

(No Model.)

W. M. BUTLER.
COMPOUND FAUCET.

No. 464,472.

Patented Dec. 1, 1891.

Fig. 1.

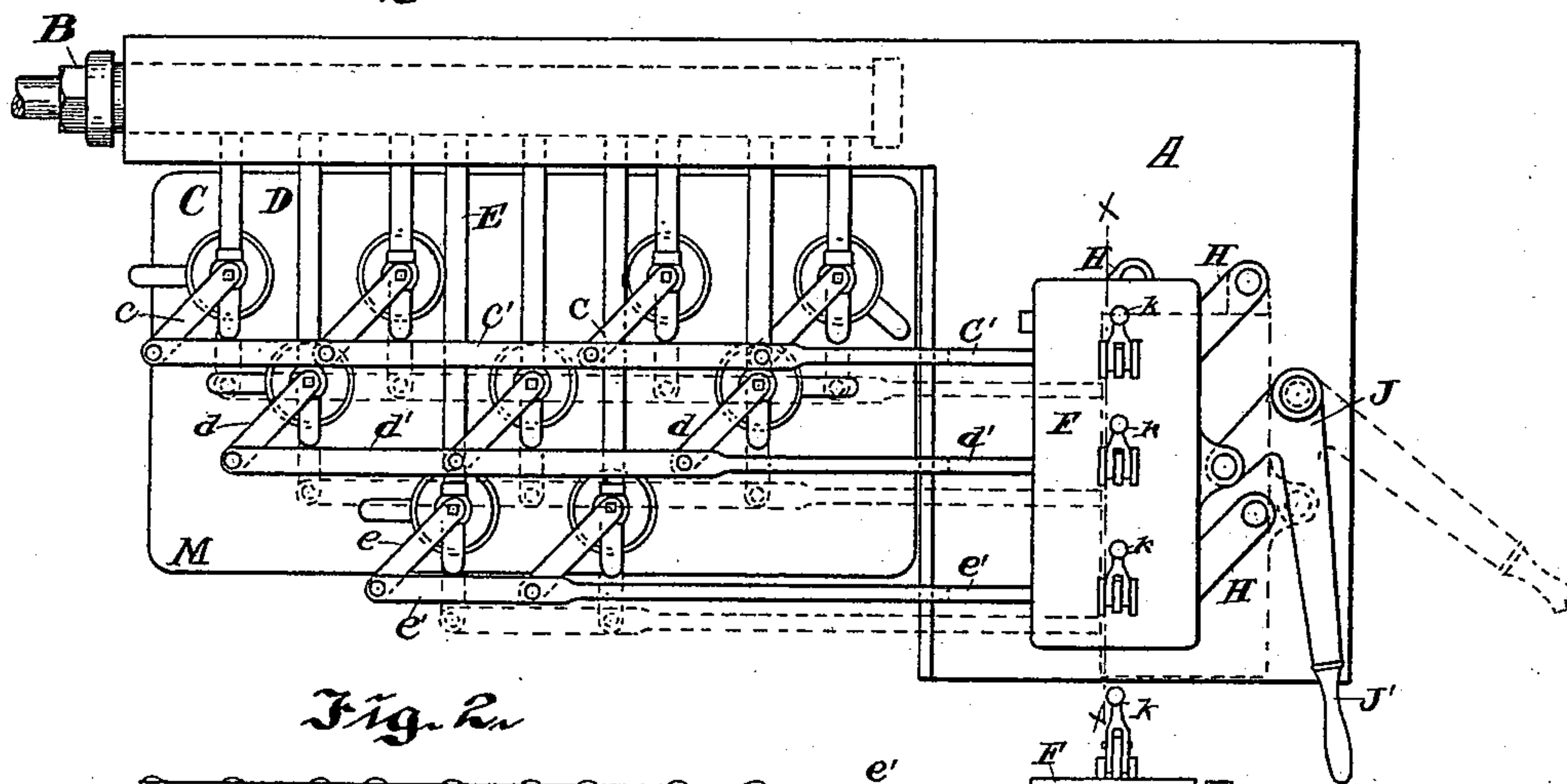


Fig. 2.

