

(No Model.)

R. H. YALE.
Traction Wheel

No. 238,014.

Patented Feb. 22, 1881.

Fig. 1.

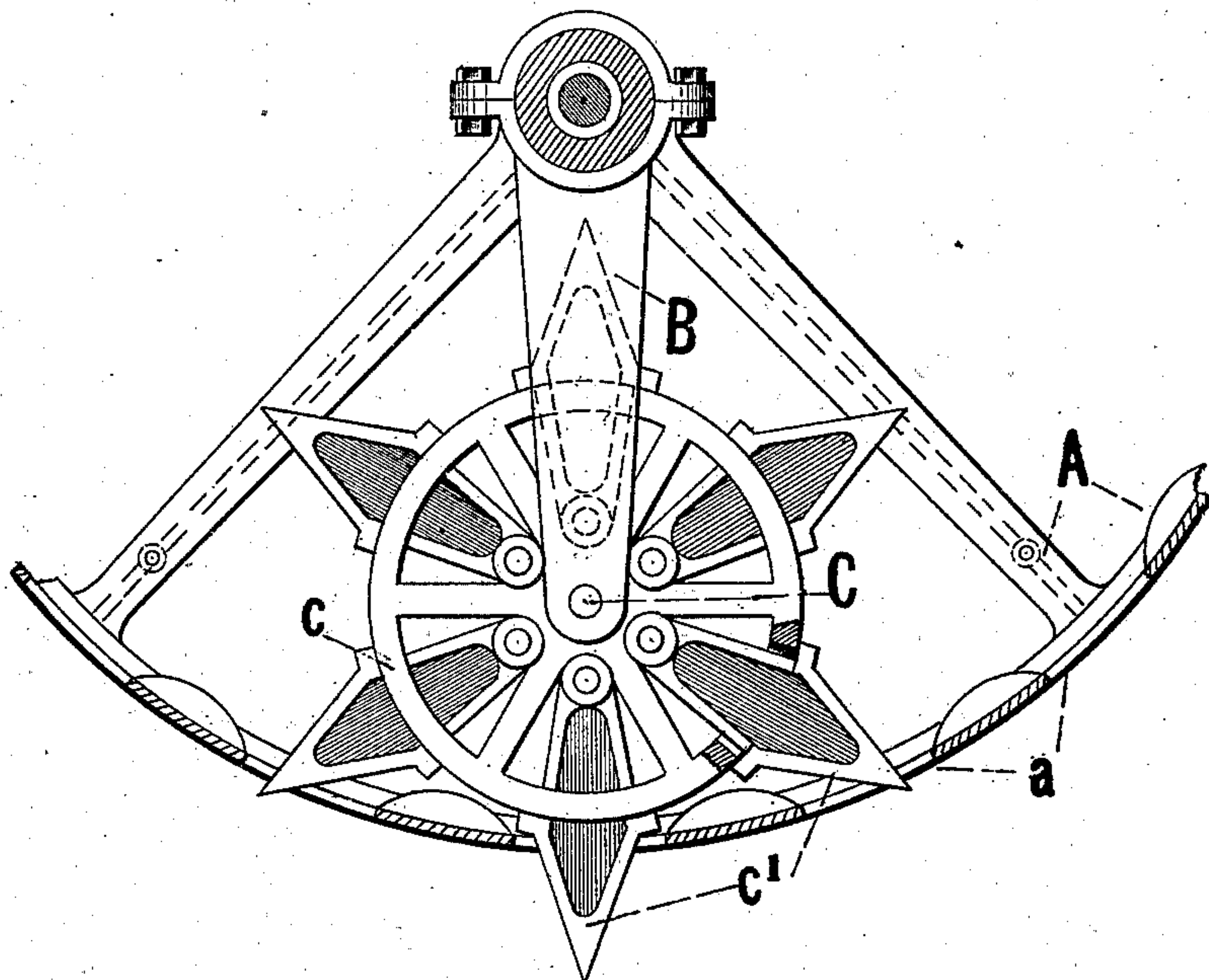
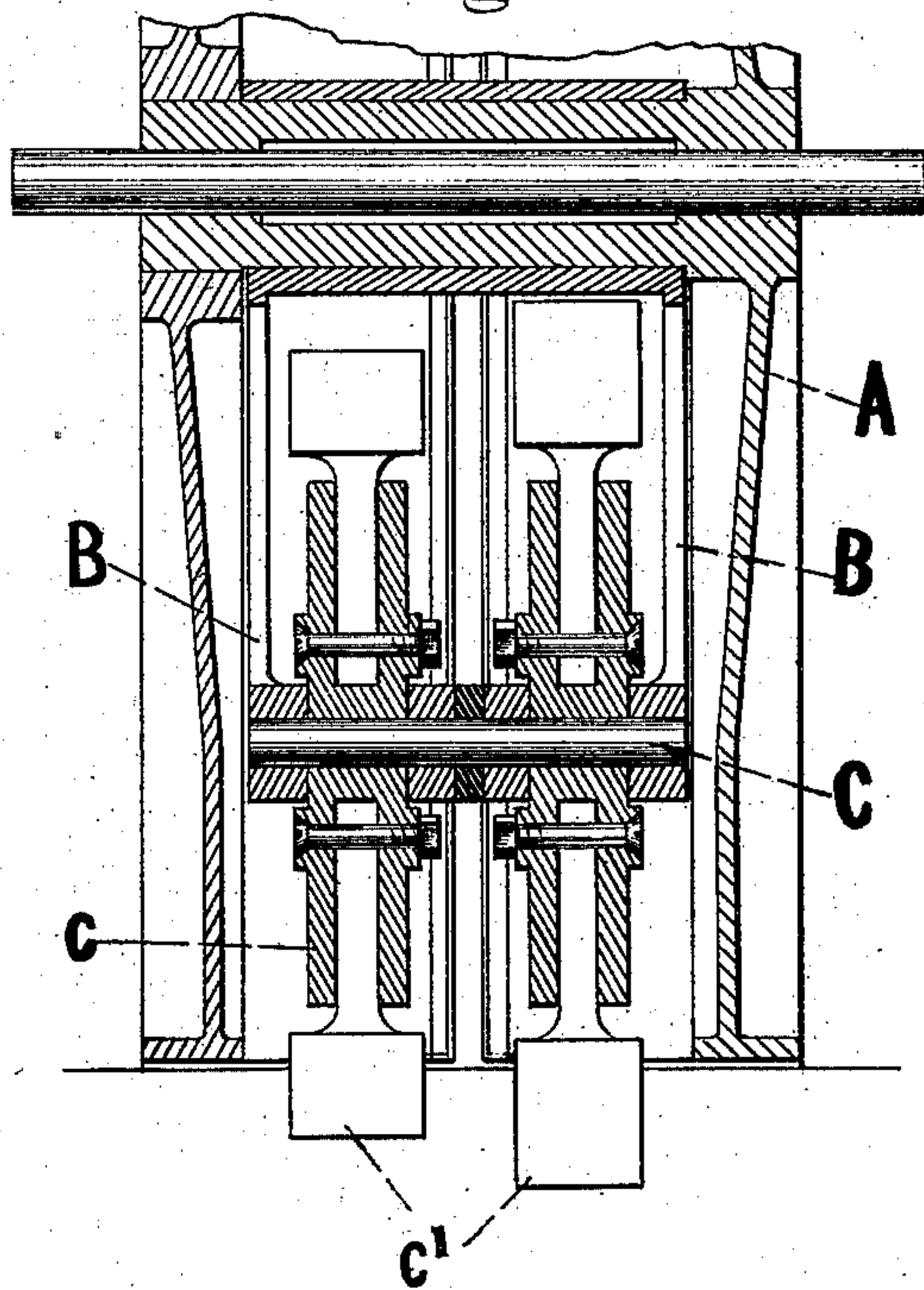


