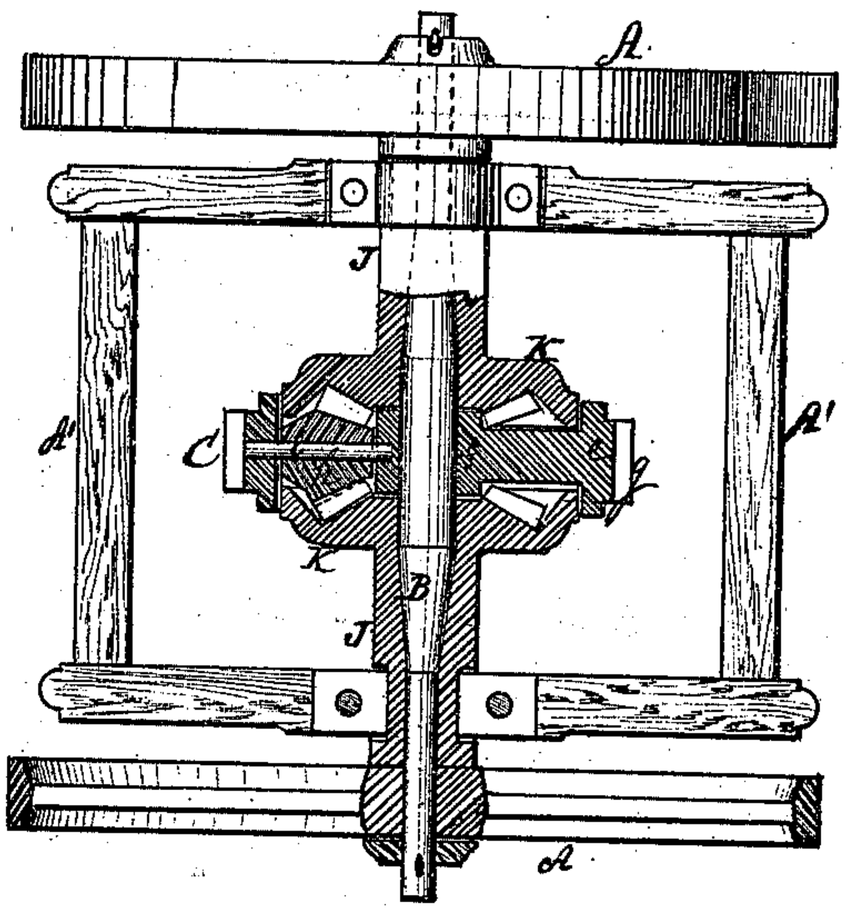
T. Salisbury,

Mill Gearing.

No. 94,844. Patented Sept. 14. 1869



Witnesses:

Geo. N. Mabee

Jno. K. Brooks

Inventor:

T. Salisbury

Per Munn & Co

Attorneys.

United States Patent Office.

T. SALISBURY, OF ALBION, PENNSYLVANIA.

Letters Patent No. 94,844, *dated September* 14, 1869.

IMPROVEMENT IN THE ARRANGEMENT OF GEARING FOR DRIVING AGRICULTURAL MACHINERY.

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

To all whom it may concern:

Be it known that I, T. SALISBURY, of Albion, in the county of Erie, and State of Pennsylvania, have invented a new and useful Improvement in Arranging Gearing; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to a new and useful improvement in arranging gearing for driving agricultural machinery, and for other purposes; and consists in a combination of two bevel-wheels and bevel-pinion, with a spur-wheel, as hereinafter more fully described.

The accompanying drawing represents a sectional plan view of gearing, arranged to operate according to my invention.

Similar letters of reference indicate corresponding parts.

The main object of this invention is to equalize the power applied, by means of two driving-wheels, while a spur-gear wheel is revolved with the driving-wheel at a uniform rate of speed therewith.

A A represent the two driving or traction-wheels.

B is the axle, to which a spur-wheel, C is securely attached.

e is the rim, and *f* is the hub of this spur-wheel.

g represents the cogs.

In a recess between the rim and the hub of this wheel, a bevel-pinion, *h*, is placed, which revolves on the arbor *i*.

Each of the driving-wheels A A has sleeve-hubs J, which are shown mostly in section.

Upon the inner ends of these hubs are bevel-wheels K, which face toward the spur-wheel C, and engage with the bevel-pinion *h*.

By this arrangement, it will be seen that the driving-wheels A A act upon the the spur-wheel C, independently of each other, and that any variations in the speed of the two driving-wheels, as, for instance, in turning corners or curves, or going over uneven ground, will not affect the power applied.

The flexible nature of this connection allows each wheel, without regard to its position, to exert the full force due to its traction upon the spur-wheel, thus compensating for any slack motion, and equalizing their action.

A′ represents a platform, resting on the sleeves J J.

It will be seen that while the driving-wheels turn upon or revolve around the axle C, the axle itself makes a revolution in the same direction, and in the same space of time.

For driving various kinds of machinery, especially and principally machines applied to agriculture, this arrangement of gearing will be found to be of the greatest service, as the ruinous consequences produced by unduly straining any one part of the driving-machinery is avoided.

Having thus described my invention,

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

The combination, with sleeves J J, rotating loosely upon the same continuous axle B, of a spur driving-gear, C, fastened fixedly thereon, the intermediate parts being substantially as shown and described.

T. SALISBURY.

Witnesses:

JEDUTHUN WELLS

S. A. SANDERS.