TYPE C-6 FEED VALVE

This valve is used to maintain a constant pressure in the control pipe.

DESCRIPTION OF VALVE:

A slide valve, operated by a piston, controls a port leading from the low pressure or control pipe side of the valve to the valve chamber. See Diagram on Page 60. The valve chamber is in communication with the main reservoir or high pressure side of the valve. The piston which carries the slide valve is fitted loosely in the valve casing, allowing air to leak around it, so that any difference in pressure between the two sides is quickly equalized. A small pilot valve, actuated by a brass diaphragm, governs a port leading from the piston chamber at the back of the slide valve piston to the chamber on the pressure side of the diaphragm, the latter being connected to the low pressure or control pipe side of the valve.

A regulating spring acts against the pressure on the diaghragm. Its compression, which determines the control pipe pressure, can be readily changed by means of an adjusting screw.

OPERATION:

When the valve is closed the pressure in the main reservoir and piston chamber is equal and the pilot valve is closed by its spring, the diaphragm being deflected by the control pipe pressure. If the pressure in the control pipe falls, thereby reducing pressure on diaphragm, the pilot valve opens and reduces the pressure on the piston chamber side of the piston. The piston then moves, opening the supply port and making connection between the main reservoir and control pipe. This connection continues until the pressure in the control pipe is sufficient to deflect the diaphragm and allow the pilot valve to close. The pressure then quickly equalizes on both sides of the piston and the supply port is closed by the action of the slide valve spring.

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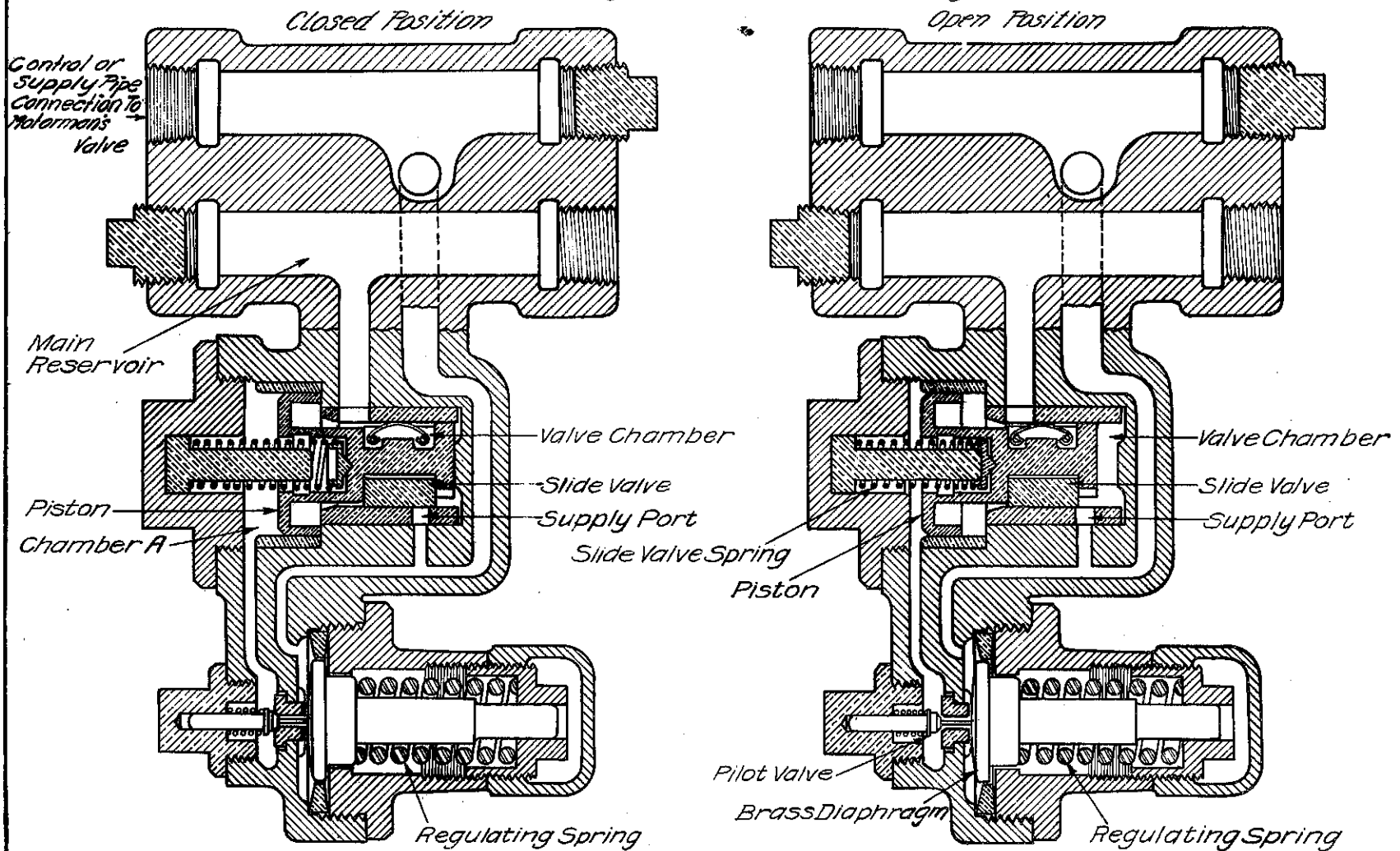
Instruction Diagram of Slide Valve Feed Valve
Mounted on Combined Straight and Crossed Passage Pipe Bracket



Checked G. M.

Approved E. E. Case

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