

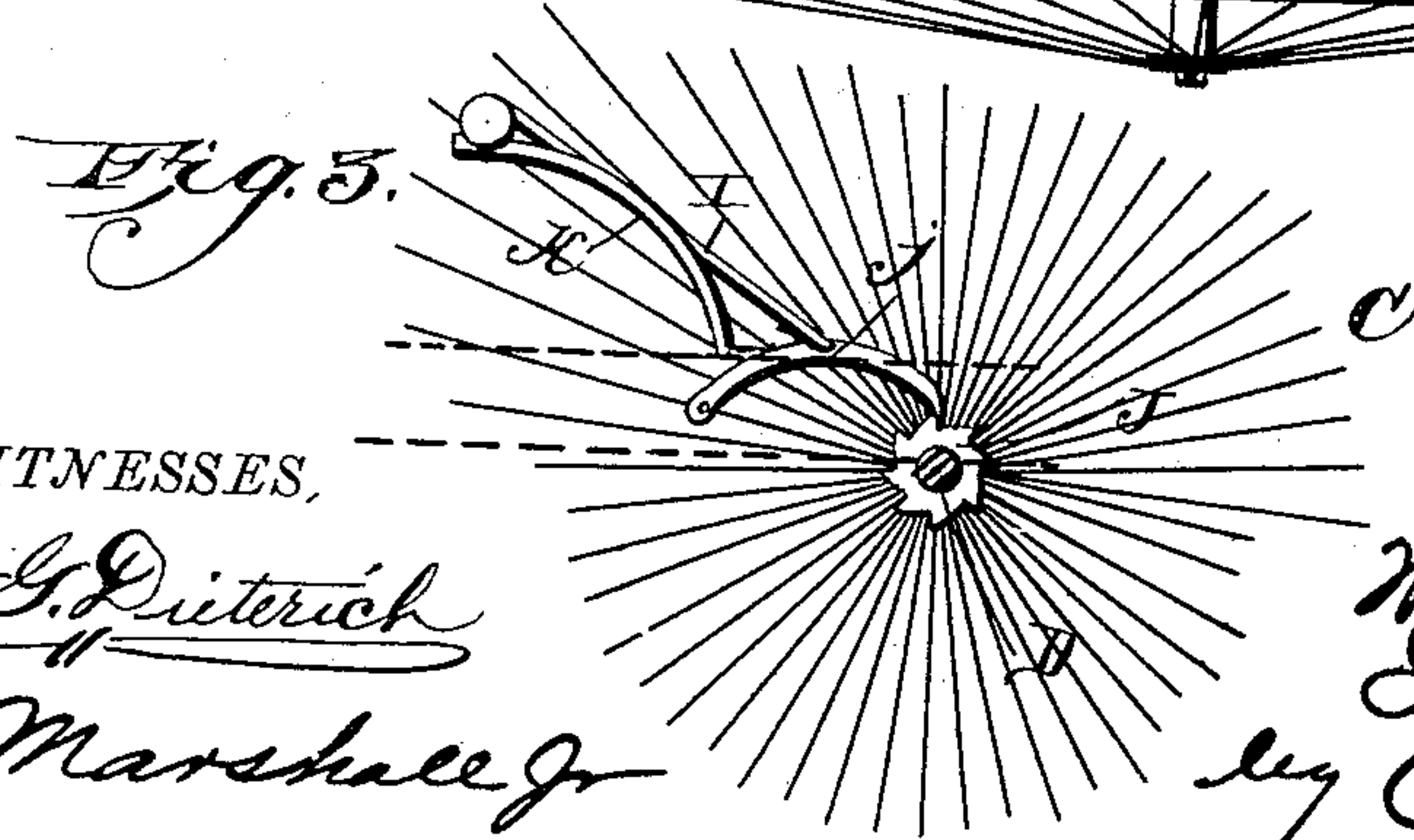
