

I. STRAUB.
Wind-Wheel Powers.

No. 138,593.

Patented May 6, 1873.

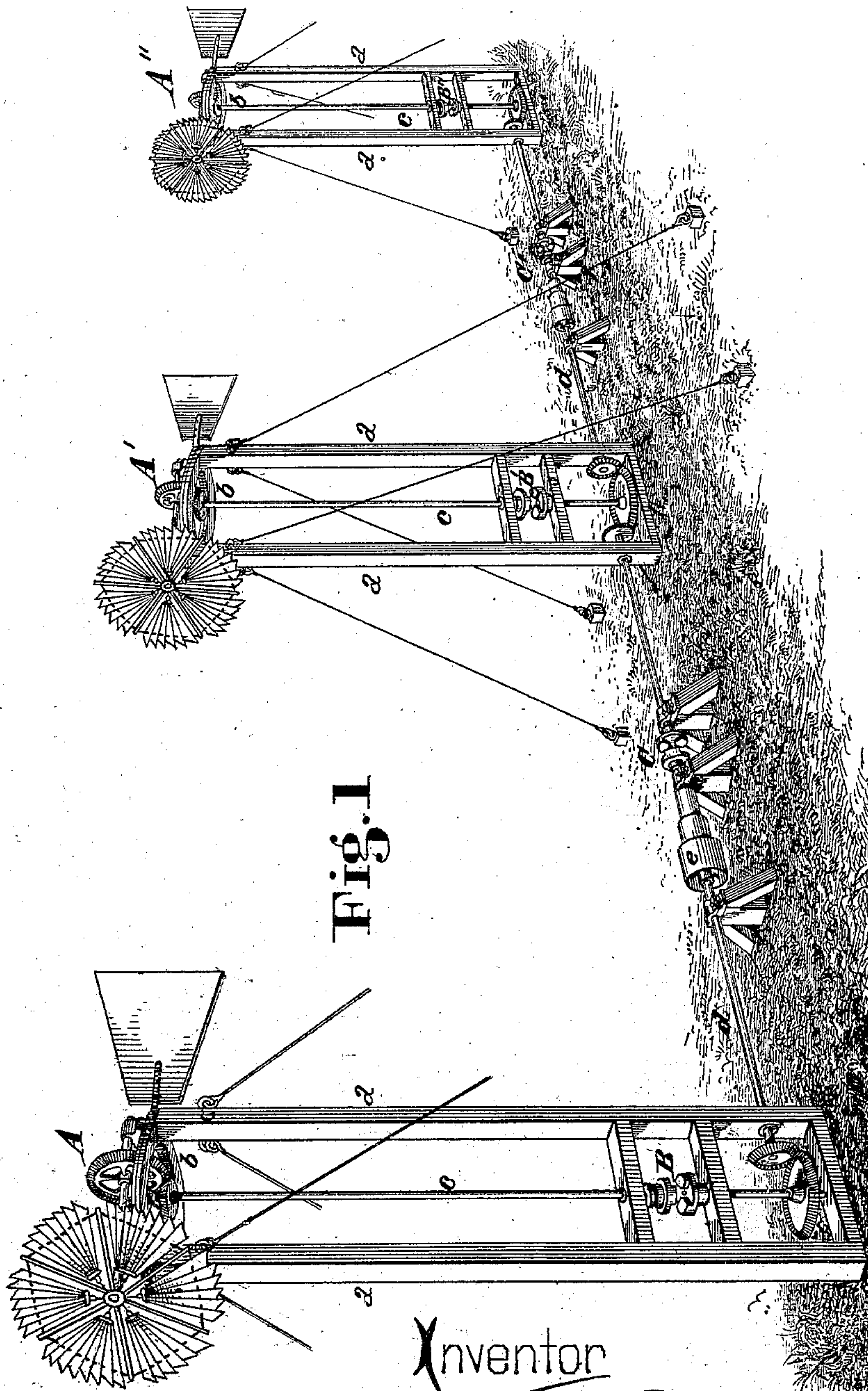


Fig. 1

Inventor

Attest
John O'Hara
C. H. Shoemaker

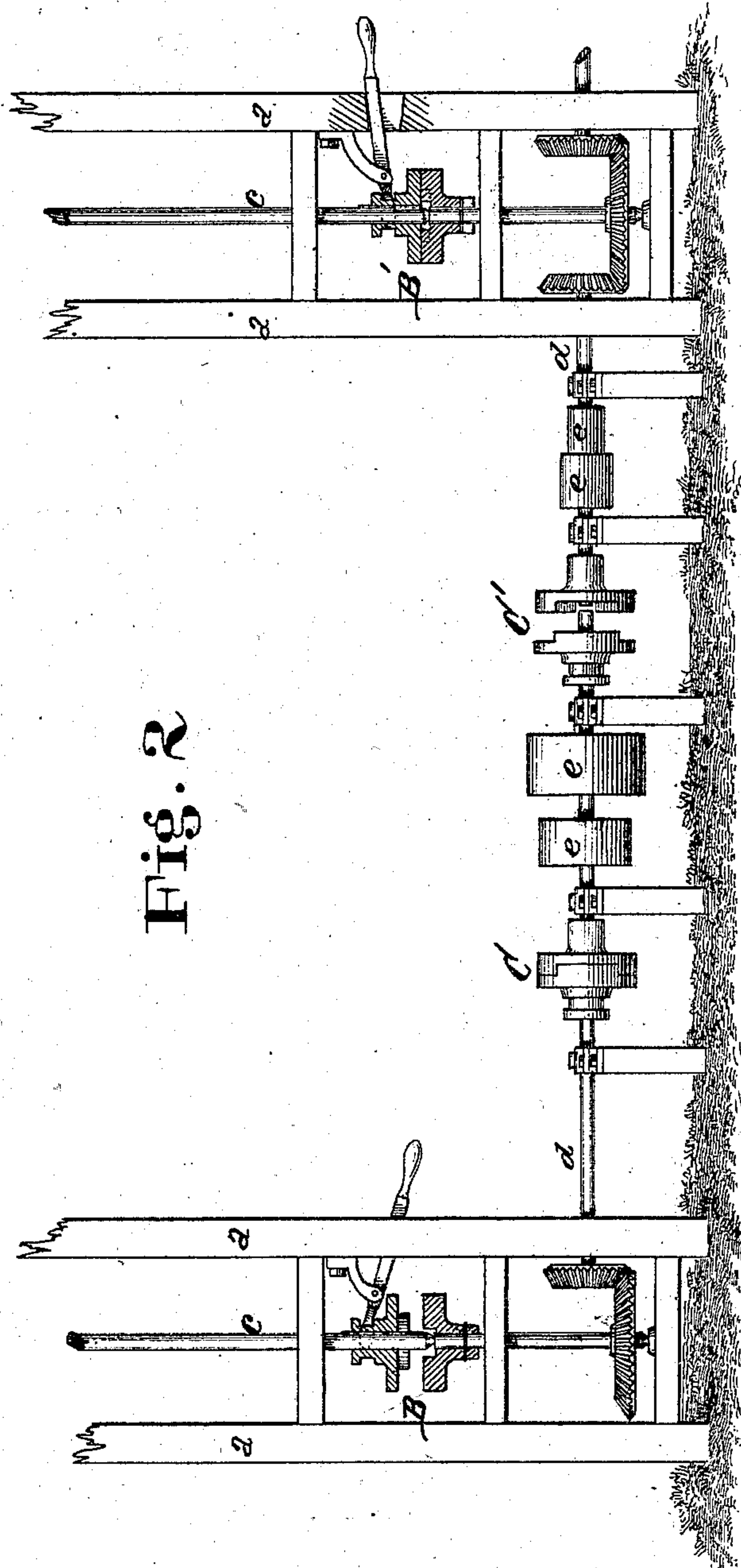
Isaac Straub

