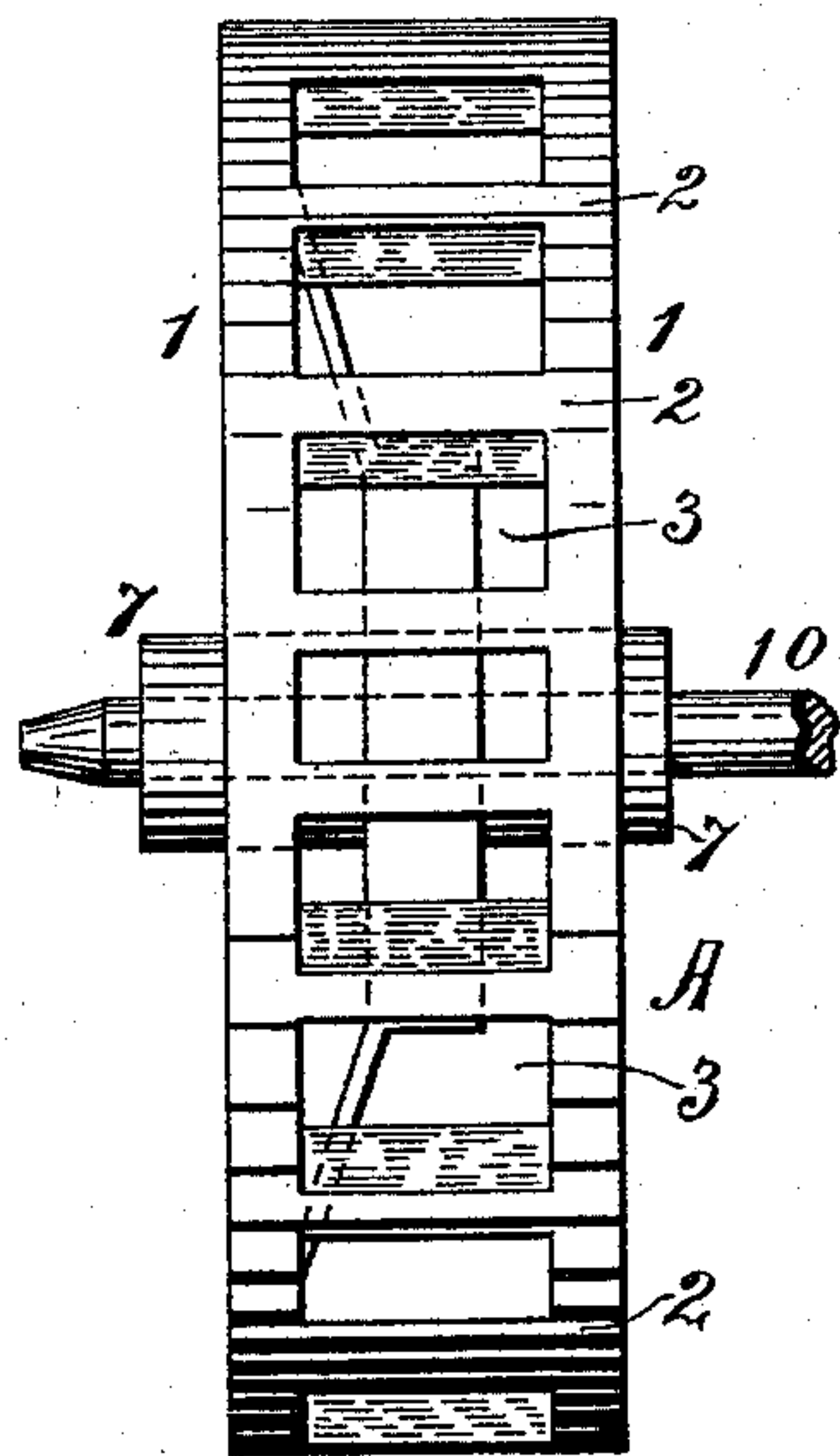


(No Model.)

