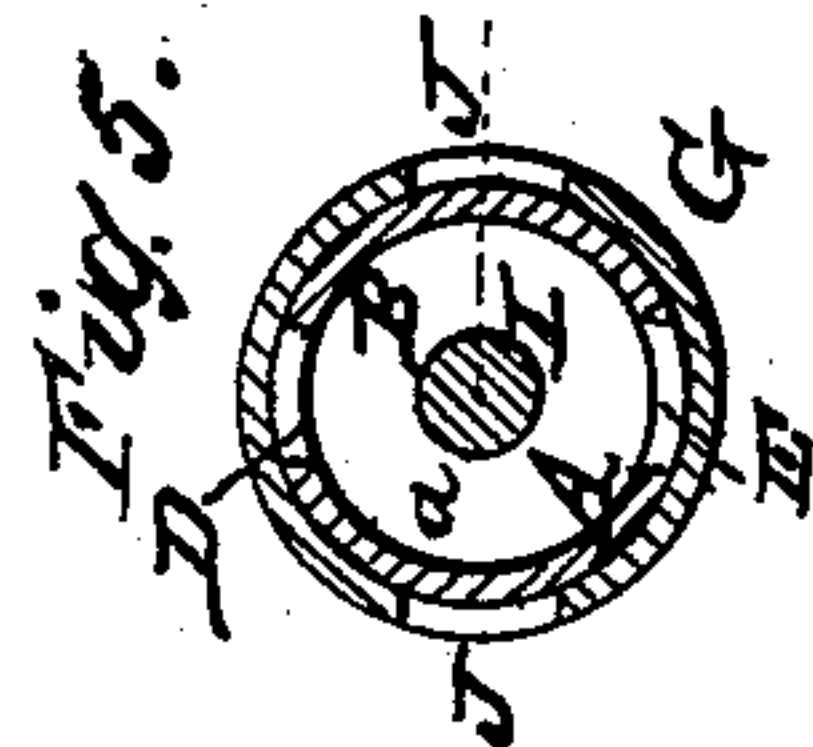
