(No Model.)

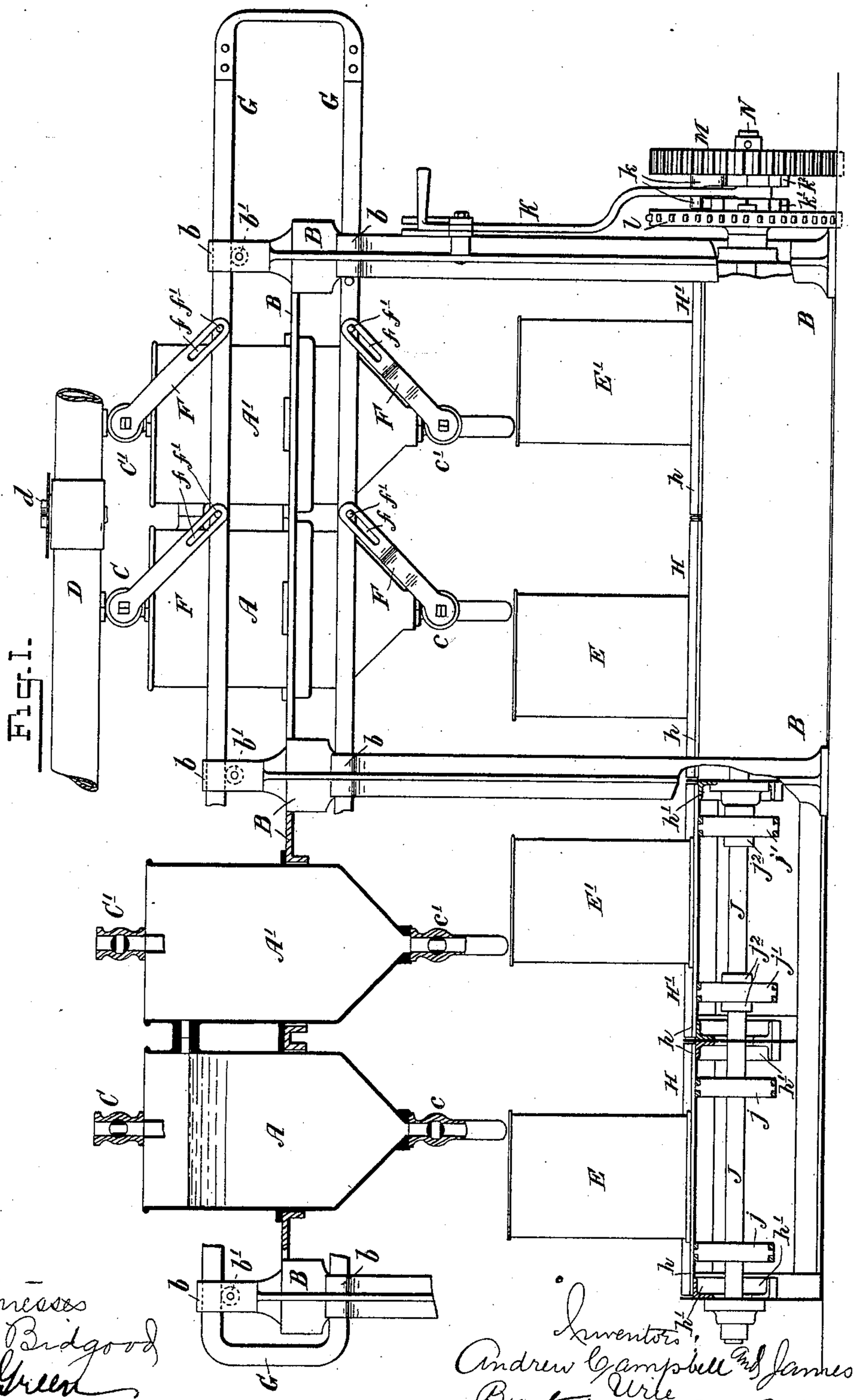
3 Sheets—Sheet 1.

A. CAMPBELL & J. URIE.

APPARATUS FOR FILLING OIL CANS.

No. 602,282. Patented Apr. 12, 1898.

Fig. 1.



Witnesses
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J. Green

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(No Model.)