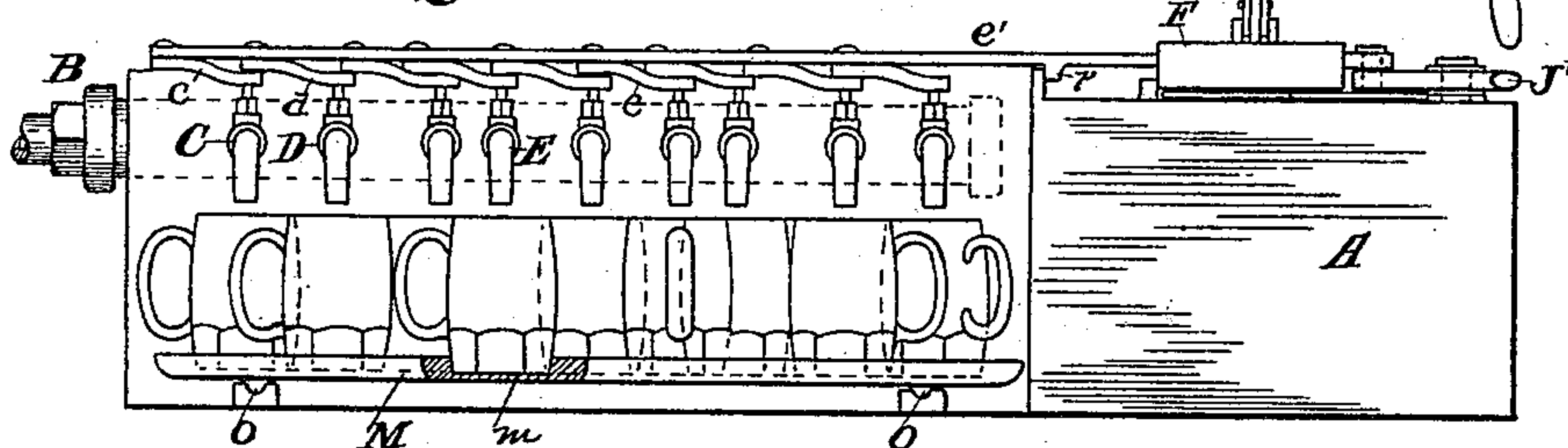


Fig. 3.