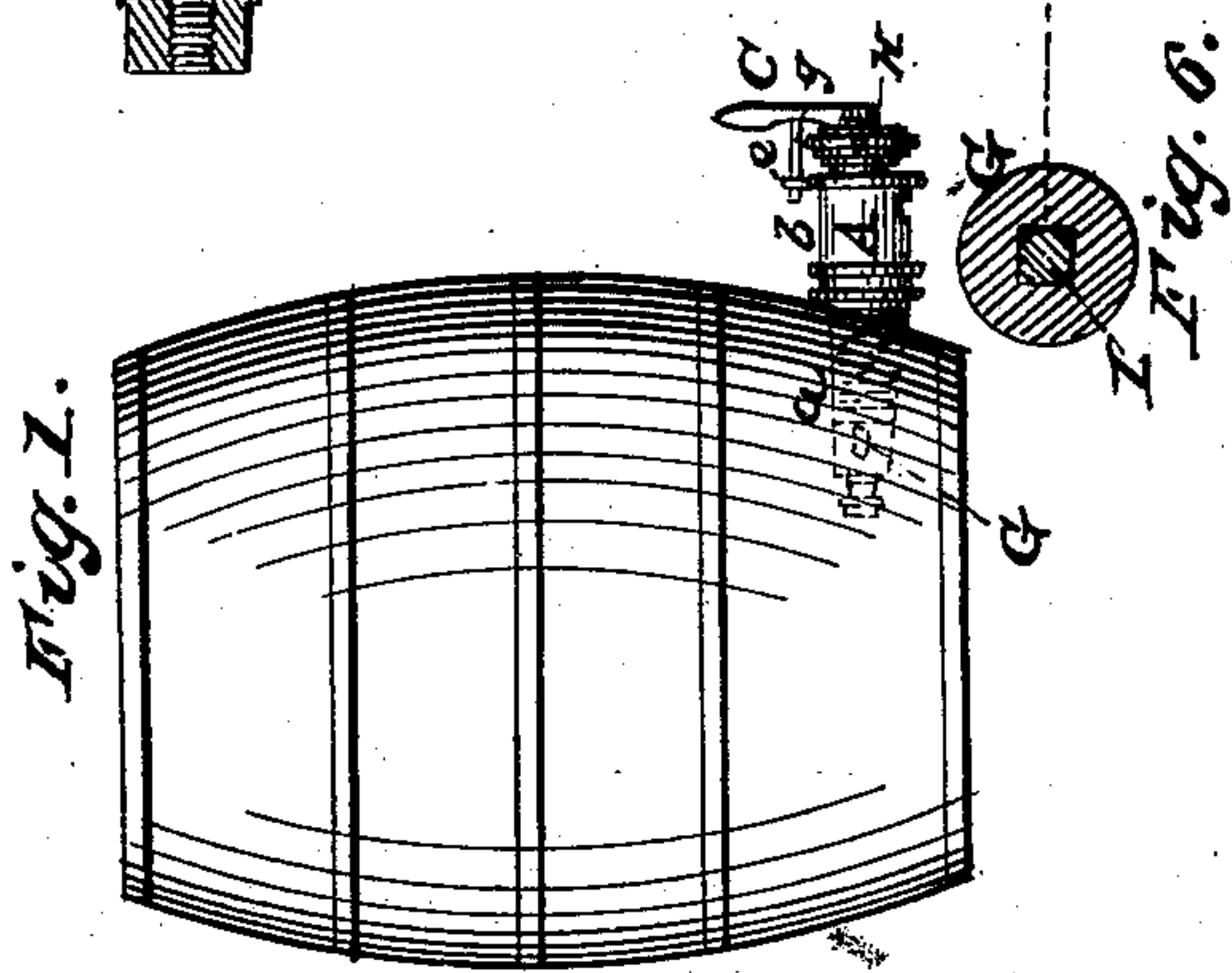
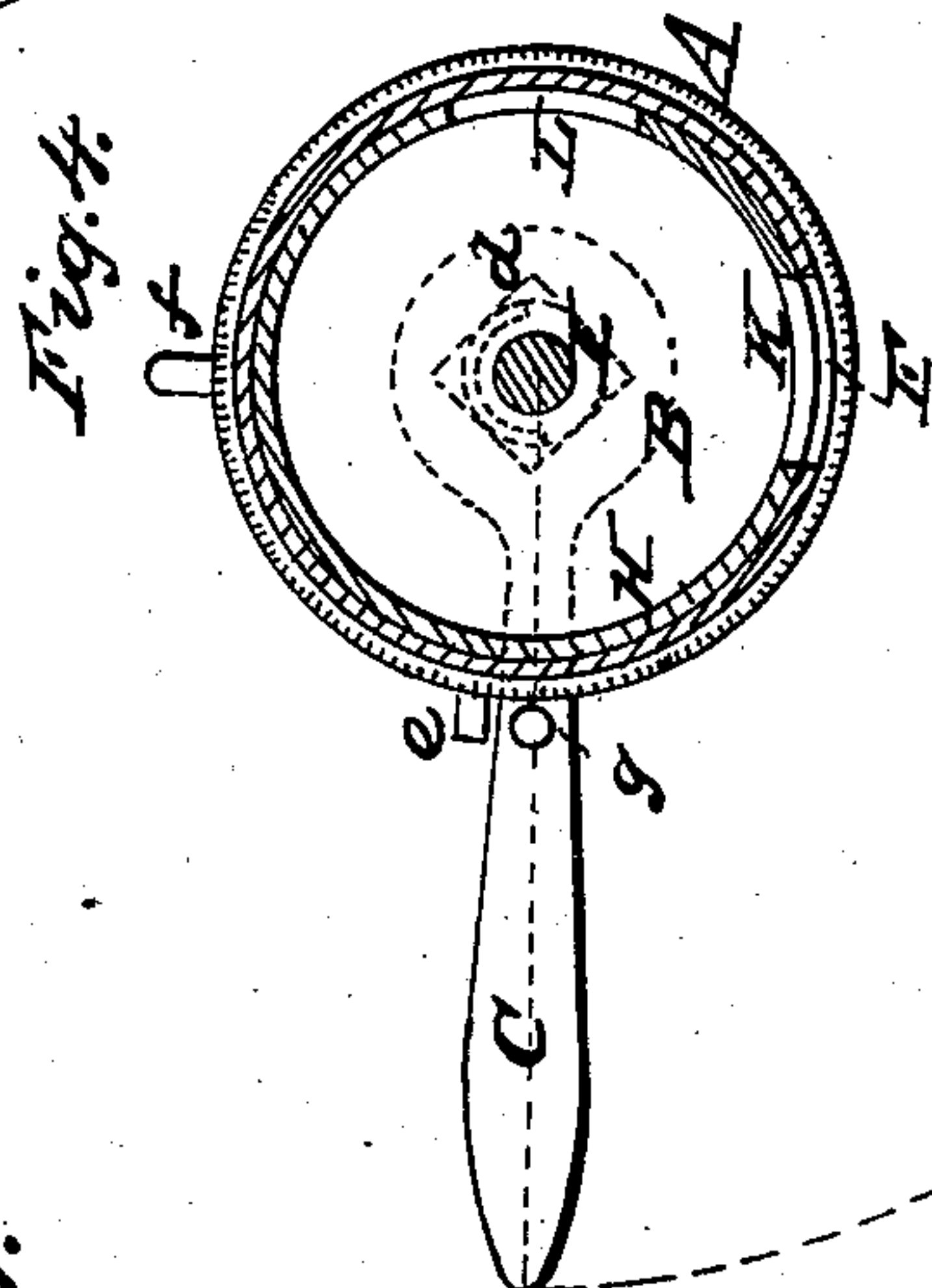
