No. 606,687. Patented July 5, 1898.

J. M. SEYMOUR, JR.

LAND ROLLER.

(Application filed Dec. 15, 1897.)

(No Model.)

Fig. 1.

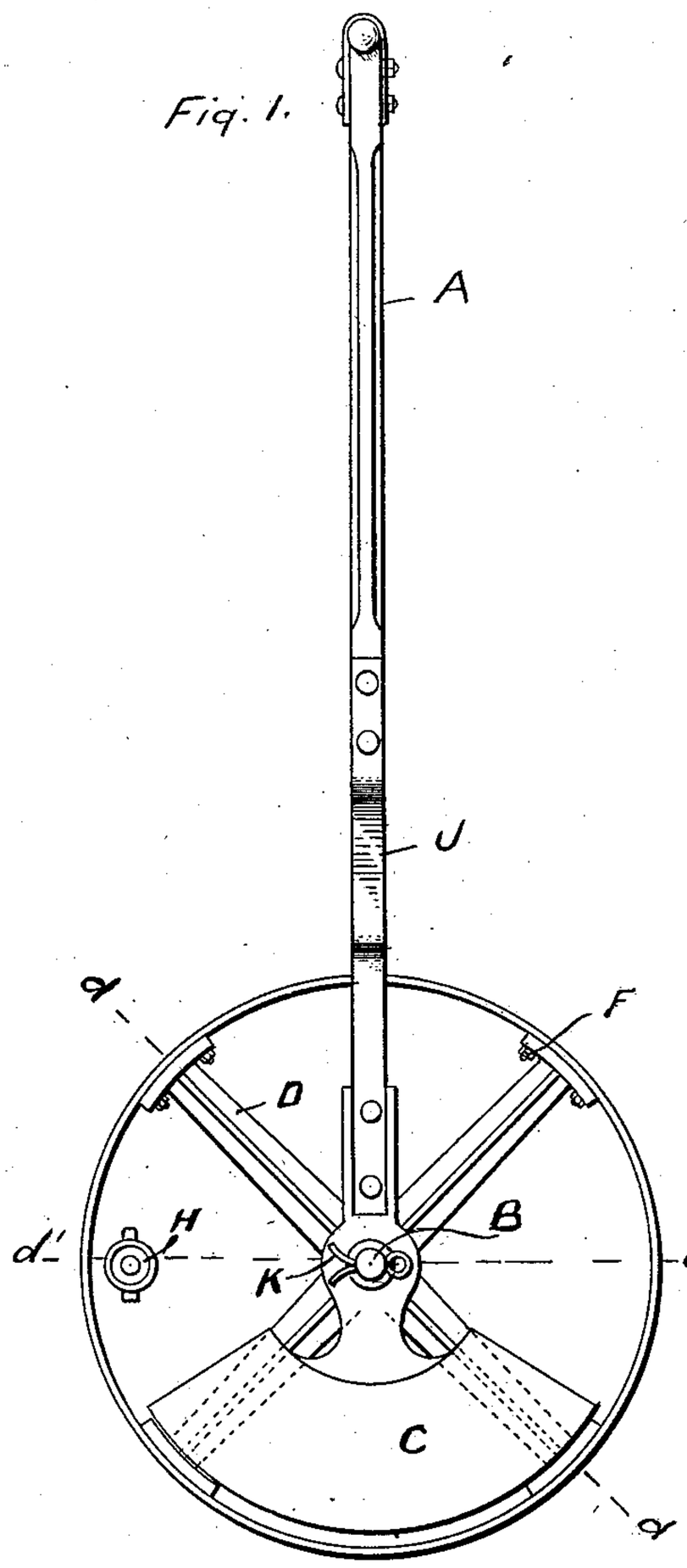


Fig. 2.

