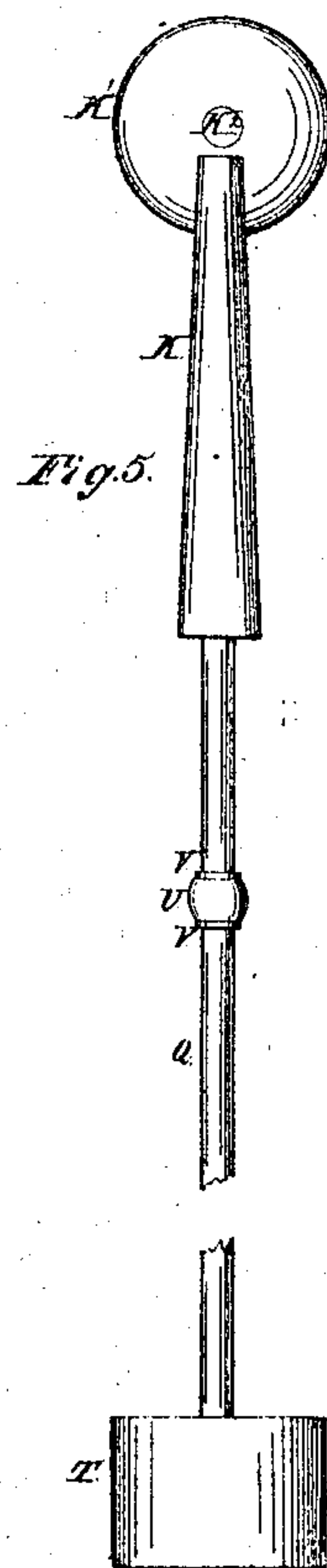
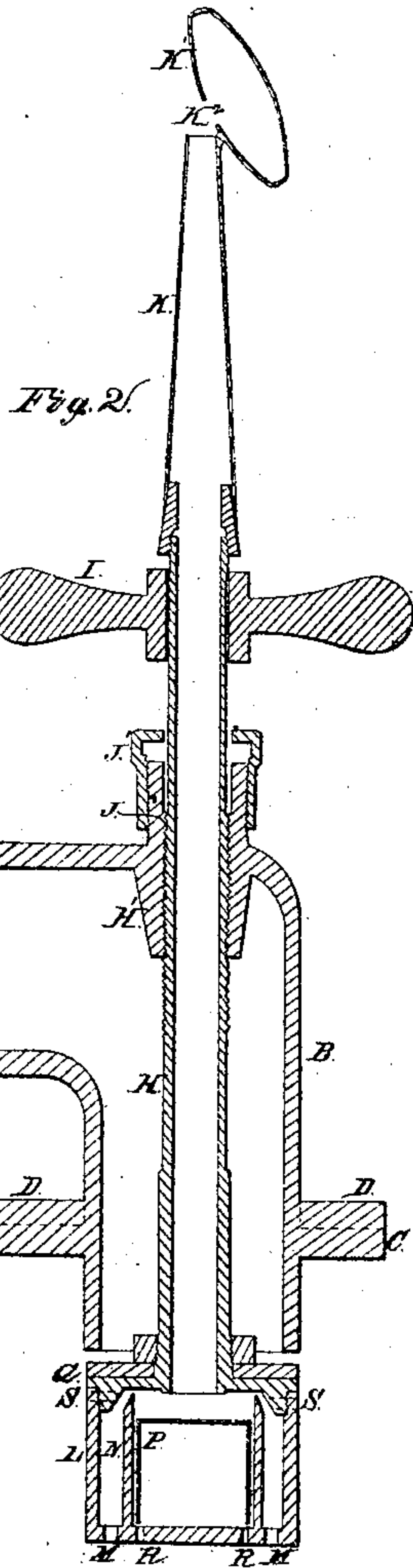
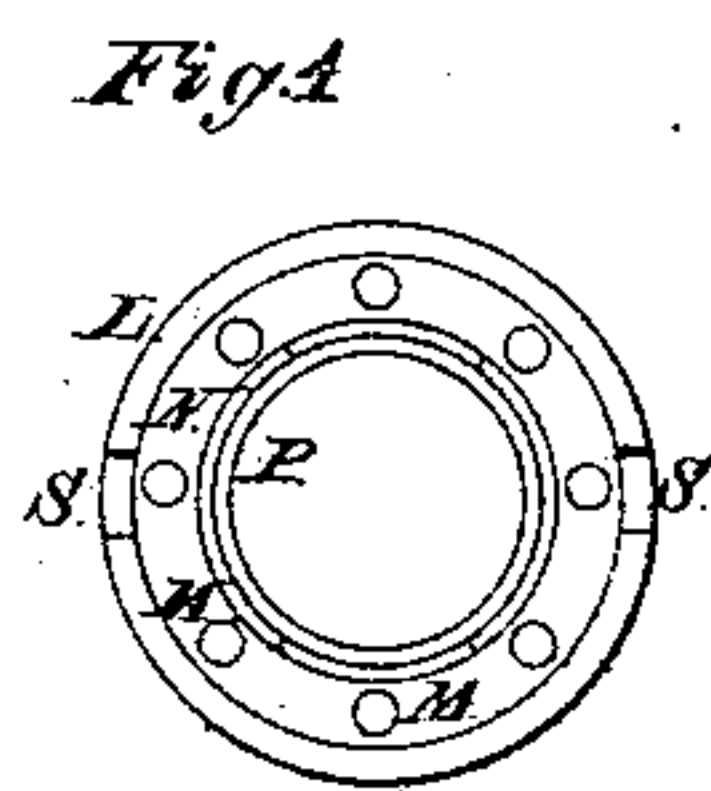