3 Sheets—Sheet 2.

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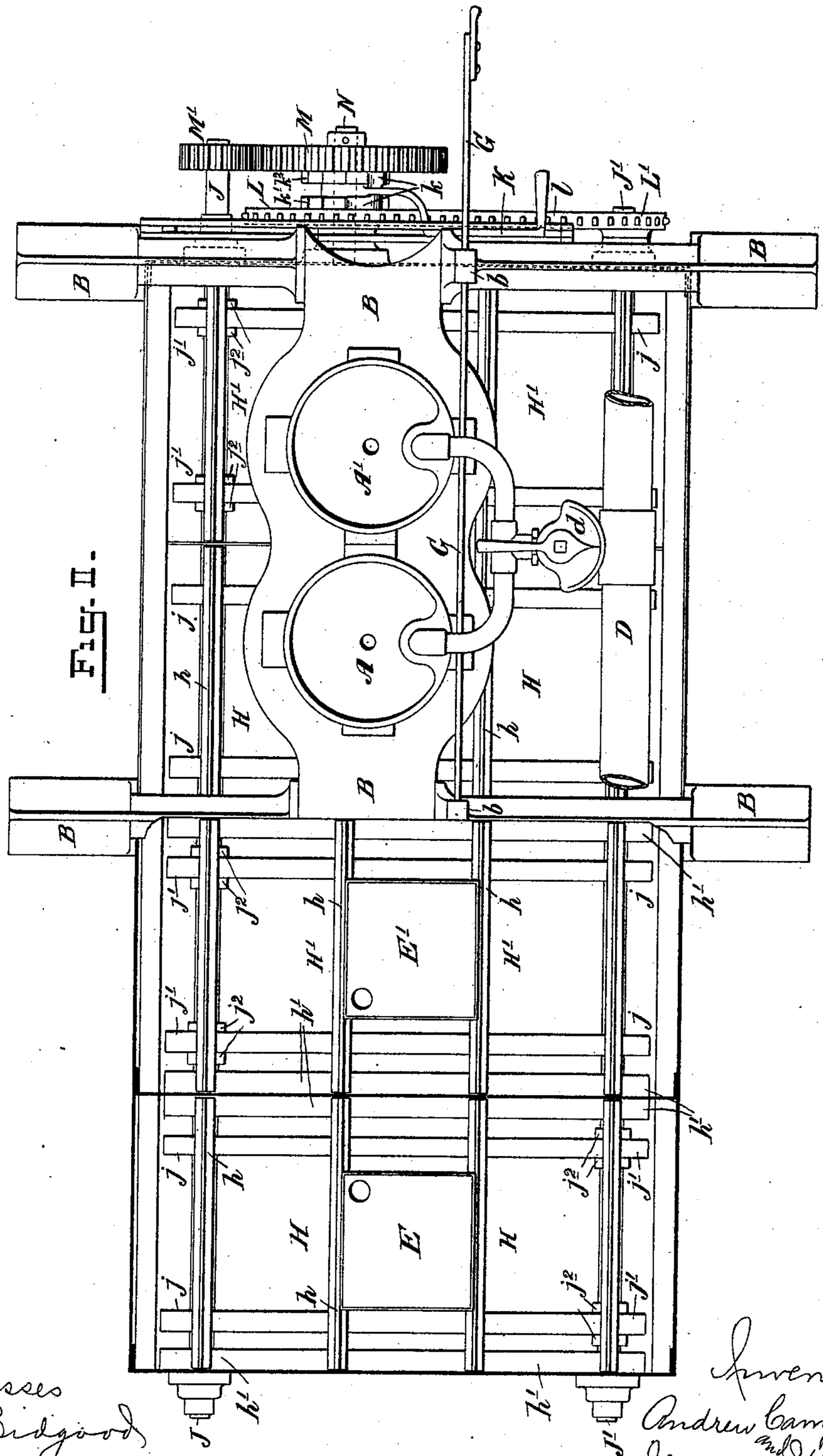
Fig. II.



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(No Model.) 3 Sheets—Sheet 3.

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APPARATUS FOR FILLING OIL CANS.

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Fig. III.