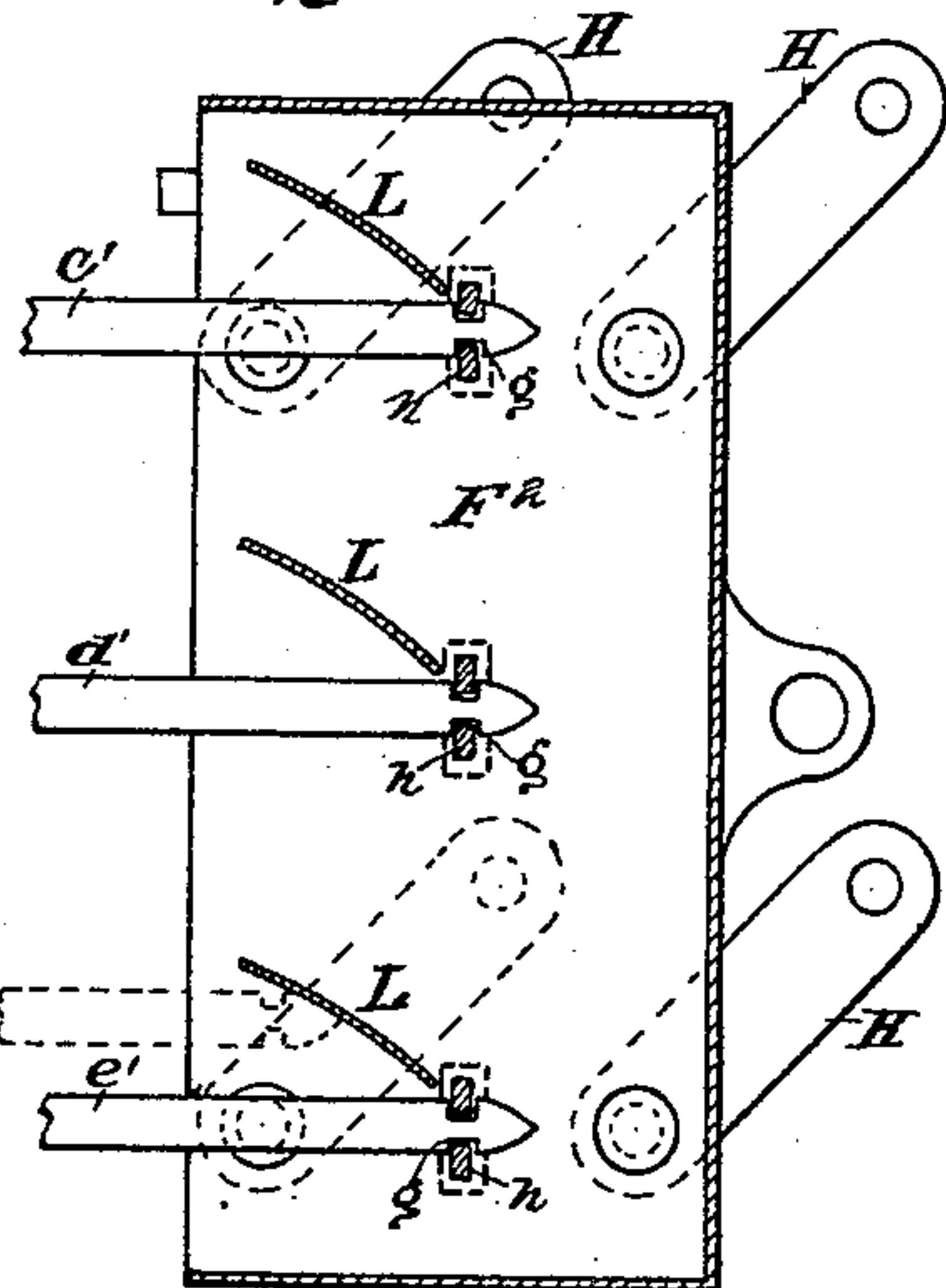


Fig. 4.

