No. 881,873. PATENTED MAR. 10, 1908.

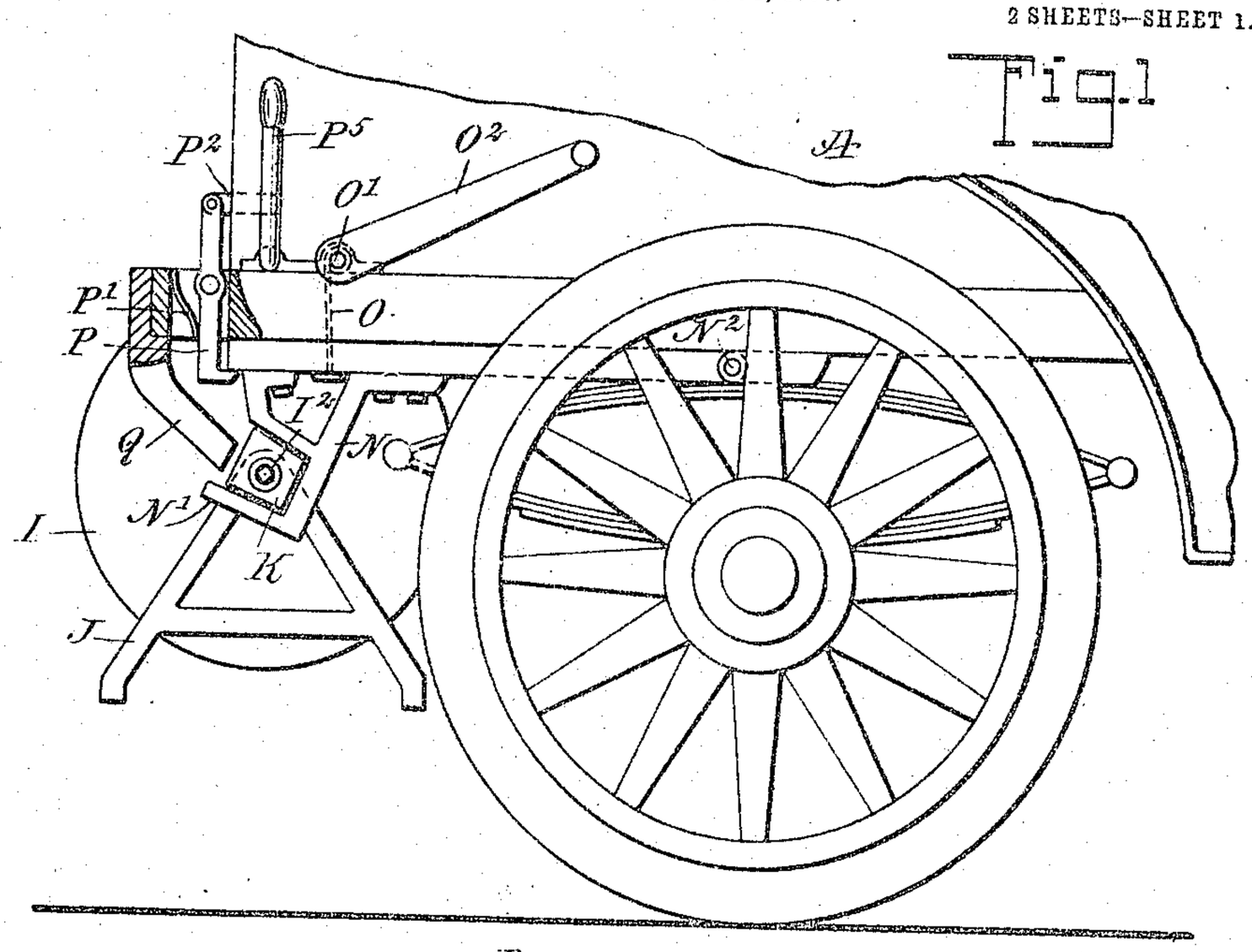
E. F. SANFORD.

FIRE FIGHTING APPARATUS.

APPLICATION FILED SEPT. 24, 1907.