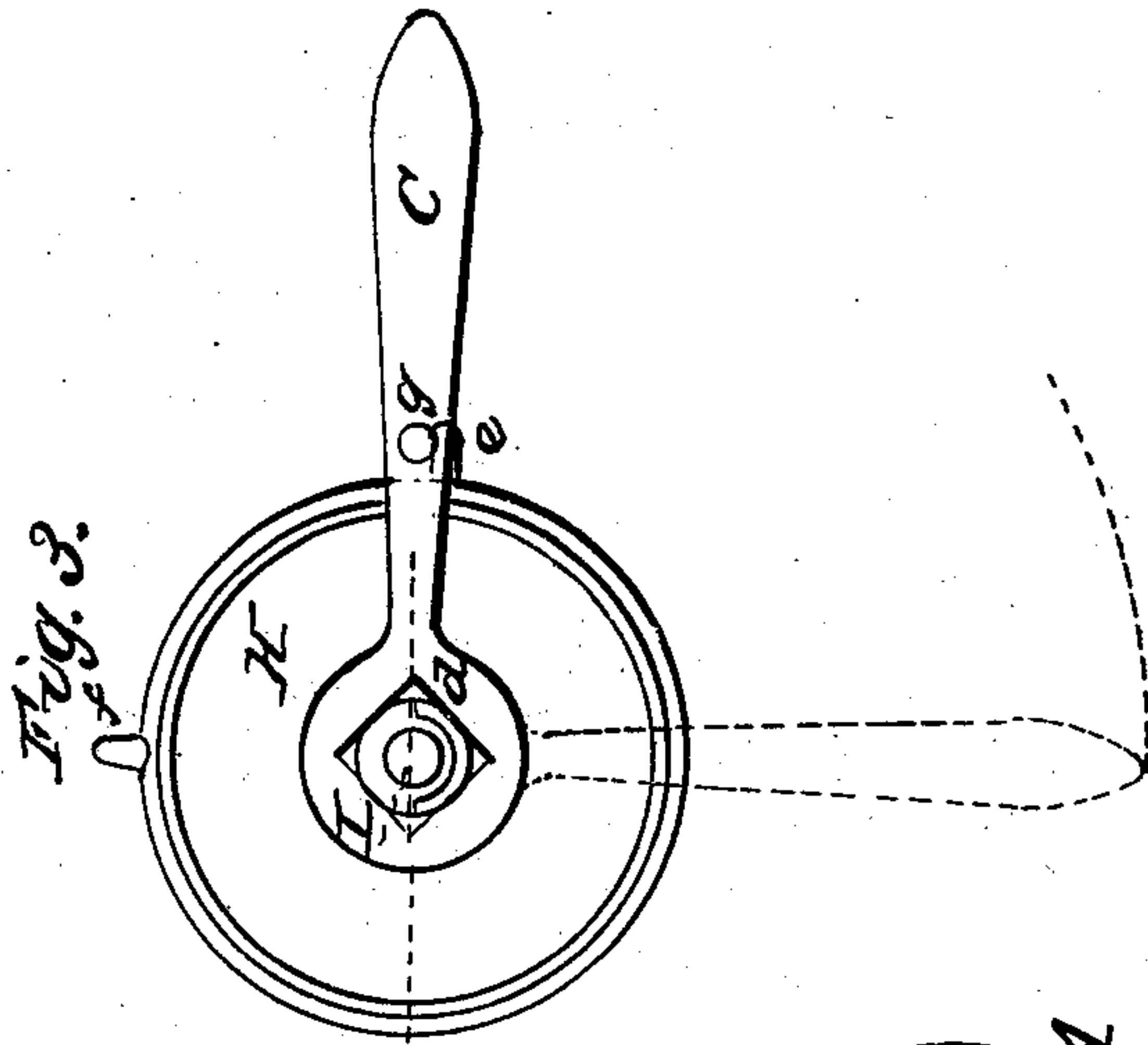
