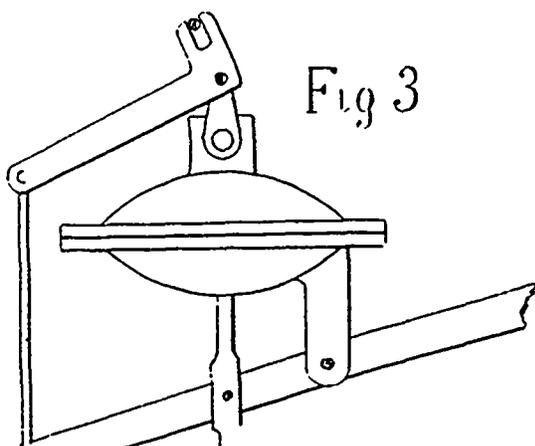
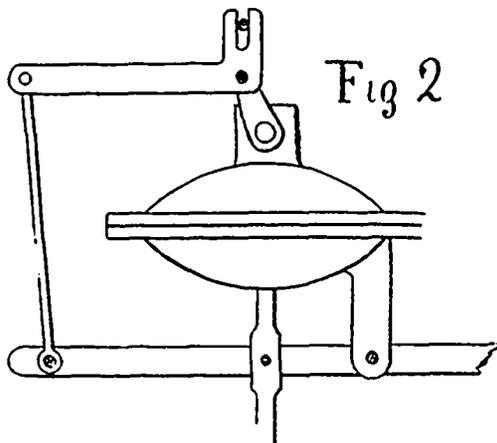
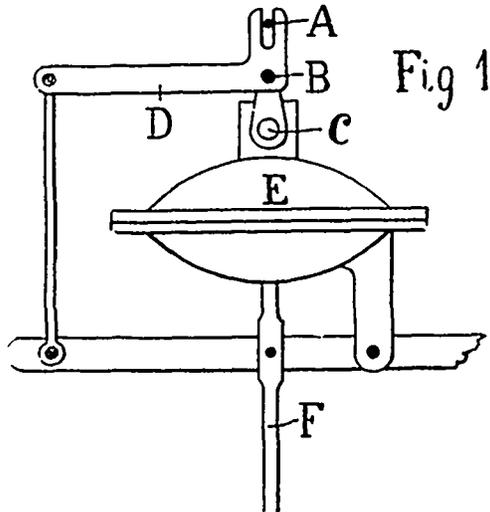


*E* case containing diaphragm piston; *F* rod of same, making connection to lower bell crank lever operating valve of hydraulic ram. Say for illustration that when the shutters are midway open, a fall in temperature occurs. Generally before an ordinary thermometer will be affected, the thermostat finger *A* moves to the left,



operating the valve lever *C*, as in Fig. 2, to turn on water above the diaphragm, causing rod *F* to descend; this tips the bell crank lever *C*, as in Fig. 3. The thermostat finger remains to the left, but the valve lever *B* has been returned to its normal position, and the downward movement of the rod *F* has ceased. The reverse takes place on a rise in temperature. The large valve through the lower bell crank lever is operated the same way, only that the outer end of the bell crank lever is connected directly or indirectly to the falling or rising shutters.

It has not been considered necessary to describe all the connecting pipes and other details; that will be sufficiently clear through the cuts to the practical eye.

I will add, however, that the parts are all adjustable; the two separate movements work in perfect unison the one with the other; the shutters will work in varying positions between full open and full shut within a range of temperature of 5° F., and while in working position will vary the opening to compensate for the shadow of a cloud as it passes the face of the sun. Last fall I placed to order of Mr. H. Dale, of Brampton, six of the ventilators described, operating 100 feet of shutters each, in his new 600 ft. rose house. They stood the test of this winter well, working satisfactorily in spite of snow, wind, or ice. There are now building to his further order additional machines for other houses.

The object of putting six machines in a house, or one to 100 feet, where one could be made to do the work, is that in a house of such length the temperature will vary in different places, particularly in windy weather, so it is preferable to make every 100 feet of house independently regulated. The present design is in two patterns; one double valve as described, the other single valve. It is found the single valve can be built quite sensitive enough for ordinary requirements. Thus with an efficiently regulated steam-heating apparatus, and automatic ventilation supplemented, if desired, by electric alarm bells, the genus homo to-day can leave acres of perishable blooming flowers to the mercy of a Canadian climate unwatched, and sleep in peace; he needs not to rise to replenish his fire or put a cover on the hole in his roof; the untiring hand of an automaton does this with the accuracy and precision no human nerves could accomplish. Mr. Dale has kindly offered to furnish to any interested parties any information required from a florist's point of view. This apparatus, it will be readily understood, can be applied to other ventilating purposes than that described.

#### INSPECTION BEFORE OR AFTER.

A great many people have the idea that the quickest and easiest way to cure an evil, of whatever kind, is to pass an Act of Parliament on the subject. If the Act can be made of the "thou shalt," or "thou shalt not" order, they esteem the victory even greater. However, making a law is not enforcing it, and greater evils may arise through a law which is not enforced, than those which its enactment was originally intended to cure. The British idea of liberty has always been complete freedom of the individual, together with the exaction of severe penalties for any interference with the freedom



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of others. On the continent of Europe, and pretty generally in the United States, it is believed that the Government is somebody or something by whose permission the rest of the world exists, and that a command from it is certain to be obeyed. The liberties of the citizen seem the gift of the Government.

The different ideas are well exemplified in the