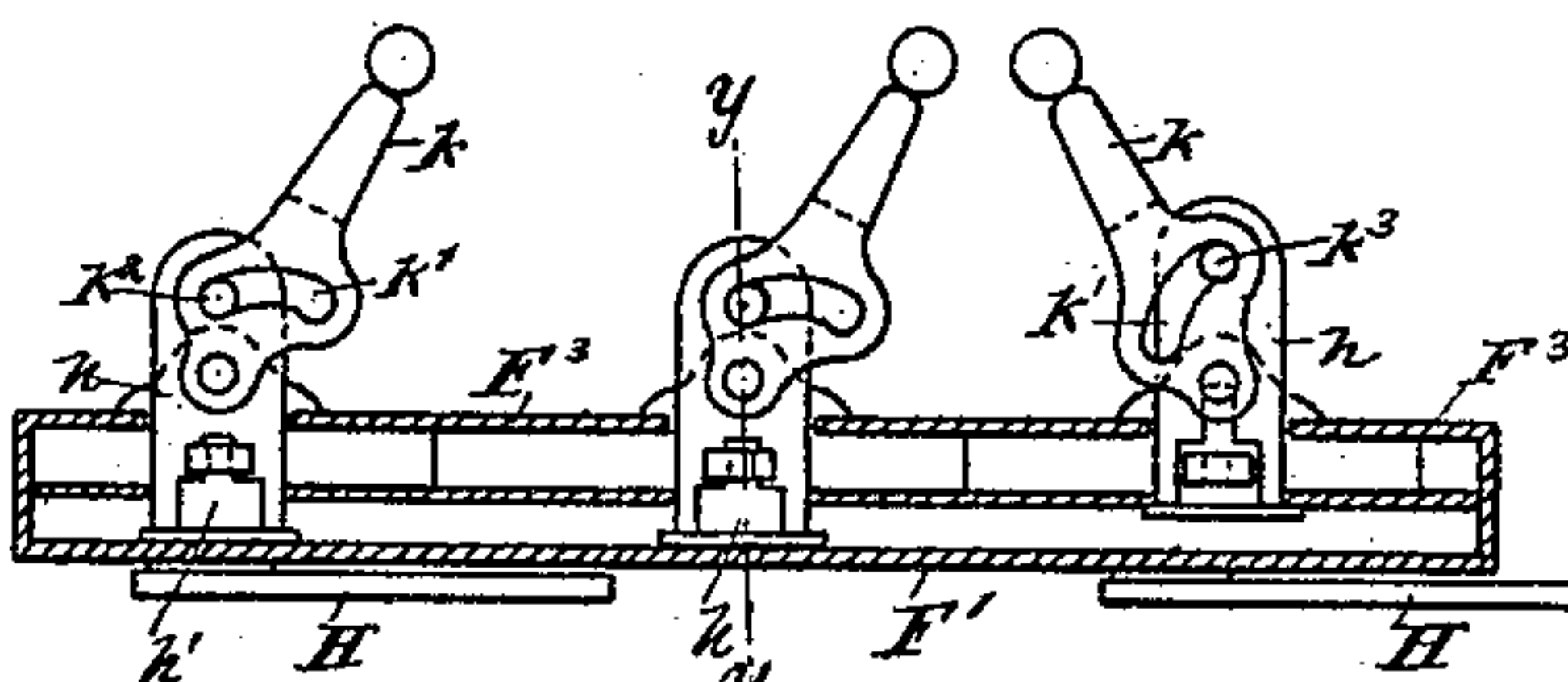
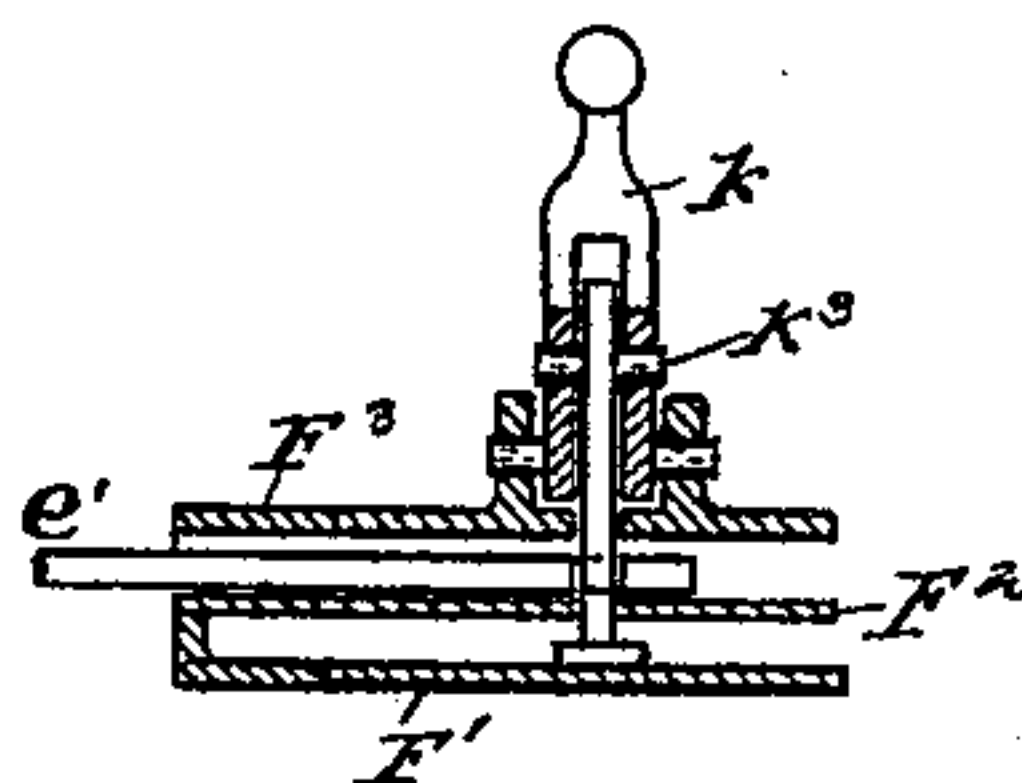


Fig. 5.



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WILLIAM MILL BUTLER, OF ROCHESTER, NEW YORK.