Fig. 2



WITNESSES:

T. S. West

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INVENTOR:

R. H. YALE,

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ATTYS.

UNITED STATES PATENT OFFICE.

RICHARD H. YALE, OF NEW ORLEANS, LOUISIANA.

TRACTION-WHEEL.

SPECIFICATION forming part of Letters Patent No. 238,014, dated February 22, 1881.

Application filed July 20, 1880. (No model.)

To all whom it may concern:

Be it known that I, RICHARD H. YALE, of New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and
5 useful Improvement in Traction-Wheels; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked
10 thereon.

This invention is an improvement upon my Patent No. 193,680, July 31, 1877; and it consists, mainly, in uniting the spurs or blades of the spur-wheel to the hub of the same by means
15 of a pivot-connection, so that each blade or spur has a movement independent of its fellows within certain limits, as will be fully described hereinafter.

In the drawings, Figure 1 represents a side
20 elevation of my improved spur-wheel, and Fig. 2 a transverse sectional elevation of the same.

To enable others skilled in the art to make my improved wheel and properly use the same, I will proceed to describe fully the construction of the same and its manner of operation.
25

A represents the main wheel, adapted by preference to serve as a caster-wheel, which is provided upon its periphery with a series of openings, *a a*, substantially like those described in my patent before referred to.
30

B B represent the dependent arms or links supporting the shaft C of the spur-wheel, as shown.

c represents a wheel located upon the shaft C, which is provided with recesses or openings 35 for receiving and holding the body portion of the blades or spurs.

c' represents the blades or spurs held in the recesses of the wheel, each of which is strongly united at its base to the hub by means of a
40 pivot-connection, as shown. The recesses of the wheel *c*, it will be observed in Fig. 1, are made long enough to permit the spurs to move freely upon their pivots within certain limits.

The general operation of my improved wheel 45 is the same as that of the wheel described in my patent before referred to. Owing to the pivoting of the spurs, however, each one has a freedom of action in entering the openings in the main wheel, by means of which the slipping of the wheel is more perfectly prevented.
50

Having thus fully described my invention, what I desire to secure by Letters Patent is—

1. In combination with a main wheel, a spur-wheel having pivoted blades, substantially as
55 described.

2. In combination with the main wheel, the spur-wheel having the wheel *c* and pivoted blades, as described.

This specification signed and witnessed this 60 17th day of July, 1880.

R. H. YALE.

Witnesses:

ANDREW HERO, Jr.,
D. I. DOWERS.