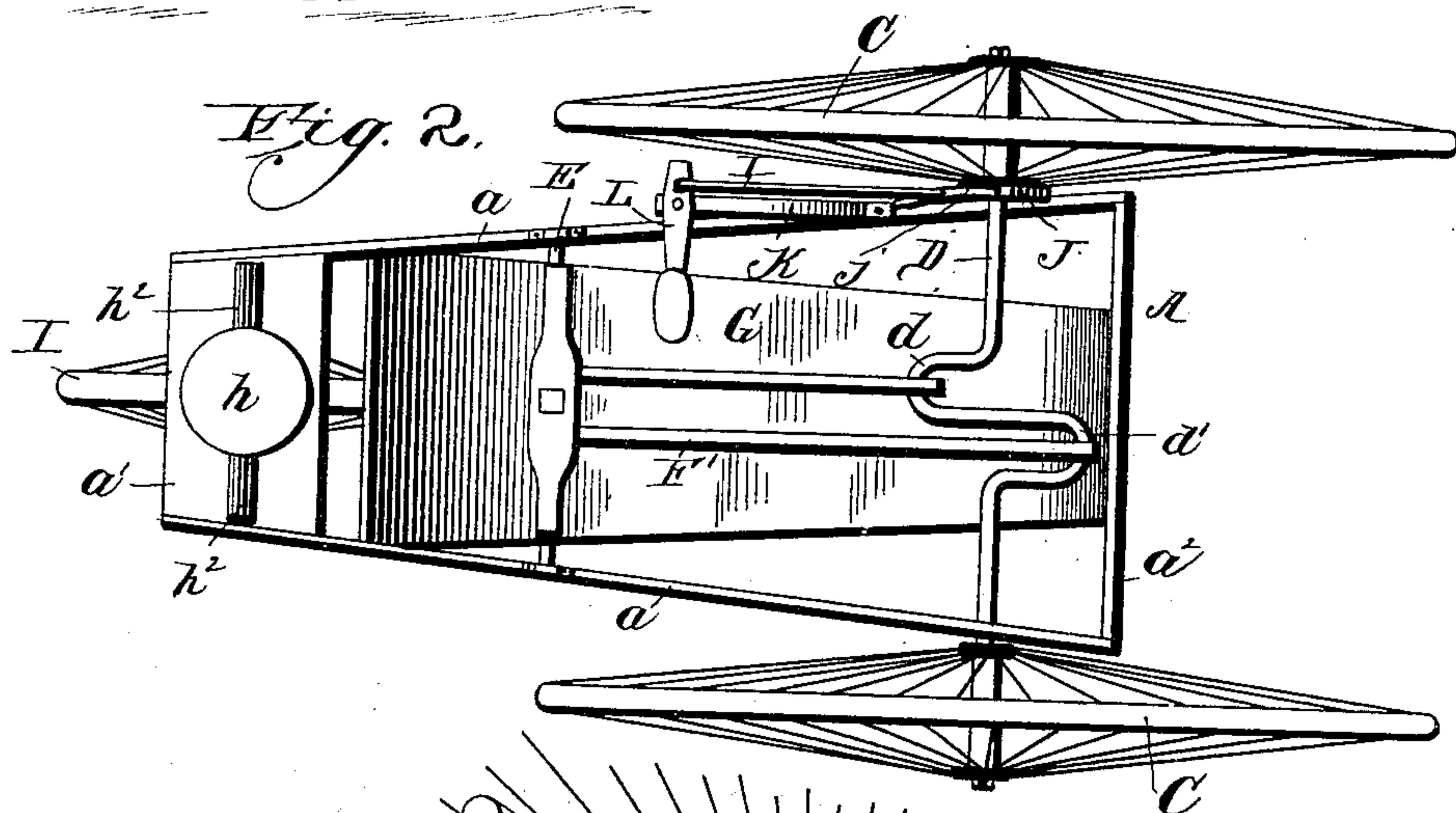