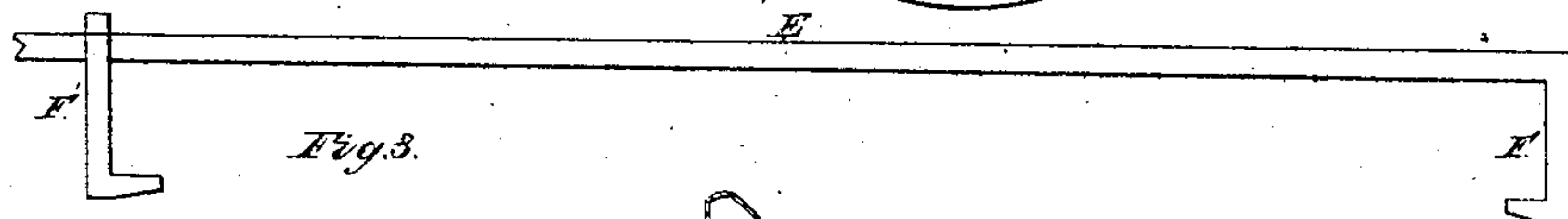
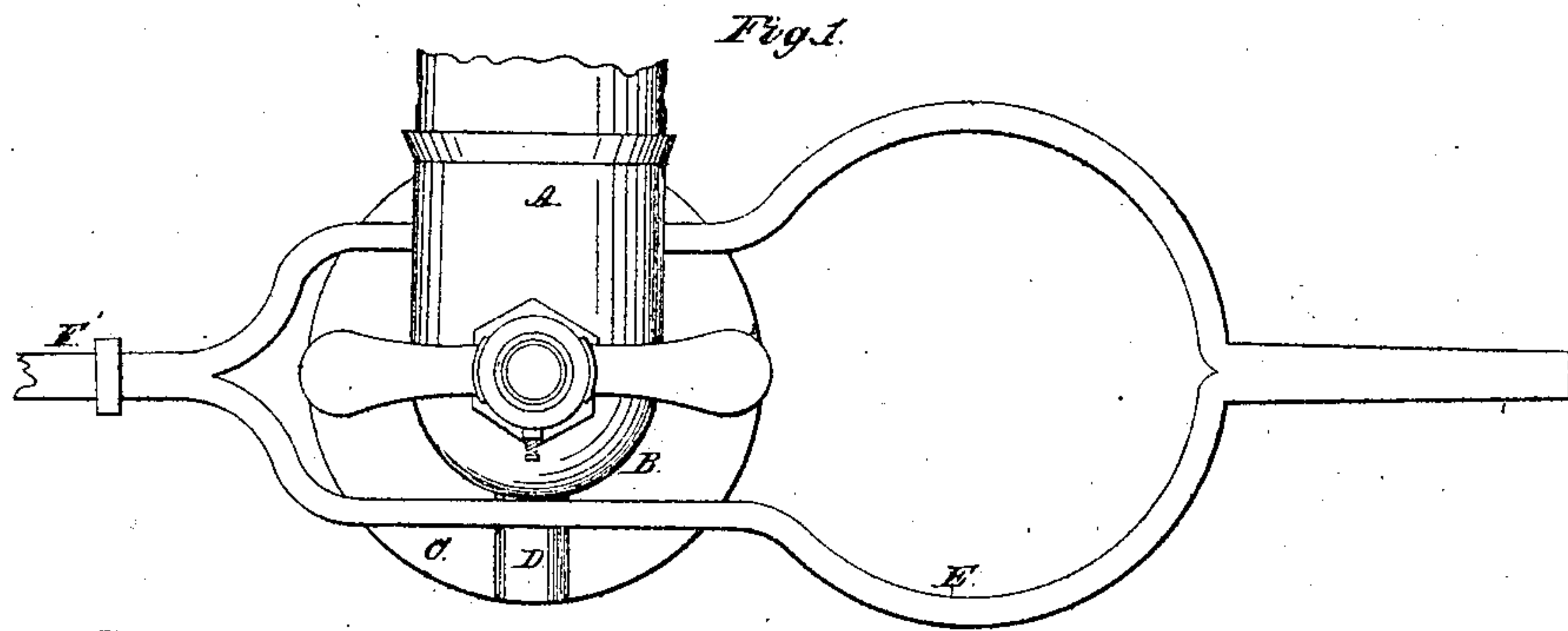