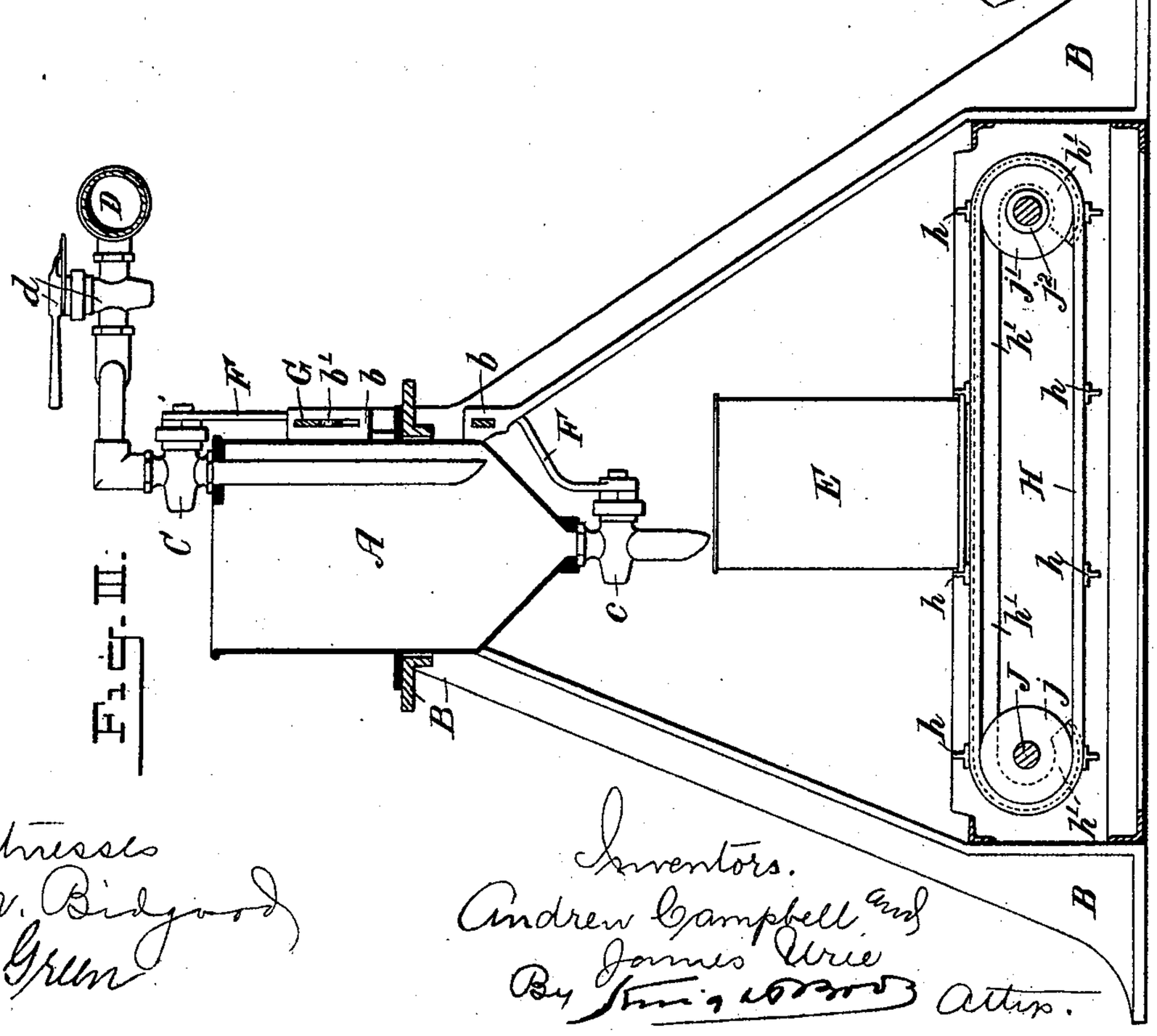

Fig. IV.

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UNITED STATES PATENT OFFICE.

ANDREW CAMPBELL AND JAMES URIE, OF RANGOON, BURMAH, ASSIGNORS TO THE BURMAH OIL COMPANY, LIMITED, OF SAME PLACE AND GLASGOW, SCOTLAND.

APPARATUS FOR FILLING OIL-CANS.

SPECIFICATION forming part of Letters Patent No. 602,282, dated April 12, 1898.

Application filed November 2, 1896. Serial No. 610,794. (No model.)

To all whom it may concern:

Be it known that we, ANDREW CAMPBELL and JAMES URIE, subjects of the Queen of the United Kingdom of Great Britain and Ireland, residing at Rangoon, British Burmah, works manager and engineer of the Burmah Oil Company, Limited, respectively, have invented an Apparatus for Filling Oil-Tins, of which the following is a specification.

Our invention relates to apparatus for filling oil-tins automatically from the main or storage tank.

In the drawings, Figure 1 is an elevation, partly in section, Fig. 2 a plan, Fig. 3 a cross-section, and Fig. 4 an end view, of our apparatus.