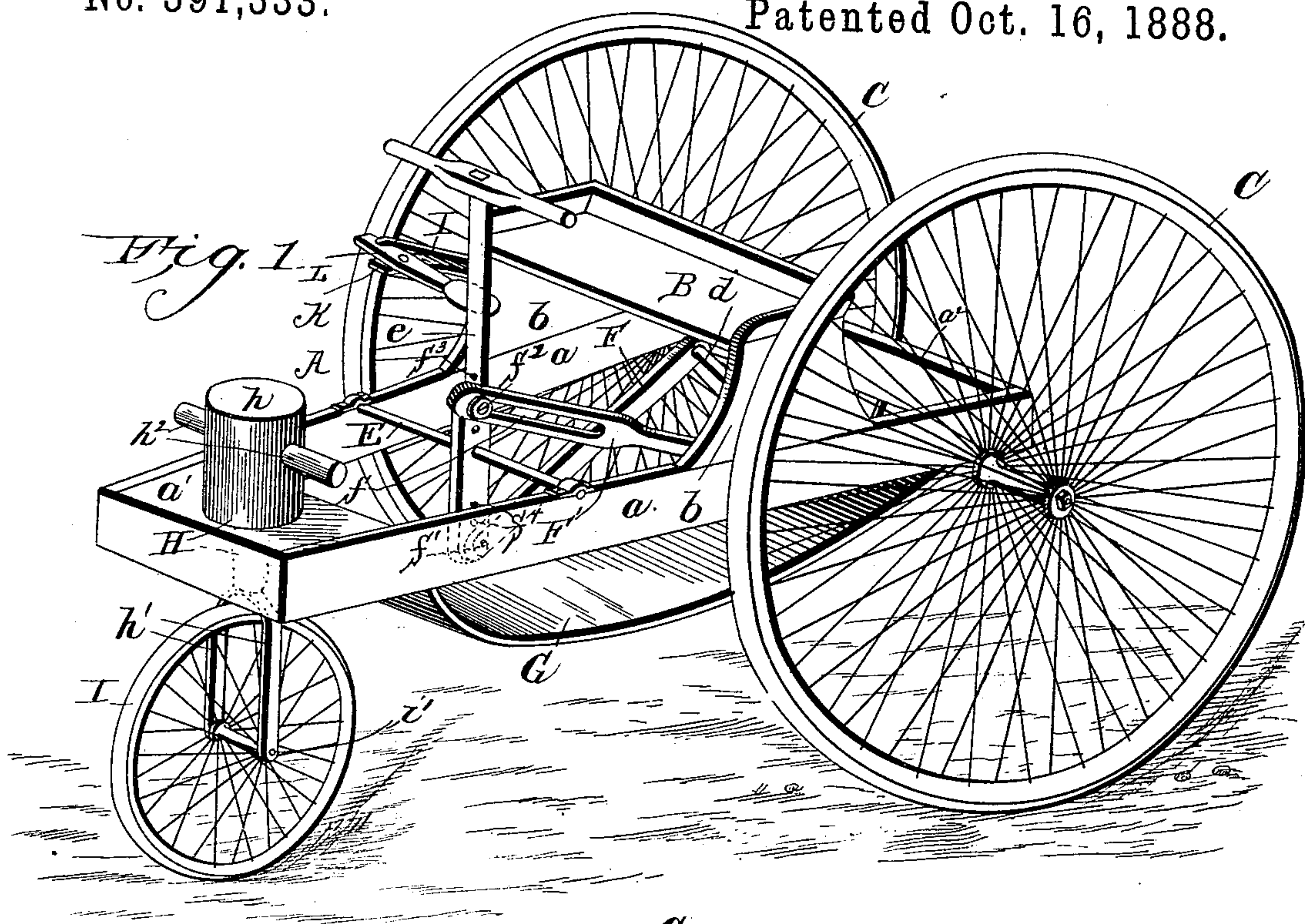
(No Model.)

