

said beam, the relative impedance of said transmitter coils being varied upon movement of the float-carried armature thereby to vary the current flowing in the respective receiver coils so as to vary the pull on the respective beam armatures and thus to tilt said beam, said beam having means at its opposite ends for supporting said armatures generally in the same vertical lines regardless of tilting of said beam.

4. In a system for remote indication and integration of fluid rate-of-flow having a rotameter including a vertical metering tube and a float adapted for free up-and-down movement responsive to variations in rate-of-flow of fluid through said tube, and having indicating means remote from said rotameter, and electrical counting means; an extension tube disposed in axial alignment with said metering tube, an elongated member extending from said metering float into said extension tube, a balanced beam connected to said indicating means, means for tilting said beam responsive to movements of said float, said last-mentioned comprising an alternating current impedance circuit including a pair of end-to-end co-axial transmitter coils disposed about said extension tube, an armature carried by said elongated member and adapted to be moved within said transmitter coils by said float, a pair of generally vertical laterally-disposed receiver coils, and a pair of armatures carried by said beam and extending within said receiver coils and adapted to be pulled thereby so as to exert opposite moments upon said beam, the relative impedance of said transmitter coils being varied upon movement of the float-carried armature thereby to vary the current flowing in the respective receiver coils so as to vary the pull on the respective beam armatures and thus to tilt said beam, and means connected to said beam for varying the rate of counting of said counting means responsive to variations in the rate-of-flow of fluid.

5. In a system for remote indication and integration of fluid rate-of-flow having a rotameter including a vertical metering tube and a float adapted for free up-and-down movement responsive to variations in rate-of-flow of fluid through said tube, and having indicating means remote from said rotameter, and electrical counting means; a balanced beam connected to said indicating means, means for tilting said beam responsive to movements of said float, said last-mentioned means comprising an alternating current impedance circuit including a pair of end-to-end transmitter coils co-axial with said metering tube, an armature carried by said float and adapted to be moved within said transmitter coils, a pair of generally vertical laterally-disposed receiver coils, and a pair of armatures carried by said beam and extending within said receiver coils and adapted to be pulled thereby so as to exert opposite moments upon said beam, the relative impedance of said transmitter coils being varied upon movement of the float-carried armature thereby to vary the current flowing in the respective receiver coils so as to vary the pull on the respective beam armatures and thus to tilt said beam, and means connected to said beam for varying the rate of counting of said counting means responsive to variations in the rate-of-flow of fluid.

6. In a system for measuring total fluid flow during a predetermined elapsed time period, said system having a rotameter including a vertical metering tube and a metering float adapted

for free up-and-down movement responsive to variations in rate-of-flow through said tube, and having an electrical counter; a magnet, a magnetically-operated switch adapted to actuate said counter, means for periodically interrupting the magnetic field of said magnet thereby periodically to operate said switch, and means actuated by said metering float for controlling said interrupting means for varying the rate of interruption of said magnetic field, thereby to vary the total registered by said counter during said elapsed time period.

7. In a system for measuring total fluid flow during a predetermined elapsed time period, said system having a rotameter including a vertical metering tube and a metering float adapted for free up-and-down movement responsive to variations in rate-of-flow through said tube, and having an electrical counter; a magnet, a magnetically-operated switch adapted to actuate said counter, means for periodically interrupting the magnetic field of said magnet thereby periodically to operate said switch, said last-mentioned means including a slotted interruptor wheel rotatably mounted adjacent said switch, and means actuated by said metering float for varying the rate of rotation of said interruptor wheel, thereby to vary the total registered by said counter during said elapsed time period.

8. In a system for measuring total fluid flow during a predetermined elapsed time period, said system having a rotameter including a vertical metering tube and a metering float adapted for free up-and-down movement responsive to variations in rate-of-flow through said tube, and having an electrical counter; a magnet, a magnetically-operated switch adapted to actuate said counter, means for periodically interrupting the magnetic field of said magnet thereby periodically to operate said switch, said last-mentioned means including a slotted interruptor wheel rotatably mounted adjacent said switch, and means for varying the rate of interruption of said magnetic field thereby to vary the total registered by said counter during said elapsed time period, said last-mentioned means including a balanced beam, an electrical impedance circuit for tilting said beam responsive to movement of said metering float, and means actuated by tilting of said beam for varying the rate of rotation of said interruptor wheel.

9. In a system for measuring total fluid flow during a predetermined elapsed time period, said system having a rotameter including a vertical metering tube and a metering float adapted for free up-and-down movement responsive to variations in rate-of-flow through said tube, and having an electrical counter; a magnet, a magnetically-operated switch adapted to actuate said counter, means for periodically interrupting the magnetic field of said magnet thereby periodically to operate said switch, said interrupting means including a slotted interruptor wheel rotatably mounted adjacent said switch, and means for varying the rate of interruption of said magnetic field thereby to vary the total registered by said counter during said elapsed time period, said last-mentioned means including a cam, means for rotating said cam responsive to movement of said metering float and means for varying the rate of rotation of said interruptor wheel responsive to rotation of said cam.