Referring to the said drawings, we employ a set of two circular or other-shaped oil cans or tanks A A′, mounted upon a frame B, each can being provided at the top with an inlet cock or valve C C′, respectively, leading from the main oil-supply pipe D, said pipe being provided with a regulating cock or valve and index-plate *d* and at the bottom with a discharge cock or valve *c c′* for emptying the contents into the commercial tins or drums E E′.

The inlet and outlet valves of each can or tank A A′ are operated by means of two short levers F, connected to a main or double-armed operating bar or handle G by means of slots *f*, engaging with pins *f′*, secured to the main handle. The main handle is mounted so as to slide in guides *b* upon the frame B, the top guides being provided with wheels or pulleys *b′* for facilitating the working of the lever. The arrangement is such that when the lever is forced forward it opens the discharge and closes the inlet of the tank A and closes the discharge and opens the inlet of the tank A′, the reverse happening when the lever is pulled outward, thus filling the cans E E′ alternately.

If desired, we may employ two, three, or more sets of tanks.

We also employ means for automatically feeding the tins or drums E E′ alternately below the discharge or outlet cocks *c c′* of the oil-tanks A A′, consisting of endless bands H H′, one for each tin, composed of small ⊥ or other-shaped rails or guides *h*, the ends of the rails resting upon guides *h′*, secured to the main frame, so that the tins are always in the correct position below the discharge.

At each side of the main frame B and at a suitable distance from the tanks are mounted shafts J J′, upon which the endless bands H H′ work by means of chains on their inner sides engaging with sprocket-wheels *j j′* on said shafts, the driving-wheels *j* of the band H being keyed to the shaft J, while the wheels *j′* run loosely upon the shaft J′. The band H′ is mounted reversely to the first in that the driving-wheels *j* are keyed to the shaft J′ and the wheels *j′* run loosely upon the shaft J. The loose wheels are retained in position on the shafts by collars j^2. Both shafts are operated by a hand-lever K, having at its lower end a double-acting pawl *k*, which in order to operate the shaft J′ engages with a ratchet *k′*, secured to a sprocket-wheel L, said wheel being connected to a smaller sprocket-wheel L′, keyed upon the shaft J′ by a chain *l*. The shaft J is operated by the pawl *k*, engaging with a ratchet k^2, secured to a spur-wheel M, engaging with a smaller spur M′, keyed upon the shaft. The hand-lever K, sprocket-wheel L, and spur-wheel M are mounted upon a shaft N, secured to the side of the frame B.

As shown in the drawings, when the lever K is operated in the right-hand direction the pawl *k* will engage with the ratchet *k′* upon the sprocket-gear and operate the shaft J′, containing the driving-wheels *j* of the band H′, thus moving the tin E′, which is now full, forward and placing another tin below the discharge. The lever G is then forced forward and opens the discharge to the tin E, so that when filled the lever K is operated in the left-hand direction, the pawl *k* engaging with the ratchet k^2 upon the spur-gear and operating the shaft J, which has the driving-wheels of the band H′ keyed thereon, thus moving the tin E forward and placing another in position, the arrangement being that both tins are fed forward alternately; or we may mount the lever K and gear that it can be operated in the opposite direction to the foregoing.

The bottom of the main frame B is formed as a tank, so as to retain any oil that may be spilled or leak from the tanks below.

We claim—

1. In an apparatus for filling oil-cans from a storage-tank, the combination of two filling-tanks A, A′ each having inlets and discharge-outlets and valves in each of said inlets and outlets, levers F attached to said valves, and the double-armed bar or handle G connected to all of said levers and operating the valves in such manner that the inlet and outlet valves of each tank are opened and closed alternately and the valves of tank A are operated reversely to those of tank A′.

2. In an apparatus for filling oil-cans from a storage-tank, the combination with two discharge-outlets, of means for feeding cans alternately below said outlets, comprising feeding or can-supporting parts mounted to move independently, an operating-lever and connecting devices, such as ratchets and pawls between said lever and the can-supporting parts, whereby the same are moved alternately by motions of the lever in opposite directions.

3. In an apparatus for filling oil-cans, the combination with two discharge-outlets, of can-supporting bands located beneath said outlets, shafts supporting and operating said bands, an operating-lever and reversely-placed pawl-and-ratchet connections between said lever and shafts whereby the bands are moved alternately by reverse movements of said lever.

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Witnesses:
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