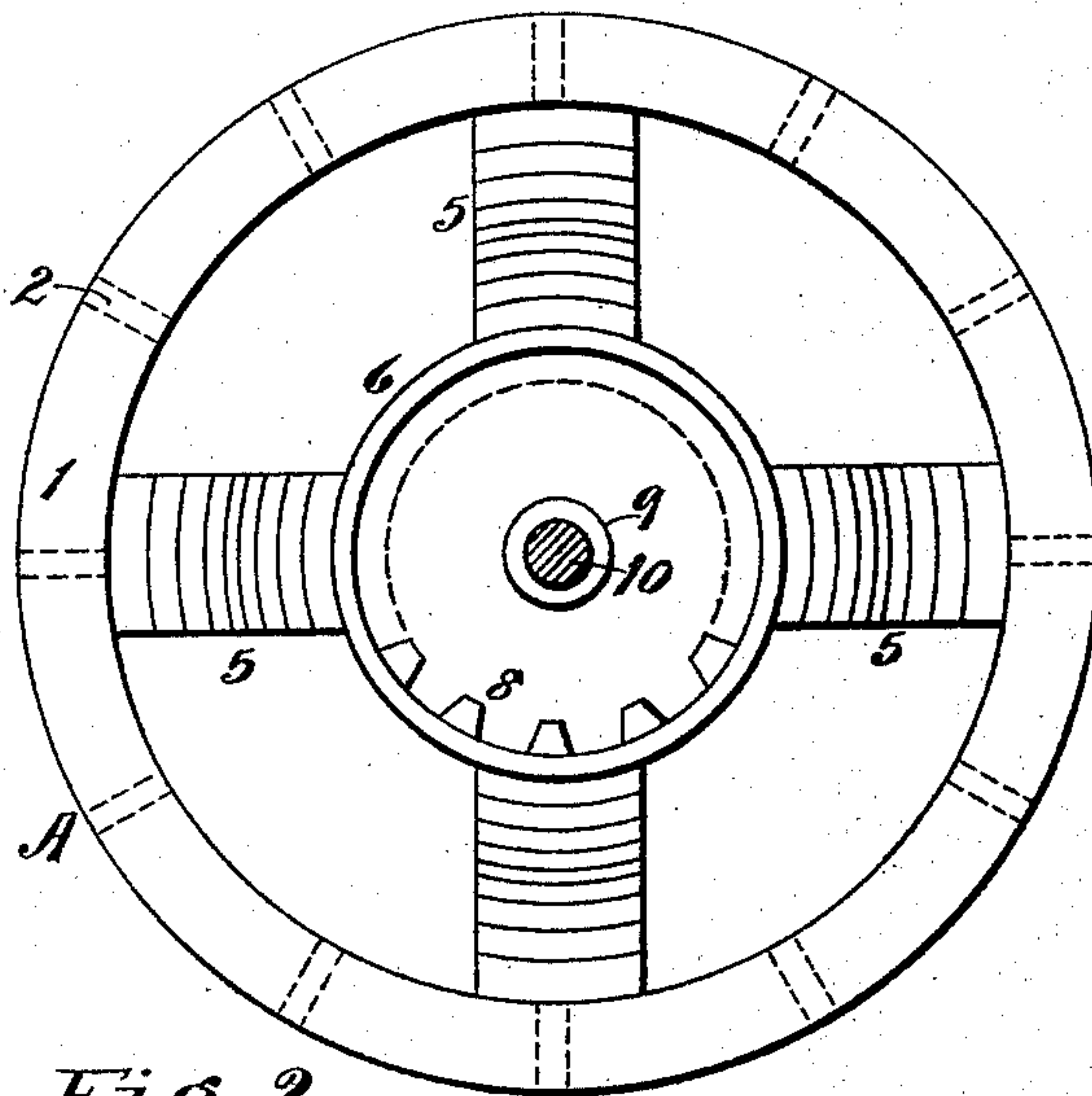
G. E. LEWIS.  
TRACTION WHEEL.

No. 388,423.

Patented Aug. 28, 1888.