B. PICKERING.
COCK.

No. 29,309.

Patented July 24, 1860



UNITED STATES PATENT OFFICE.

BARTON PICKERING, OF DAYTON, OHIO.

COCK.

Specification of Letters Patent No. 29,309, dated July 24, 1860.

To all whom it may concern:

Be it known that I, BARTON PICKERING, of Dayton, in the county of Montgomery and State of Ohio, have invented a new and useful Self-Indicating and Self-Closing Cock; and I do hereby declare that the same is described and represented in the following specifications and drawings.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and use referring to the drawings in which the same letters indicate like parts in each of the figures.

Figure 1, is a plan or top view of the cock. Fig. 2, is a sectional elevation of same. Fig. 3, is an elevation of the lever used to clamp the cock to the cask to be filled. Fig. 4, is a top view of the valve box. Fig. 5, is an elevation of a tube to be used when casks are to be only partially filled.

The nature of my invention and improvements in stop cocks consists in a stop cock with a hollow stem provided with a float valve arranged in a guard box with a concentric ring to guide the valve as it is floated as the cask is filled, and in arranging a whistle so as to be blown or sounded by the air issuing from the barrel through the stem of the cock, so that the person in charge may know when the barrel is full. Also in arranging an adjustable pipe to hold the floating valve higher or lower in the cask, so as to fill the cask more or less as desired.

In the accompanying drawings A, is the horizontal and B, the perpendicular part of the cock which may be made of metal in the form shown, or in such other form as will answer the purpose intended. The end A, is designed to receive a hose to supply the cock with the liquid which is to run through it, from some tank or cask with which the hose may be connected in some convenient manner. The end B, which is to be inserted in the cask to be filled, is provided with a flange C, having ribs like the one shown at D, Fig. 1, on opposite sides of the cock for the lever E, to rest or bear on when the cock is applied to a cask to be filled in the following manner. A piece of india rubber, or other packing is applied around the end B, under the flange C, when the end B, is inserted in the bung of a cask, when the hook F, on the end of the lever E, (which has been previously put around the

part B, above the flange C,) is placed under the chime at one end and the lever E, is pressed down on the ribs D, on the flange C, so as to press it against the packing, and the packing against the cask, so as to make an airtight joint around the cock: and after the lever is pressed down the sliding hook F', on the lever E, is moved up so as to catch under the chime of the cask at the opposite end from the hook F, so as to hold the cock firmly in the cask while it is being filled.