2 SHEETS—SHEET 1.

Fig. 1



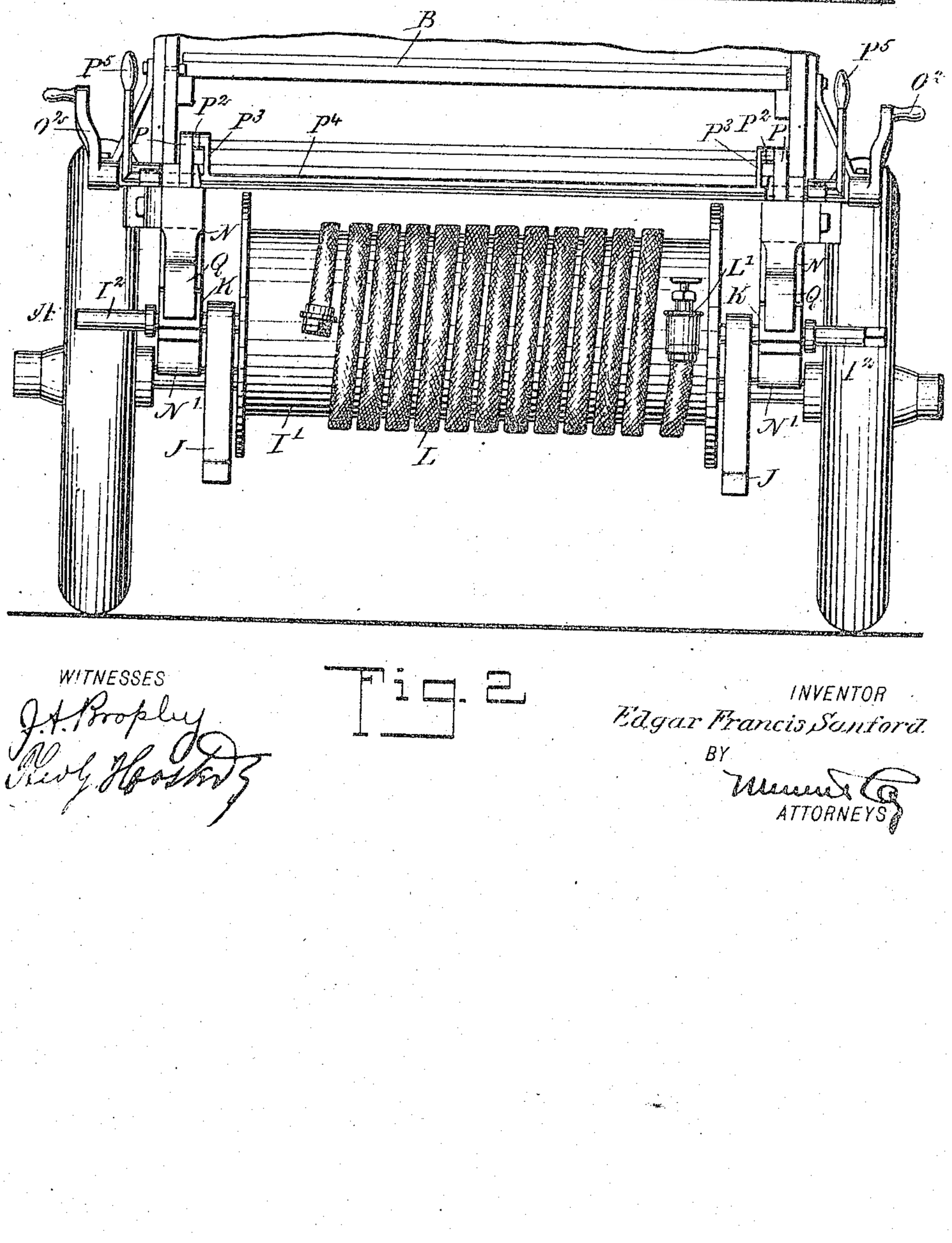


Fig. 2

WITNESSES