*Fig.-1*



*Fig.-2*

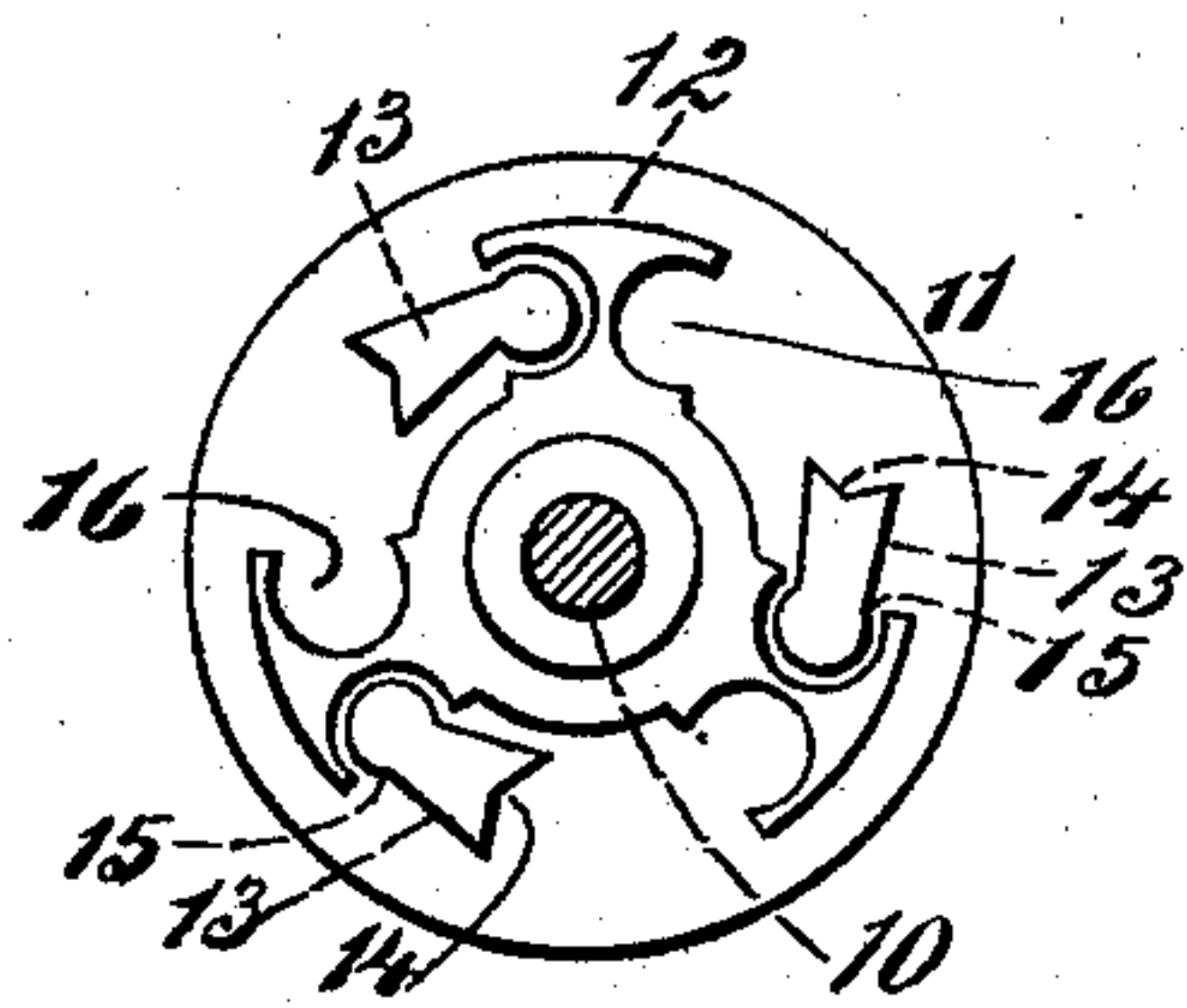
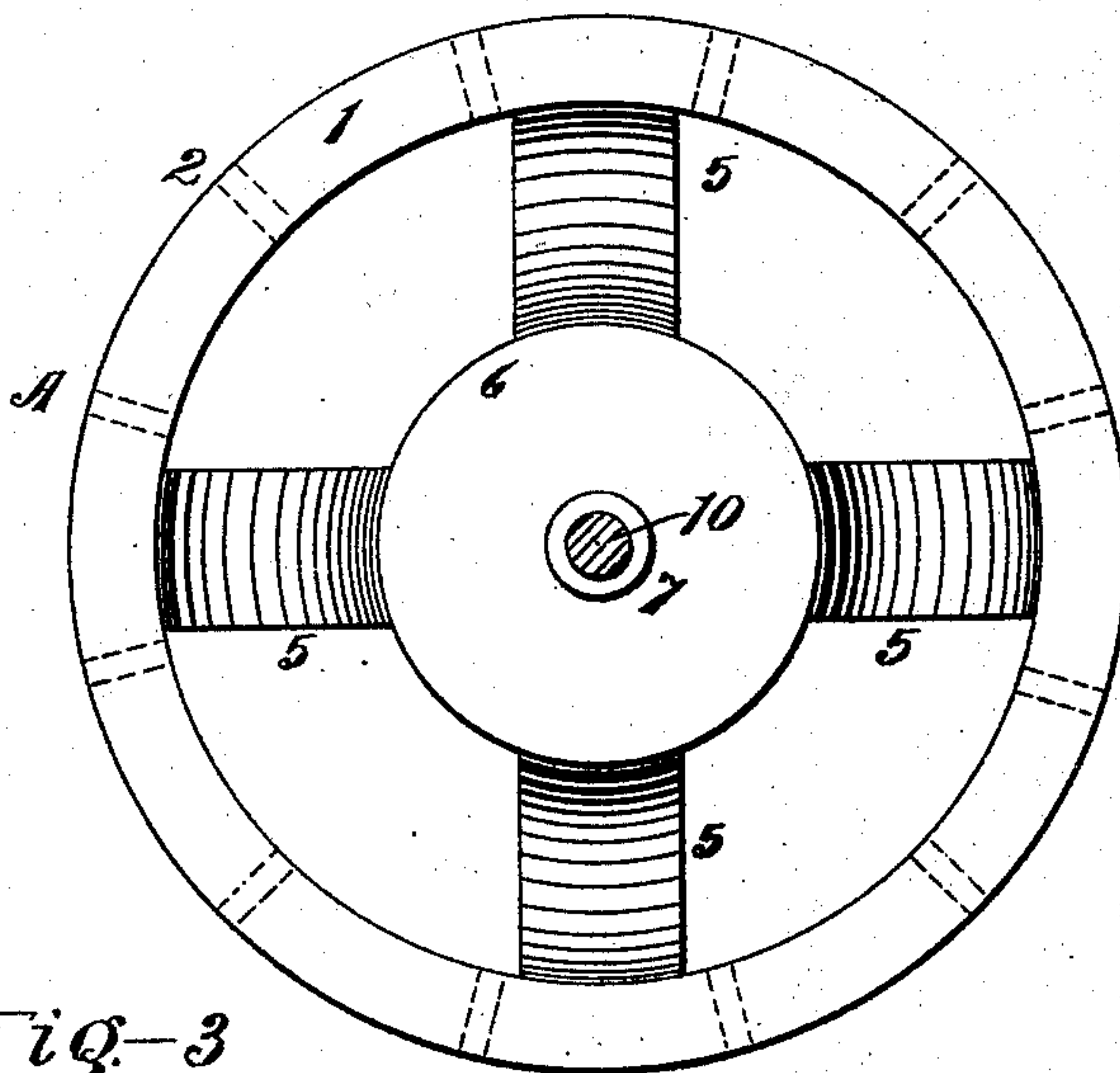