COMPOUND FAUCET.

SPECIFICATION forming part of Letters Patent No. 464,472, dated December 1, 1891.

Application filed November 26, 1889. Serial No. 331,629. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM MILL BUTLER, of the city of Rochester, county of Monroe, and State of New York, have invented certain new and useful Improvements in Apparatus for Drawing Beer, &c.; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to letters of reference marked thereon.

My present invention has for its object to provide an apparatus for simultaneously filling a number of glasses or receptacles of any kind with beer, wine, grain, or any desired material capable of running from a spout or pipe, the flow being governed by valves or cocks, though particularly adapted in the present instance to apparatus for drawing beer, whereby any desired number of glasses within, of course, certain limits may be filled simultaneously, the cocks or valves being under such control of the operator that he can regulate or set the device to operate any desired number of them simultaneously, and the pressure or head under which the beer or other material is supplied being the same, the operation of a single part being all that is required.

An apparatus of this kind is especially desirable in places where a large number of customers are to be supplied, as in restaurants, concert-halls, and the like, and where the operation of filling the glasses separately from a single cock, as at present, would consume too much time, thereby enabling a comparatively small number of waiters to supply a large number of customers very rapidly.

With the object in view, therefore, of providing an apparatus possessing the capabilities mentioned and as one form thereof the invention consists in certain novel constructions and combinations of parts, all as will be hereinafter described, and the novel portions pointed out particularly in the claims at the end of this specification.

In the drawings, Figure 1 is a plan view of one form of apparatus embodying my invention; Fig. 2, a front elevation of the same with a number of receptacles in position to be filled; Fig. 3, a horizontal sectional view through the coupling-plate; Fig. 4, a section

taken on the line $x x$ of Fig. 1; Fig. 5, a section taken on the line $y y$ of Fig. 4.

Similar letters of reference in the several figures denote similar parts.

The letter A indicates a suitable frame or support for the present form of apparatus, embodying a casing for the supply-pipe or manifold B, to which the beer or other liquid is supplied, and C D E three series of faucets, cocks, or valves from which it is drawn into the glasses or other receptacles. For convenience these valves are arranged substantially in separate series, as shown, located in different planes, the valve arms or levers $c d e$ of each series being pivoted to connecting-bars $c' d' e'$, respectively. In the present arrangement four valves are shown in the first (rear) series, three in the next, and two in the next; but any other arrangement can be employed, and it will be seen that by operating all the bars simultaneously to the right nine glasses may be filled, or by operating the first and second seven, or the first and third six, or the second and third five, or the first or second or third four, three, and two glasses, respectively, as will be understood. Of course a greater or less number of valves could be employed; but the above are deemed sufficient for the purposes of description. The valve-connecting bars $c' d' e'$ are extended to one side and are each detachably connected to a common movable plate F by suitable catches or fastening devices G, presently described, said plate being pivoted upon links H and preferably of the same length as the arms $c d e$ of the valves, so that by the movement of said plate the bars connected thereto will be moved and the valves opened. The movement of the plate is preferably caused by a bell-crank lever J, pivoted to its rear side and the base or support, the handle J' being provided on the long arm, the short arm being the same length as the faucet arms and links, so that all the parts may be moved together by the operation of the handle.

The construction of the connecting-piece F, termed, for convenience of description, a "plate," may be varied greatly; but in the present instance I prefer to make it of three plates, the lower one F' constituting the bottom plate, to which the guiding-links H are pivoted, the middle one F² forming the lower

guide for the bars $c' d' e'$ and, if desired, the lower guides of the catches, and the top one F^3 constituting a cover for the parts, preventing the vertical displacement of the valve-bars and supporting the catches; but this construction can be greatly modified, if desired.