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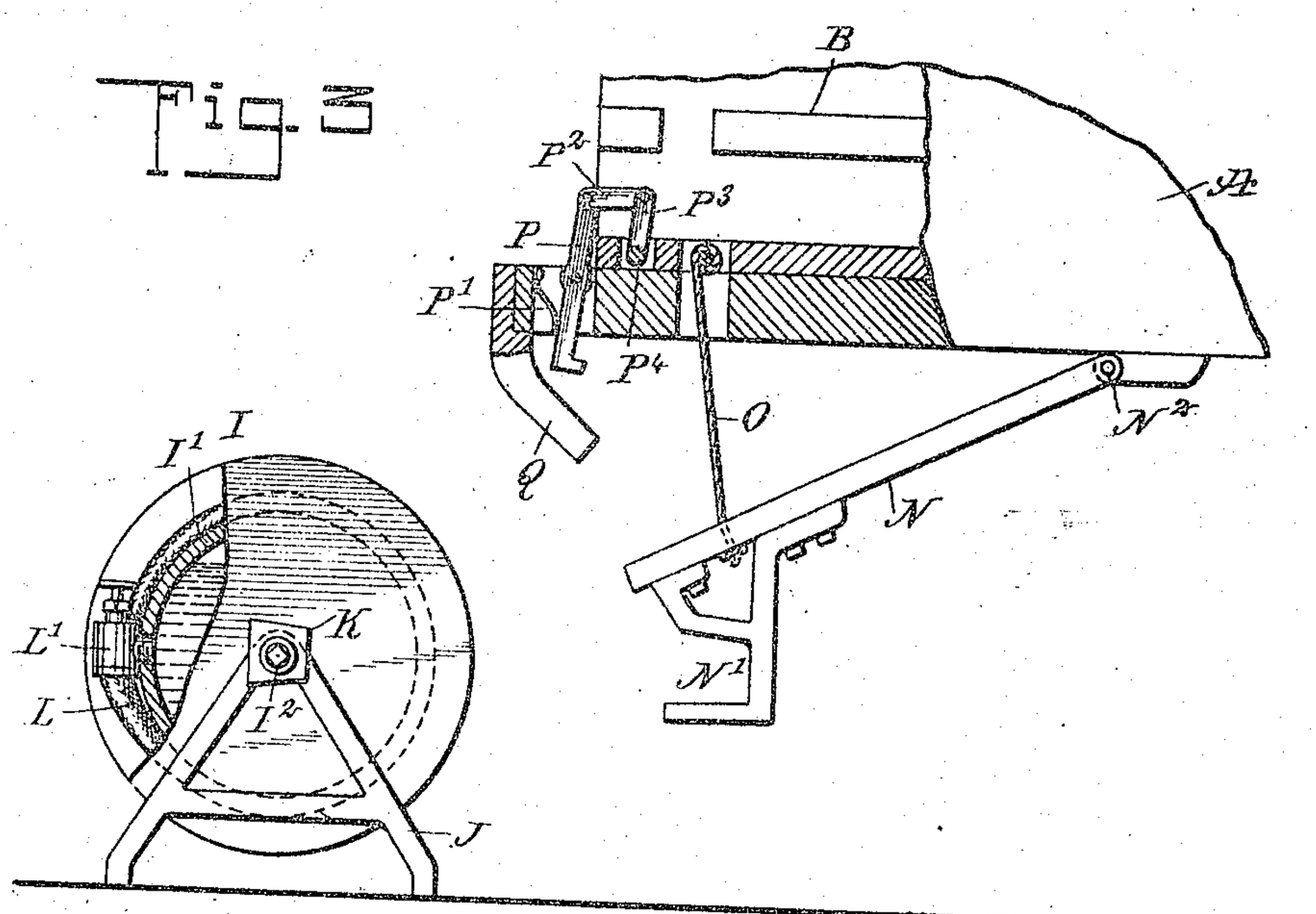
2 SHEETS—SHEET 2.