Fig. 4



*Fig-3*

Witnesses.

N. P. Dennisow.

John M. Matson.

Inventor.

George E. Lewis

By his Attorney,

Smith & Werrison

# UNITED STATES PATENT OFFICE.

GEORGE E. LEWIS, OF SENECA FALLS, NEW YORK.

## TRACTION-WHEEL.

SPECIFICATION forming part of Letters Patent No. 388,423, dated August 28, 1888.

Application filed March 26, 1888. Serial No. 268,485. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE E. LEWIS, of Seneca Falls, county of Seneca, in the State of New York, a citizen of the United States, have  
5 invented certain new and useful Improvements in Traction-Wheels, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation. Fig. 2 is a  
10 side elevation of the inner face of the wheel, showing the interior of the ratchet-case. Fig. 3 is an elevation of the outer face of the wheel. Fig. 4 is a plan view of the inner face of the head closing the ratchet-case, showing the  
15 seats for the heads of the pawls and pawls seated in part of them.

My invention relates to traction-wheels, which can be used upon lawn-mowers or analogous tools or implements for other purposes;  
20 and my object is to produce an improved wheel.

My invention consists in the several novel features of construction and operation hereinafter described, and which are specifically  
25 set forth in the several clauses of claims hereunto annexed.

It is constructed as follows:

A is the wheel, consisting of rims 1, connected by radial bars 2, creating the openings  
30 3 between the bars. These bars are arranged upon diametrical lines and are usually of substantially the same width as the rims. To the outer rim the radial arms 5 are connected or integral with the rim, which arms carry the  
35 ratchet-case 6 and the outer part of the hub 7. Within this ratchet-case are the inwardly-projecting ratchet-teeth 8, and 9 is a collar around the axle-hole in the center which receives the

axle 10. The rims, bars 2, spokes 5, and ratchet-case with its ratchet and collar and the  
40 outer part of the hub 7, are all cast in one piece.

Upon the axle 10, I secure the cap or head 11, fitting into or closing the ratchet-case, and upon the inner face of this head I cast the pro-  
45 jections 12 of substantially a T-form and provided with the side curved seats, 16, which receive loosely-curved heads of the gravity-pawls 13, which pawls engage with the ratchet  
8 when the rotation of the wheel reverses. 50 These pawls are ordinarily provided with a notch, 14, in their outer ends, and are provided, also, with a neck, 15, so that they cannot slide longitudinally out of their seats, but can swing  
freely upon their heads in the seats. 55

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

1. A traction-wheel consisting of rims, cross-bars connecting the rims, and spokes carrying upon their inner ends a ratchet-case  
60 and hub all cast in one piece, substantially as described.

2. A traction-wheel consisting of a hub, a ratchet-case surrounding and integral with the hub, spokes extending outward from the  
65 ratchet-case and integral therewith, and the outer periphery of the wheel integral with the outer ends of the spokes and provided with openings through the periphery, substantially  
as described. 70

In witness whereof I have hereunto set my hand.

GEORGE E. LEWIS.

In presence of—

JASPER N. HAMMOND,

CLARENCE A. MACDONALD.