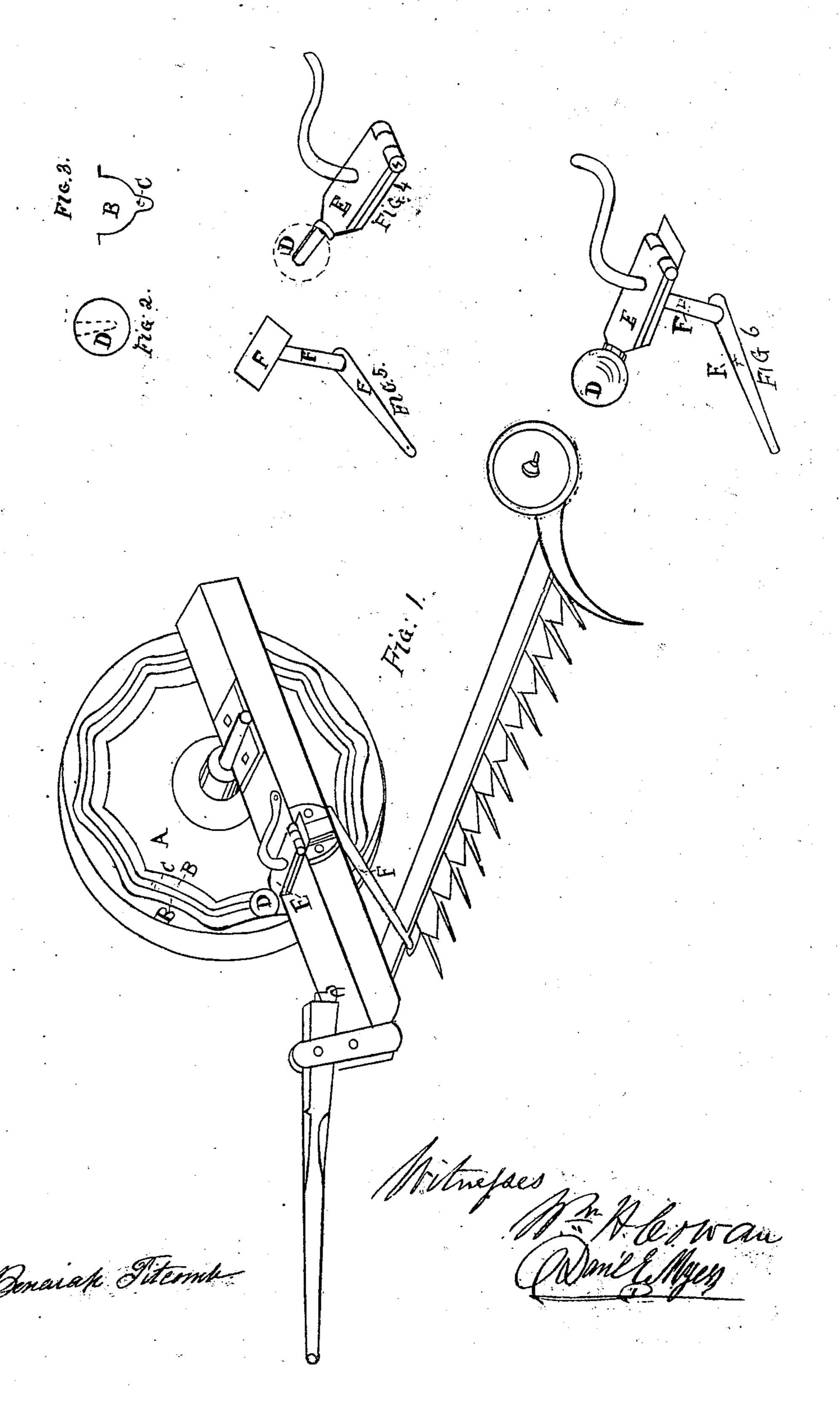
B. Titcomb.

Mower.

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Patented June 5, 1860



## United States Patent Office.

BENAIAH TITCOMB, OF BALTIMORE COUNTY, MARYLAND.

## IMPROVEMENT IN HARVESTING-MACHINES.

Specification forming part of Letters Patent No. 28,618, dated June 5, 1860.

To all whom it may concern:

Be it known that I, BENAIAH TITCOMB, of the sixth election district of the county of Baltimore, and the State of Maryland, have invented a new and useful Improvement on the Harvesting-Machine; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which—

Figure 1 is a perspective view of the machine; Fig. 2, friction roller or ball D; Fig. 3, the shape of the double semicircular cam or groove B and C; Fig. 4, the hinged lever E; Fig. 5, the rock-shaft or crank F; and Fig. 6, rock-shaft and hinged lever connected.

The nature of my invention consists in the arrangement of a hinged lever provided with a spherical friction-roller or its equivalent for communicating motion to the cutters from the cam-groove of the driving-wheel, so that by the use of a rod or lever the friction-roller can be instantly thrown from the cam-groove while the machine is in motion, and also so that it will be thrown out of gear in backing the machine, substantially as hereinafter described.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I construct my main or driving wheel A of iron, with a double semicircular cam or corrugated groove, B and C, or groove within a groove, sunk in the side or disk or inner surface. I next construct a friction roller or ball of a spherical shape, adapted to the size of the

groove B and operating therein, which, by its revolving motion, will clear the groove of all foreign matter which may come in contact with the groove. I then construct my hinged lever E, or its equivalent, which I firmly attach to the top of rock-shaft or crank F. On the end of said hinged lever E, next to the wheel, is placed the ball or roller D, working on a journal or axle, and at a suitable distance therefrom I construct a hinge, attached to the said rock-shaft or crank F, whereby the roller, by the aid of a lever or its equivalent, may be instantly thrown from the cam groove by the driver while the machine is in motion, thereby leaving the wheel free from all connection with the cutters, avoiding all accidents which might otherwise happen. In backing the machine the roller will be automatically thrown up and out of the cam.

Being aware that cam-grooves have been used for the purpose of giving motion to the cutters, and that various shapes of rollers have been used in connection therewith, I do not claim to be the inventor of cam-grooves or of friction rollers operating therein; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

The hinged lever E, provided with the spherical roller D, or its equivalent, constructed, arranged, and operating substantially and for the purpose as set forth.

BENAIAH TITCOMB.

Witnesses:

DANL. E. MYERS, ANDR. C. GREGG.