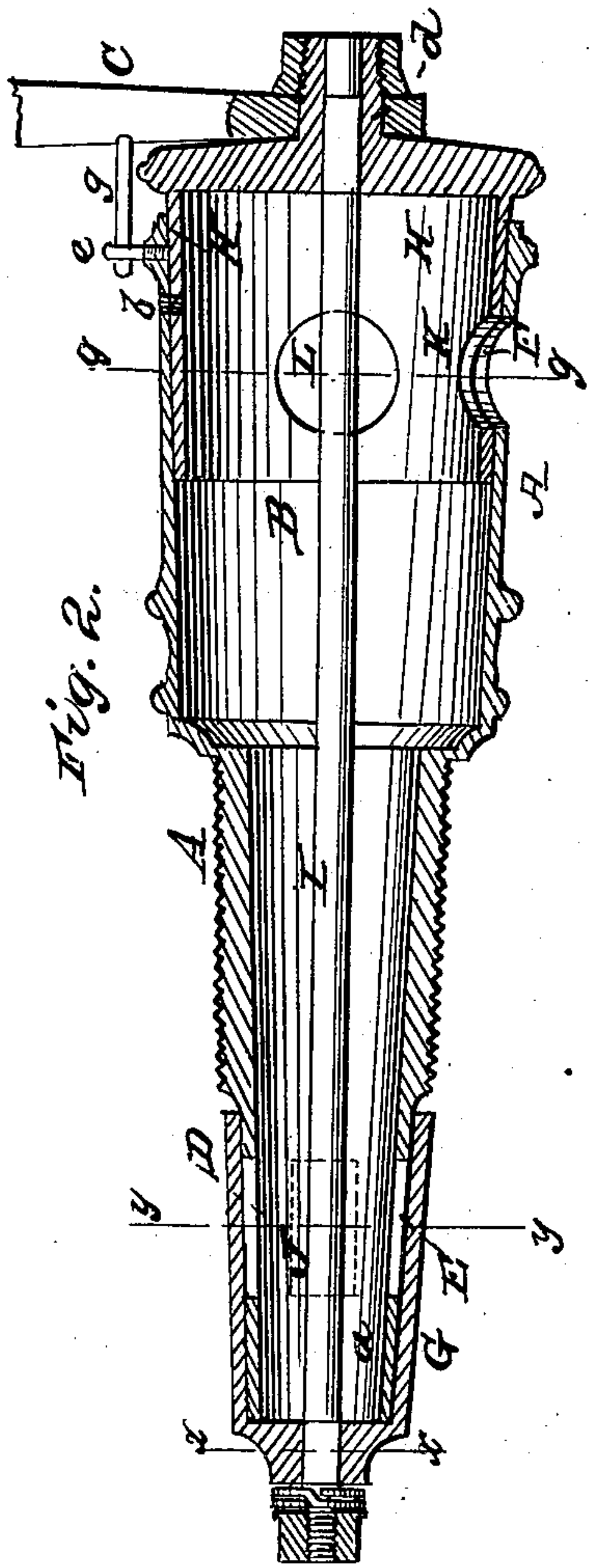