As a means of connecting the valve-bars and plate F , I preferably form the ends of said bars with the sharpened ends and the notches g at the sides, and the catches G are formed of plates h , having the slots h' therein preferably larger at the bottom, sufficient to accommodate the end of the valve-bar and contracted at the top, as shown, to enter the notches g in the bars $c' d' e'$ and prevent their withdrawal. These plates h are guided in apertures in plates F^2 and F^3 and are arranged to be moved vertically by small bifurcated levers k , pivoted on the top plate and having a cam-slot h' in the arms, with which engages pin h^3 on the upper end of the catch-plate h , said slot being so arranged as that when the end of the lever is moved in one direction the catch-plate will be raised and held in this position with the large portion of the slot in line with the valve-bars, and when thrown to the other side of the pivoted center the plate h will be held in depressed position, the sides of the narrow portion of the slot engaging the notches in the ends of the valve-bars, as shown in Figs. 3 and 4.

Suitable segmental guide-plates L are arranged to the left and rear of the notches, adapted when the plate F is moved to the left to direct the ends of the valve-bars into proper position in the catches.

In order to provide for properly positioning the glasses or receptacles beneath the faucets, I prefer to employ a tray M , having in its upper sides recesses m , in which the glasses are set, these recesses being arranged so that a glass will come beneath each faucet and properly position the tray by suitable ribs n on the bottom, engaging corresponding channels or grooves o on a base, as in Fig. 2. Suitable stops r are provided on the bars $c' d' e'$, adapted to engage a rail on the base, preventing the movement of the said bars and insuring the proper centering of their ends in the catches when desired to couple them after being disengaged.

The operation will now be understood. The parts being in the position in full lines, Fig. 1, the operator, if he wishes to fill the full number of glasses—say nine—moves the lever to the position shown in dotted lines, Fig. 1, turning on all the valves, and the beer or other liquid being under even pressure at all the faucets the glasses will be filled simultaneously, and when desired the handle may be turned back to normal position, shutting it off. Should it be desired to draw from less than the whole number of faucets, the operator simply turns the catch-lever of the series it is undesirable to open to the position indicated in Fig. 4, at the right, causing the larger portion of the slot h' to be presented

opposite the notches in the valve-bar, when the plate F may be operated as before, valve-bar released, remaining stationary, and when the plate is returned to first position the segmental plate L will guide the end of the bar into position to be engaged by the catch-plate when again moved down.

I do not wish to be understood as confining my invention to the arrangement of parts herein shown, as it will be seen that the faucets could be arranged to turn vertically, if desired, and the operating-handle J' moved in the same direction; or, if desired, a series of single valves capable of independent connection by means such as catches to a common coupling-bar could be employed, or the catches be located on the ends of the valve-connecting bars $c' d' e'$ instead of on the plates. Other modifications could as readily be made without departing from the spirit of my invention.

I claim as my invention—

1. The combination, with a series of valves or faucets, of a movable coupling-plate, a series of readily-detachable catches thereon arranged to connect any of the faucets to the plate, whereby any desired number may be operated simultaneously by the movement of the plate, substantially as described.

2. The combination, with the movable plate having the movable slotted catches thereon, of a series of valves, each having a bar or link connected thereto, arranged to co-operate with the catches and be secured by them when the latter are moved in one direction, substantially as described.

3. The combination, with two or more series of valves or faucets, the valves of the series being connected by connecting-bars, of a movable coupling-plate and readily-detachable catches for connecting the bars of each series to it, substantially as described.

4. The combination, with two or more series of rotary valves or faucets, the valves of the series being connected for simultaneous operation, of a coupling-plate and readily-detachable catches by which the series are separately connected to said plate, and a lever for moving the plate in the arc traversed by the valve-arms, substantially as described.

5. The combination, with two or more series of valves or faucets, the valves of the series being connected for simultaneous operation, of a movable coupling-plate, links on which it is pivoted, and detachable catches for separately connecting any or all of the series to the said plate, substantially as described.

6. The combination, with the series of valves or faucets, of the movable coupling-plate having the slotted catches thereon, and the operating-handles adapted when moved in one direction to secure the valves to the plate and when moved in the other direction to keep the catch-plates out of engagement, substantially as described.

7. The combination, with a movable plate

having guides and a readily-detachable catch thereon, of a valve or faucet and an arm connected thereto arranged to be guided and connected by the catch to the plate, substantially as described.

5 8. The combination, with two or more series of faucets, bars connecting said series having the projections at the ends, of a

movable plate, slotted catches for engaging the projections on the bars, and means for moving the catches to engage and disengage them, substantially as described.

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