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Fig. 2



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Essexmaker

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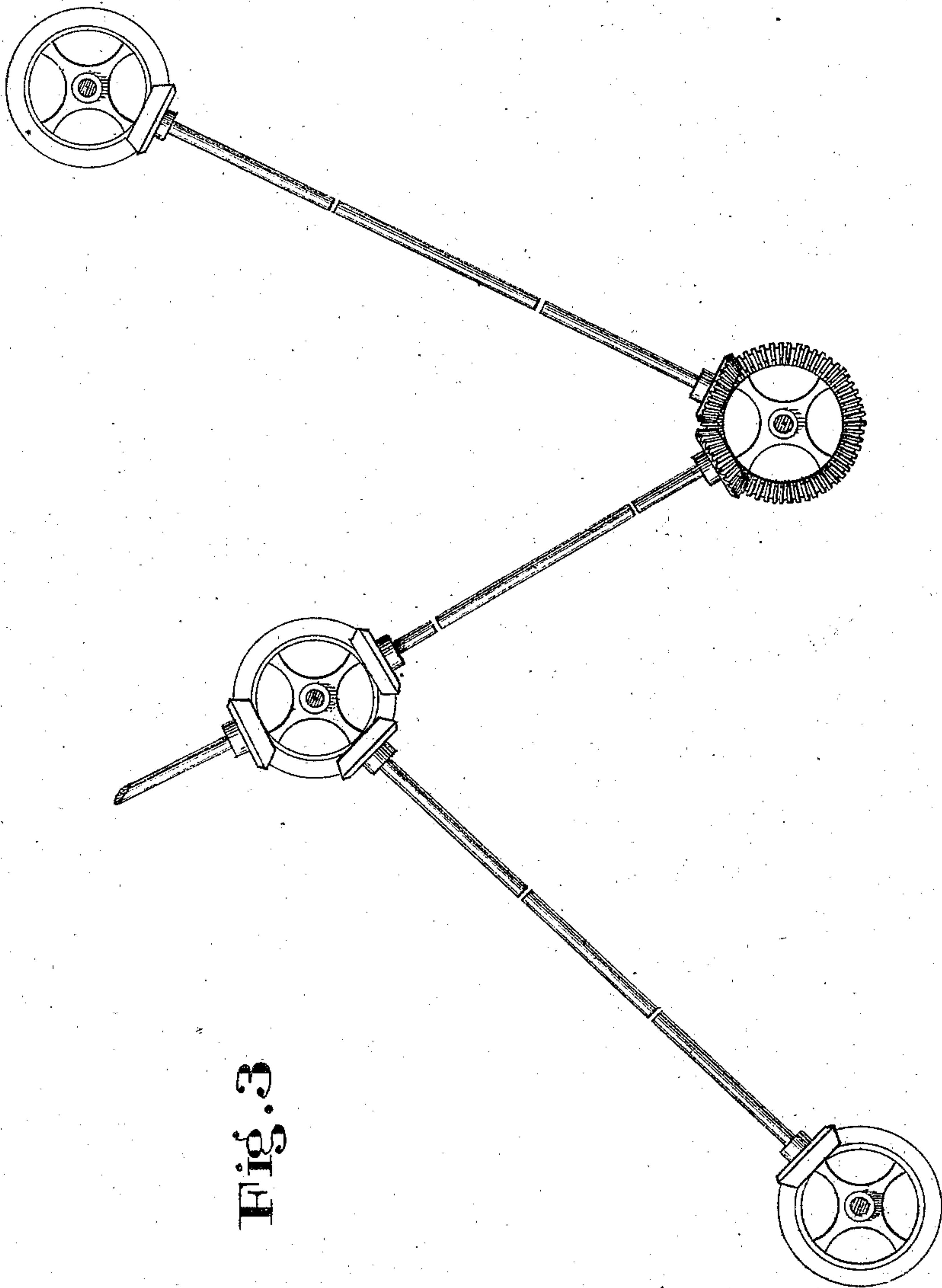