Fig. 3



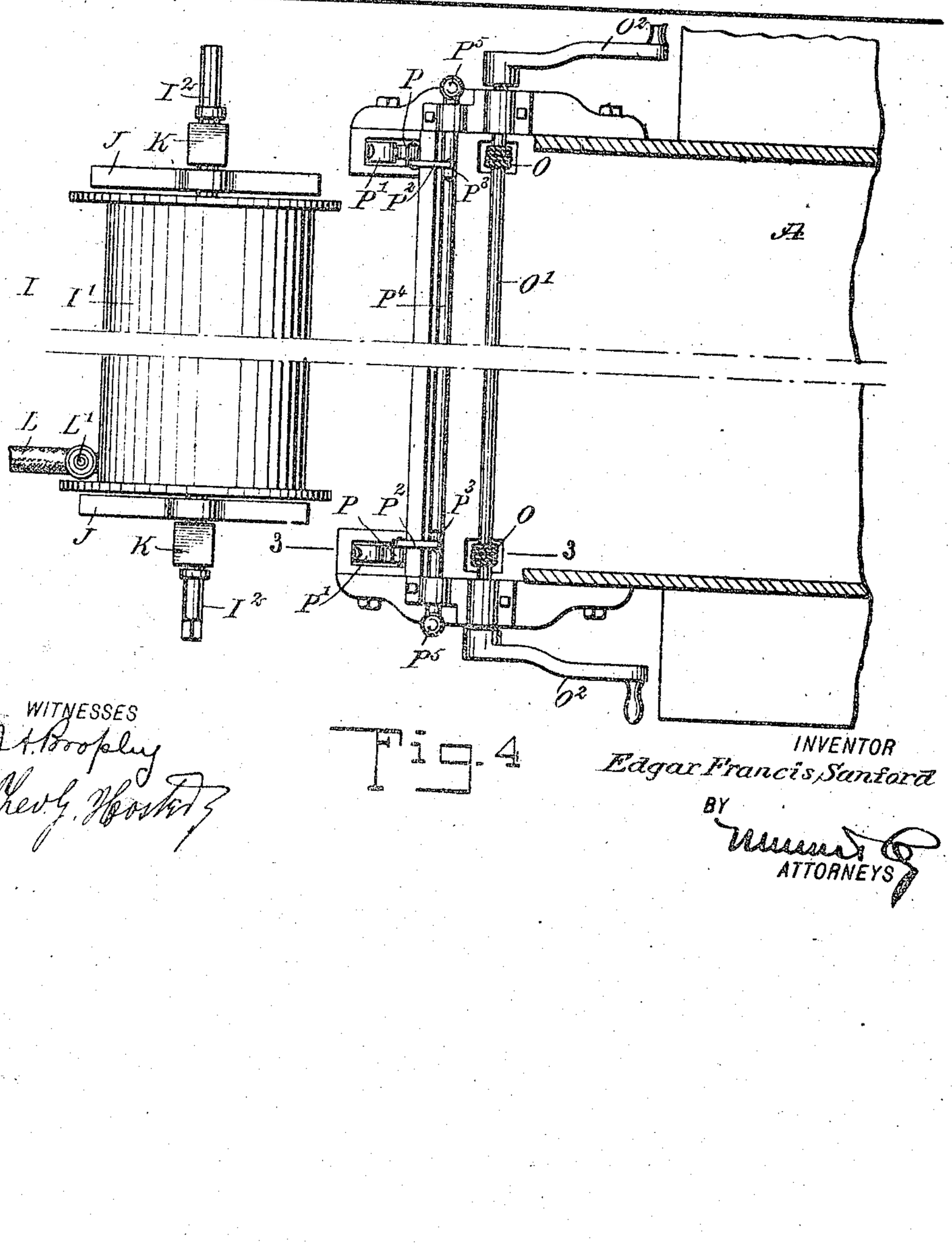


Fig. 4

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EDGAR F. SANFORD, OF MERCED, CALIFORNIA.

FIRE-FIGHTING APPARATUS.

No. 881,873. Specification of Letters Patent. Patented March 10, 1908.

Original application filed April 16, 1907, Serial No. 368,568. Divided and this application filed September 24, 1907. Serial No. 394,309.

To all whom it may concern:

Be it known that I, EDGAR FRANCIS SANFORD, a citizen of the United States, and a resident of Merced, in the county of Merced and State of California, have invented a new and Improved Fire-Fighting Apparatus, of which the following is a full, clear, and exact description, this being a division of the application for Letters Patent of the United States, No. 368,568, filed by me April 16, 1907.

The object of the invention is to provide a new and improved fire-fighting apparatus in the form of a chemical tank, removably mounted on the hose truck and arranged to permit using the chemical tank when detached from the hose truck, and allow using the hose truck for its legitimate purpose independent of the tank.

The invention consists of novel features and parts and combinations of the same, which will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation, partly in section, of the improvement and showing the chemical tank mounted on the rear end of the hose truck; Fig. 2 is a rear end view of the same; Fig. 3 is a side elevation, partly in section, of the rear end of the hose truck, the chemical tank and the means for supporting the same, the section being on the line 3—3 of Fig. 4, and Fig. 4 is a plan view of the same, part of the hose truck being in section.

The vehicle A carries a hose rack B, as more fully shown and described in the application for Letters Patent of the United States, of which this application is a division, so that further description of the hose rack is not deemed necessary.