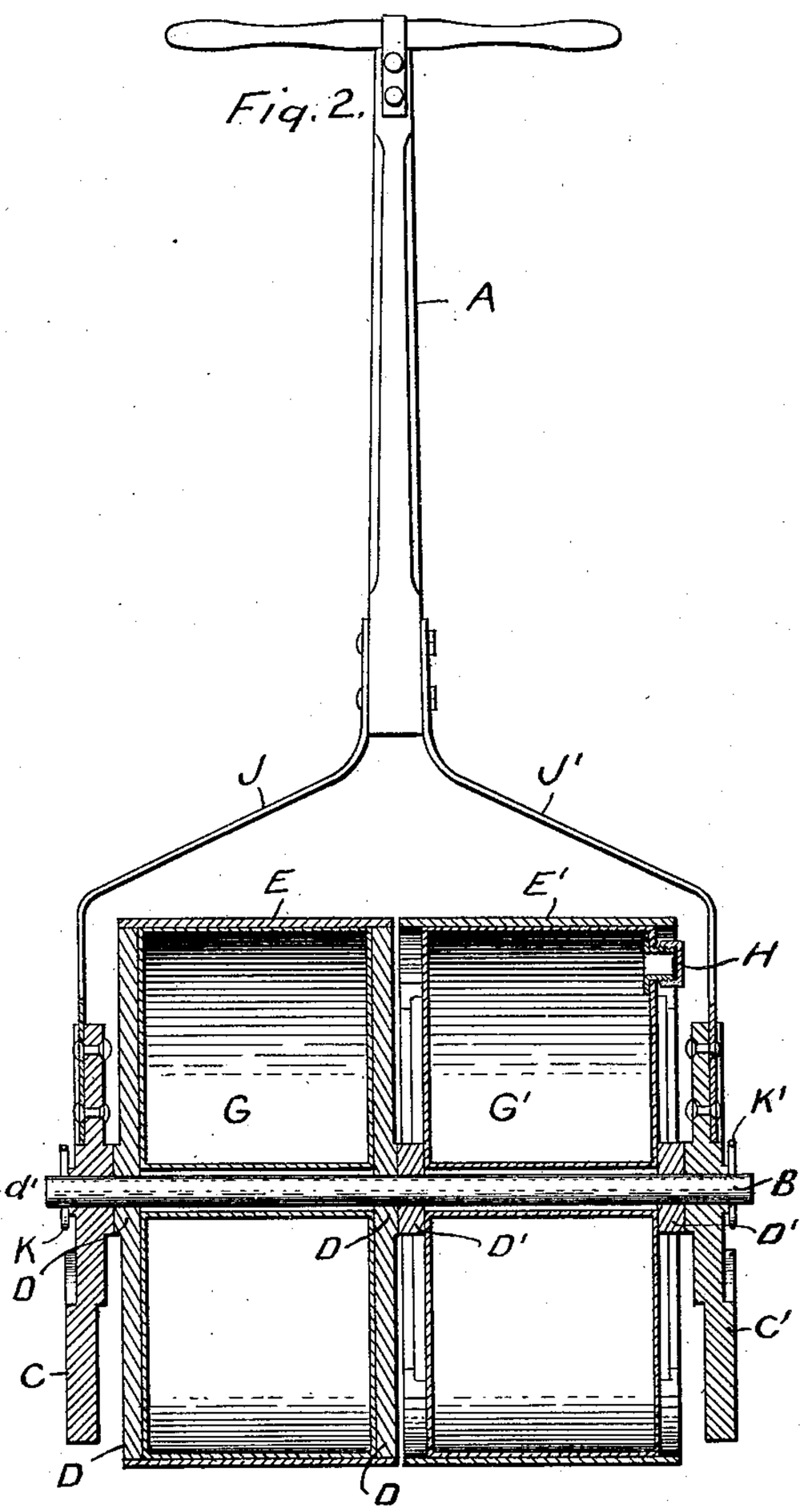
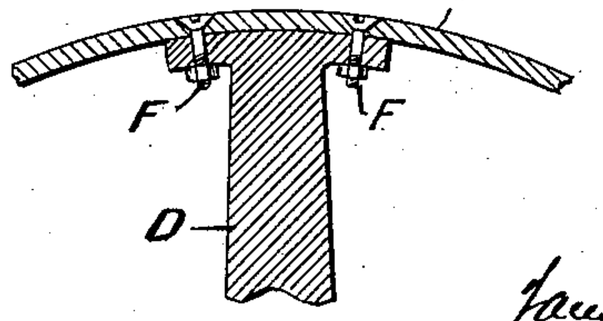


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

JAMES M. SEYMOUR, JR., OF NEWARK, NEW JERSEY, ASSIGNOR TO THE PETER HENDERSON & COMPANY, OF NEW JERSEY.