W. T. OSBORNE & J. JOHNSON.

VELOCIPÈDE.

No. 391,333.

Patented Oct. 16, 1888.



WITNESSES,

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VELOCIPEDE.

SPECIFICATION forming part of Letters Patent No. 391,333, dated October 16, 1888.

Application filed June 19, 1888. Serial No. 277,511. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM THOMAS OSBORNE and JOHN JOHNSON, citizens of the United States, residing at Martling, in the county of Marshall and State of Alabama, have invented a new and useful Improvement in Tricycles, of which the following is a specification.

The invention relates to improvements in tricycles; and it consists in the construction and novel combination of parts hereinafter described, illustrated in the drawings, and pointed out in the appended claims.

Figure 1 of the drawings represents a perspective view of a tricycle embodying the invention. Fig. 2 represents a plan view of the same with the seat removed. Fig. 3 represents a detail view of the ratchet-teeth on the hub and the mechanism attached thereto.

Referring to the drawings by letter, A designates the frame of the machine, composed of the side bars, a , the block a' , standing between the front ends of the side bars and the rear transverse bar, a^2 .

B is the seat, secured to uprights b , rising from the side bars at proper points, and C C are the wheels on the axle D, journaled in the side rails in the rear of the seat and provided with the oppositely-standing cranks d d' , respectively.

E is a transverse shaft or bar having its ends secured in the side rails a sufficient distance in front of the seat, and e is a double-armed lever pivoted and turning on said shaft and having a cross-bar handle on the end of its upper arm to be grasped by the rider. The pivoted pin f' of the pitman may be inserted into any one of the series of adjusting-openings, f^3 , in the lower arm of the lever to aid in regulating the speed by giving more or less leverage.

F' is a pitman, having its rear end pivoted to the crank d' and its front portion provided with a longitudinal slot, f , through which passes a pivotal pin or screw, f' , into the upper arm of the lever e at a proper point, which pin is provided with a head and washer to prevent the pitman F' from disengaging. The pitman F' is pivoted through its slot to the upper arm of the lever nearer to the shaft E than the pivotal point of the pitman F, else the

slot would not be necessary. The pivotal pin f' of the pitman F may engage in any one of the series of adjusting-openings f^4 to lessen or increase the leverage. When the crank d' is frontward, the pin f' rests in the rear end of the slot f , and when the said crank is rearward the pin rests in the front end of the slot. Thus both pitmen can work in unison without binding, and the crank-axle will be easily rotated by the motion of the lever.

G is a downwardly-convex guard-plate secured to the frame below the parts described between the side rails and preventing dust and dirt rising from the road to said parts.

H is a vertical shaft journaled in a bearing in the front block, a' , and having an enlarged head, h , above said bearing, and a yoke, h' , below the same, and h^2 is a transverse steering-bar running through an opening in the head h and extending on each side thereof to form rests for the rider's feet.

I is the guide or steering wheel on a transverse shaft, i' , which has its ends secured in the depending arms of the yoke h' , near the ends thereof. The said shaft and wheel can thus be readily turned by the rider's feet on the ends of the steering-bar h^2 .

J is a ratchet-wheel secured to the end of one hub adjacent to the side rail, with its teeth above inclining forward and having their rectangular shoulders rearward, and j is a pawl pivoted to the side rail in front of the ratchet-wheel, and with its bent-down point engaging the teeth thereof.

K is a support rising from the adjacent side rail in front of the pawl, and L is a lever pivoted thereon, with the end of its outer arm connected by the link-rod l to the pawl, so that the rider by pulling on the inner arm of the lever can disengage the pawl from the ratchet-wheel and allow the tricycle to be moved backward. This could not be done when the point of the pawl engaged the shoulders of the teeth; but the machine could be moved forward as the pawl would then ride over the incline of the teeth.

The machine being moved by pitmen and crank-shaft can be moved as easily backward as forward.

Having described our invention, we claim—

1. In a tricycle, the combination of the axle

provided with two cranks standing in opposite directions, the double-armed lever swinging on a transverse shaft secured to the side bars in front of the seat, the pitman F, connecting 5 the end of the lower arm of the lever with one of said cranks, and the pitman F', pivoted at its rear end to the other crank and having the slot *f* in its front portion, through which slot the said pitman is pivoted to the upper arm 10 of the lever at a point nearer the shaft on which the lever turns than the pivotal point of the pitman F, substantially as specified.

2. In a tricycle, the combination, with the conveyer-wheels, the double-cranked axle, the 15 swinging lever and the pitmen connecting the upper and lower arms of said lever to the opposite cranks of the axle, of the vertical shaft H, having the head *h* and yoke *h'*, and journaled therebetween in the front end of the 20 main frame, the steering-bar *h*², and the steer-

ing wheel I, journaled between the ends of the yoke *h'*, substantially as specified.

3. In a tricycle, the combination, with the main frame and driving mechanism, substantially as described, of the ratchet-wheel J, se- 25 cured to the end of one hub adjacent to the side bar of the main frame, the pawl *j*, pivoted to said bar and engaging the ratchet-wheel, the lever J, pivoted on the support K, and the link-rod *l*, connecting the outer arm 30 of said lever and the pawl, substantially as specified.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

WILLIAM THOMAS OSBORNE.

JOHN JOHNSON.

Witnesses:

JOSEPH WHITEHEAD,
J. W. SHIPP.