A chemical tank I containing a fire extinguishing fluid is removably carried on the rear end of the vehicle A, and this chemical tank I is provided with a drum I′ for containing the chemical (see Fig. 3), the shaft I^2 of the drum being journaled in a stand J, and on the said shaft I^2 are held supporting bearing blocks K, as indicated in Figs. 3 and 4. On the drum I′ is adapted to wind a hose L connected at one end by a valve L′ with the interior of the drum I′, to allow the fire extinguishing fluid to pass out of the drum I′ through the valve L′ when opened and into the hose L to the nozzle thereof to extinguish a fire. Normally the valve L′ is closed and the hose L is wound on the drum I′, and the entire chemical tank I is supported on the rear end of the vehicle, and for this purpose the following arrangement is made: The blocks K previously mentioned fit into open bearings N′ held on swing arms N extending longitudinally and fulcrumed at N^2 to the vehicle body, and the said swing arms N are connected with ropes or cables O extending upwardly and winding on a drum O′ journaled in suitable bearings on the vehicle A. The ends of the drum O′ are provided with handles or crank arms O^2 under the control of the fireman, to allow the arms N to swing downward until the stand J rests on the ground, the bearings N′ then being open at the rear, so that when the vehicle A is drawn forward the blocks K move out of the bearings N′ and the chemical tank I remains standing on the ground while the vehicle A moves forward. In a like manner when the vehicle is backed up the bearings N′ engage the blocks K, and then by the operator turning the crank arms O^2 the ropes or cables O are wound up on the drum O′, to impart an upward swinging motion to the swing arms N, with a view to lift the tank I off the ground and to hold it supported from the rear end of the vehicle, as plainly indicated in Figs. 1 and 2. When the swing arms N reach a horizontal position against the underside of the vehicle body, then the free ends of the said swing arms are engaged by catches P, to lock the swing arms in a raised position. The catches P are fulcrumed on the vehicle body and are pressed on by springs P′ so as to hold the catches in engagement with the swing arms N. The upper ends of the catches P are pivotally connected by links P^2 with arms P^3 held on a transversely extending shaft P^4 journaled in suitable bearings arranged on the vehicle body, and on the said shaft P^4 are arranged handles P^5 adapted to be taken hold of by a fireman, to move the same forward, with a view to disengage the catches P from the swing arms N immediately previous to lowering the chemical tank I, as before explained. Stops Q held on the rear end of the vehicle project close to the rear faces of the

blocks K, so as to hold the same in the bearings N′ and thus prevent accidental disengagement of the chemical tank I from its support on the rear end of the motor vehicle.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In a fire-fighting apparatus, the combination with a wheeled vehicle, of a chemical tank, and a support for the same comprising arms mounted to swing on the vehicle and arranged to normally hold the said tank above the ground, the said swing arms being capable of releasing the said tank and delivering it to the ground.

2. A fire-fighting apparatus comprising a vehicle, a chemical tank, a support for the same, the said support having swing arms for supporting the chemical tank and fulcrumed on the said vehicle, and a locking device for locking the said swing arms normally in a raised position.

3. A fire-fighting apparatus comprising a vehicle, a chemical tank, a support for the same, the said support having swing arms for supporting the chemical tank and fulcrumed on the said vehicle, a locking device for locking the said swing arms normally in a raised position, and manually controlled means arranged on the vehicle and connected with the said swing arms, to swing the latter down or up.

4. A fire-fighting apparatus comprising a vehicle, a chemical tank, a support for the same, the said support having swing arms for supporting the chemical tank and fulcrumed on the said vehicle, and a stop on the vehicle for holding the chemical tank against accidental displacement on the said swing arms.

5. A fire-fighting apparatus comprising a vehicle, a chemical tank, a support for the same, the said support having swing arms for supporting the chemical tank and fulcrumed on the said vehicle, a manually controlled drum mounted on the vehicle, and cables winding on the said drum and connected with the said swing arms.

6. A fire-fighting apparatus comprising a vehicle, and a chemical tank removably connected with the said vehicle, the said tank being in the form of a drum, a stand on which the said drum is mounted to turn, and a hose adapted to wind on the said drum and connected at one end with the said drum.

7. A fire-fighting apparatus comprising a vehicle, and a chemical tank removably connected with the said vehicle, the said tank being in the form of a drum, a stand on which the said drum is mounted to turn, a hose adapted to wind on the said drum and connected at one end with the said drum, and a valve at the connection of the said hose with the said drum.

8. In a fire-fighting apparatus, a vehicle, a tank, bearing blocks supported at the ends of the tank, and arms mounted to swing on the vehicle and having open bearings for engaging the said bearing blocks, to support the tank.

9. A fire-fighting apparatus comprising a vehicle, a tank in the form of a drum, a stand, the shaft of the drum being journaled in said stand, bearing blocks held on the said shaft, and arms for supporting the tank and stand, the said arms being fulcrumed on the vehicle body to swing up and down and having open bearings for engaging the said bearing blocks.

10. A fire-fighting apparatus comprising a vehicle, a tank for containing a fire extinguishing fluid, arms for supporting the tank at the rear end of the vehicle, the said arms being fulcrumed on the vehicle to swing up and down and provided at their free or rear ends with open bearings, the said tank being provided with bearing blocks for engagement by the said open bearings of the arms, manually controlled means connected with the arms for raising the same to lift the tank, catches for locking said arms in the raised position, and means for preventing accidental disengagement of the bearing blocks from the said open bearings of the arms.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDGAR F. SANFORD.

Witnesses:
J. H. SIMONSON,
A. T. HASTINGS.