Fig. 3

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John Q. Gara
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UNITED STATES PATENT OFFICE.

ISAAC STRAUB, OF KENTON COUNTY, KENTUCKY.

IMPROVEMENT IN WIND-WHEEL POWERS.

Specification forming part of Letters Patent No. **138,593**, dated May 6, 1873; application filed March 14, 1873.

To all whom it may concern:

Be it known that I, ISAAC STRAUB, of Kenton county, (the second toll-gate precinct,) in the State of Kentucky, have invented a new and useful Improvement in the Mode of Augmenting Wind-Power; and I do hereby declare the following is a fair, full, clear, and lucid description of the same.

My invention is designed to enable users of wind-power to augment the force of it as the increase of business requires; and consists in such a construction of the framing and driving-shafting from each wind-wheel that two or more wind-wheels mounted on separate towers can be connected together to drive collectively or in harmony, thus enabling the erection of additional towers with wind-wheels mounted to assist one or more wheels and towers previously used, each tower and wind-wheel being a complete and finished structure of its own. Each tower is made of two pieces of timber, four by sixteen inches, (see Figs. 1 2, *a a a a*,) well bolted together, about thirty inches apart, by means of suitable cross-timbers, Fig. 1. The whole is held firmly vertical in position by stay-rods, Fig. 1, *A A' A''* in the drawing, which is part of this specification.

I do not confine myself to height of tower or size of timber; thirty feet high will do, but higher will do better, a turn-table, *b b b*, on top of tower, with a good, cheap, and strong wind-wheel, *A A' A''*, Fig. 1, with gearing, driving a vertical shaft extending downward, Fig. 1, *c c c*. At a suitable distance from the ground, the vertical shaft is geared to a line-shaft, *d d*, with pulleys *e e' e'' e'''*, Fig. 2, and clutch-couplings. The power furnished by the wheels is transmitted to grinding grain, sawing wood, &c.

By this mode of augmenting wind-power, tower and wheel to tower and wheel added, and wind-wheels coupled together, as described

and shown in the drawing, the wind-power becomes limitless by adding tower wind-wheel and fixtures to tower wind-wheel and fixtures. These towers, wind-wheels, and fixtures are as completely individual and separate and independent of each other as if they stood miles apart; notwithstanding, they can be harmonized to act in accord with each other, set in a straight row, or joined together from all points of the compass, (see Fig. 3,) whatever their number.

By means of clutch-couplings *B B'*, Fig. 2, on the vertical shaft, each wind-wheel can be disconnected, taken down for repairs by the peculiar arrangement of gearing, the power transmitted from either side and beyond the interrupted one until repairs are finished, all the others going on uninterrupted.

In a strong wind, by means of the clutch-couplings *c c c*, Fig. 2, all the wind-wheels and towers can be separated, and each one used by itself. In a slack wind by the same means all the towers and wind-wheels can be coupled together, thus concentrating the whole number on a single grinding-mill, or pump, or corn-sheller, or saw. The speed of the wind-wheels is regulated by a graduating feeder to the grinding-mills. When not wanted, all can be chained fast and stopped.

What I claim is—

In combination with a series of wind-wheels, arranged upon independent towers, and a driving or power-transmitting shaft common to all the wind-wheels, connecting and disconnecting mechanism whereby any one of the series may be attached to or detached from the common shaft without interfering with the others, substantially as described.

Kenton county, Kentucky, March 12, 1873.

ISAAC STRAUB.

Witnesses:

JOSEPH HARGRAVE,
GEORGE A. SNYDER.