LAND-ROLLER.

SPECIFICATION forming part of Letters Patent No. 606,687, dated July 5, 1898.

Application filed December 15, 1897. Serial No. 661,965. (No model.)

To all whom it may concern:

Be it known that I, JAMES M. SEYMOUR, Jr., a citizen of the United States, and a resident of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Land-Rollers, of which the following is a specification.

My invention relates to new and useful improvements in land-rollers; and it consists of certain novel parts and combinations of parts particularly pointed out in the claims concluding this specification.

In the accompanying drawings I have shown my invention applied in the form which is at present preferred by me; but it will be understood that various modifications and changes may be made without departing from the spirit of my invention and without exceeding the scope of the concluding claims.

In the accompanying drawings, Figure 1 is a side view of a land-roller involving my invention. Fig. 2 is a longitudinal section through the same. Fig. 3 is a detail view on an enlarged scale.

For the purpose of enabling those skilled in the art to practice my invention in the form in which I now prefer to embody it I will describe the structure illustrated in the said drawings.

A is a handle mounted on a shaft B.

C C′ are counterweights attached to the handle-fork by means of which the handle is normally held in an upright position.

D D′ are spiders or skeleton end plates of suitable design journaled on the shaft B.

E E′ are circular bands or rims removably attached to the spiders D D′. The spider D and rim E are shown in Fig. 2 in longitudinal section through the line *d d*, Fig. 1, and the spider D′ and rim E′ are shown in Fig. 2 in longitudinal section on the line *d′ d′*, Fig. 1. Fig. 3 shows in detail the means for removably attaching the rim to the spider. These means, as shown, consist of nuts and bolts, although any other suitable means for removably attaching the spiders and rims might be substituted for that shown.

Contained within the rims E E′ and between the spiders D D and D′ D′ are tanks G G′. These tanks may be made of any suitable material; but preferably they are made of sheet metal for economy, lightness, and the ease with which they may be made watertight. Each tank is in the form of an annular chamber, the shaft B passing through the central perforation.

H is an opening provided with a screw-cap through which the weighing materials, such as water or sand, may be introduced into and removed from the interior of the tanks G and G′. It will be observed that these tanks G and G′ are entirely independent of the roller proper, that they are separable therefrom, and that they sustain none of the weight nor are they subject to any of the wear of the working parts. They may be and preferably are made with thin walls of light material, so that when empty they add little or no weight to the roller. Their capacity being large means of varying the weight of the roller throughout a large range is afforded. The roller empty may be made as light as desired, so as to be easily transported from place to place and to be adapted for the lighter grade of work. To remove these tanks for repair or for any other purpose, one of the forks J or J′ is unbolted, the key K or K′ removed, the bolts F F withdrawn, and the spider removed. The tank can then be taken out without disturbing the other parts of the structure.

I am aware that land-rollers have heretofore been made with chambers or cavities for containing water; but these chambers or cavities have been integral parts of the roller and were not separable and independent tanks, as in my construction.

What I claim is—

1. In a land-roller, the combination with suitable journal-bearings of a roller journaled thereon, a separable and independent tank contained within and stationary with reference to said roller.

2. In a land-roller, the combination with a shaft of a roller journaled thereon, a separable and independent tank contained within said roller and surrounding but not bearing upon said shaft.

3. In a land-roller, the combination with suitable journal-bearings of a roller journaled

thereon, a separable and independent tank contained and entirely filling the space within said roller stationary with reference to it and bearing directly upon it.

4. In a land-roller, the combination with a shaft of a roller journaled thereon, an annular, separable and independent tank contained within and being stationary with reference to said roller and surrounding but not communicating its weight to said shaft.

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Witnesses:
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