LARWILL & CROSS.

Faucet.

No. 10,638.

Patented March 14, 1854.





# UNITED STATES PATENT OFFICE.

J. B. LARWILL AND J. CROSS, OF BUCYRUS, OHIO.

## FAUCET FOR MEASURING LIQUIDS.

Specification of Letters Patent No. 10,638, dated March 14, 1854.

*To all whom it may concern:*

Be it known that we, J. B. LARWILL and J. Cross, of Bucyrus, in the county of Crawford and State of Ohio, have invented a new and useful Improvement in Self-Measuring Faucets; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1, represents a side view of the faucet, secured in a cask. Fig. 2, is a vertical longitudinal section of the faucet on a larger scale detached from the cask, and as it appears when used as a safety self measurer. Fig. 3, is a view of the outer end of the same. Figs. 4 and 5, are vertical transverse sections of the faucet, as it appears when ready to be used as a constant runner. These sections are taken in the lines, *g, g*, and *y, y*, in Fig. 2. Fig. 6, is a vertical transverse section of the inner end of the faucet through the line, *x, x*, in Fig. 2.

Similar letters of reference in each of the several figures indicate corresponding parts.

The nature of our invention consists in a simple and useful manner of constructing faucets—whereby they are made capable of measuring any given quantity, and of shutting off the supply from the cask, simultaneous with the discharging of same from the faucet, and vice versa when it is desired to measure another quantity—and susceptible of being speedily converted into a constant runner when desirable.

To enable others skilled in the art, to make and use our invention, we will proceed to describe its construction and operation.

The faucet, A, is made with a measuring chamber, B, of any desired capacity—from a gill upward—into which the fluid is allowed to flow from the cask without escaping from the faucet until said chamber has been filled and the handle, C, of the faucet turned by the salesman. The faucet, A, has three passages, lettered, D, E, F, communicating with the chamber, B, as shown in Fig. 2, two of which (those D, and E,) receive the fluid from the cask, and the other, F, discharges it.

G, H, are two hollow cylindrical valves for controlling the entrance and discharge of the fluid into and from the faucet. The valve, G, being placed over the inner taper end, *a*, of the faucet, and the other, H, is placed inside the outer end, and serves as a

cap, and both are connected together by the rod, I, which passes through the center of the faucet, and they are turned simultaneous with each other. The valve, G, on the inner end of the faucet serves to shut off the supply from the cask, after the faucet has been filled, and simultaneous with the opening of the discharge passage of the faucet, it being provided with two passages, J, J, similar to those, D, E, in the faucet, and are made to come directly in line with them when it is desired to supply the fluid to the faucet.

The valve, H, which fits inside the outer end, *b*, of the faucet, and serves as its cap or head, is provided with two passages, K, L, one of which being the distance of one quarter the diameter of the valve from the other, as shown in the drawing, Figs. 2, and 4. These two passages serve for letting the fluid pass out of the chamber, B, when the faucet is used as a measure or constant runner—that lettered K, being employed and coming directly in line with the passage F, when the faucet is employed as a measurer, and has been filled and needs to be emptied of its contents; in which case the handle, C, which fits over the square of the rod, I, and operates the valves, G, K, is made to occupy the positions shown in black lines, and the arm, *g*, with which the handle is provided, made to strike against the stop, *e*, and rest there, it having been moved to said position from the point designated by a \* in Fig. 4, which movement opened the discharge. After the fluid has all run out of the chamber, B, through the passage, K, of the valve, and that, F, of the faucet the handle, D, is moved back to the point designated by a \* or to the position shown in red lines in Fig. 3. This operation closes the discharge of the faucet, and opens the supply from the cask. The stop, *e*, against which the arm, *g*, of handle strikes as it is moved around in the arc of a circle, serves to prevent the faucet being accidentally converted into a constant runner; said stops also serving to prevent the faucet being accidentally converted into a measurer after it has been changed from such. The passage, L, of the valve, H, is only employed when the faucet is used as a constant runner, in which case the handle, C, is taken off the square, *d*, and again put on and made to occupy a position between the pins, *e*, *f*, as shown in Fig. 3, between which pins it



moves back and forth. It being moved in the direction indicated by the red arc of a circle when it is desired to bring the passage, L, of the valve, H, in line with the passage, F, and the passages, J, J, in line with those, D, E, and thereby convert the faucet into a constant runner.

When it is desired to shut off the supply, the handle is moved to the position shown in Fig. 3, in black lines, and its arm, g, made to bear against one of the stops as shown in Fig. 2.

This simple arrangement will effectually answer the purpose of a measurer, and after being once set as such, as a complete safety against the contents of the cask running out by leaving it open, as often occurs with the ordinary faucet,—for the fluid cannot possibly get out of the faucet until the supply from the cask is shut off. It also prevents the possibility of setting fire to the contents of the cask, while drawing therefrom.—And there is no necessity for a vent in the cask, as it will draw as well without, as with it. And by simply changing the position of the

handle as described, the faucet can be converted into a constant runner, and the contents of a cask can be drawn off with rapidity. And as this change cannot be made accidentally, the safety of the faucet is not lessened by having it susceptible of this change.

What we claim as our invention and desire to secure by Letters Patent, is:—

The manner herein described, and shown in the accompanying drawings of constructing faucets—whereby they are rendered capable of measuring any given quantity, and of shutting off the supply from the cask when it is desired to discharge the contents of the faucet—and of closing the discharge of the faucet, when it is desired to measure a fresh quantity and susceptible of being converted into a constant runner when desirable, substantially as herein described.

J. B. LARWILL.  
J. CROSS.

Witnesses:

J. HOWENSTINE,  
S. R. HARRIS.