The opening in the lever E, is made wide enough toward one end to allow the flange C, to pass through it. The opening in the end B, of the cock is closed by the valve G, made in the form shown in Fig. 2, or in such other form as will answer the purpose. The valve G, is operated by the stem H, which extends up through the top of the cock and has a screw cut on it working into a female screw in the hub H', on the inside of the cock, as shown in Fig. 2, and the stem H, is turned by the handle I, to open and close the valve G.

To prevent the liquid in the cock from escaping around the stem H, I make a hub J, around it on the top of the cock and apply a stuffing box J', with packing to make it tight. To let the air escape from the cask as it is being filled with liquid I perforate the valve stem H, through its whole length as shown in Fig. 2, and to indicate when the liquid is running into the cask properly by the escape of the air from the cask. I apply the pipe K, to the upper end of the valve stem and fasten the spheroidal whistle K', to it so that the air as it escapes from the tube K, will blow into and across the opening K², in the whistle K', and make a distinct whistling sound, so that the attendant, so long as he hears the sound of the whistle, will know the liquid is filling the cask properly.

To stop the escape of the air when the cask is nearly full and thereby retard or stop the liquid from running into the cask, and at the same time stop the whistle so that the attendant may know that the cask is so full as to require his attention, I make a screw thread on the lower part of the valve G, and make a valve box L, as shown in Figs. 2 and 4, with a female screw on its upper inside edge to fit the screw on the valve G, to which the valve box L, is screwed which valve box has holes M, M, through its

bottom to let the air in freely that is to escape from the cask through the stem H. The box L, has a concentric flange N, extending up from the bottom inside of the
 5 holes M, nearly to the under side of the valve G, to contain the floating valve P, which is raised by the air and liquid under it, after the liquid rises around it so that the top of the valve which is flexible is pressed
 10 against the opening in the lower end of the valve stem and closes it, so as to stop the air from escaping from the cask, and thereby retard or stop the liquid from running into it.

The valve P, is made of a thin hoop of
 15 metal with its upper end covered with flexible leather or india rubber, and the lower edge of the hoop rests on the bottom of the box L, leaving the lower end of the stem H, open until the cask is so near full that the
 20 liquid rises through the holes R, under the valve, so that the air under the valve causes it to float up against the opening in the valve stem as before mentioned, and when the liquid rises in the cask up to the bottom
 25 of the valve box L, the air in the cask enters the box L through the openings or scores S, in the upper edge of the box and passes into the stem H, until the opening in the lower end of the stem is closed by the floating
 30 valves P.

When it is desirable to fill the cask half full, or put a given quantity into it, the valve box L, may be taken off and the pipe Q, Fig. 5, put into the stem H, and the
 35 whistle applied to its upper end. Its lower end is provided with a valve box T, containing a floating valve like P, and arranged to close the lower end of the pipe Q, as the liquid rises and floats it. To hold the pipe

Q, in the desired position and pack the space 40 between the pipe and the stem H, I apply a piece of india rubber around it as shown at U, with collars V, V, on each side to hold it in place so that the pipe may be placed
 45 higher or lower in the stem H, so as to stop the whistle when filled to a proper height.

It is apparent from the foregoing description that the floating valve is protected by the valve box, from the action of the liquid as it runs into the cask; nor is it affected by
 50 the air escaping from the cask until it is lifted or floated up to the opening through which the air escapes.

I believe I have described the self indicating and self closing cock, which I have in-
 55 vented, so as to enable any person skilled in the art to make and use it.

I will now state what I desire to secure by Letters Patent:

1. The combination of the hollow stem H, 60 float valve P, and box L, with concentric partition N, when the whole are constructed to operate substantially as described for the purposes set forth.

2. In combination with a hollow valve 65 stem, a whistle so arranged as to be operated or sounded by the air, issuing from the barrel through the cock substantially as described.

3. In combination with a hollow valve 70 stem, the adjustable pipe Q, provided with a packing so that it may be adjusted higher or lower in the valve stem as specified.

BARTON PICKERING.

Witnesses:

C. L. HELLRIGLE,
 GEO. OWEN.