

Self-closing doors to be fitted at each end of the passage on the ground floor leading from immediately behind the Speaker's chair to the front of the House.

A double folding or revolving door to be placed between the "Ayes" lobby and the main entrance.

The door between this lobby and the common lobby to be made self-closing.

When the House is sitting it is of importance that all self-closing doors should be permitted to close, and also that as far as possible the double doors at the entrances from the "Ayes" and "Noes" lobbies should be in use.

B. DETAILS OF ARRANGEMENTS FOR REMOVAL OF VITIATED AIR.

Boyle's Ventilator; Collecting-box.—The existing outlet-cowl on lantern roof to be replaced by a Boyle's patent air-pump ventilator of 16 square feet cross-section communicating directly with a collecting-box placed under the unglazed portion of the roof.

Central Exit.—The existing central-exit pipe to be connected to this chamber, and the rectangular baffle-plate at its entrance to be lowered 4 in.

End Exits.—The apertures immediately below the ends of the skylight to be reopened and arranged to discharge into D-shaped ducts connected to the main collecting-box by inclined pipes (one to each of 3 square feet cross-section).

Exit from Public Gallery.—A pipe of 5 square feet cross-section to be led from ceiling of Public Gallery to main collecting-box.

Exit from Private Galleries.—A pipe of 3 square feet cross-section to be arranged to connect the existing apertures in the ceiling over the private galleries with the main collecting-box.

Dampers for Primary Adjustment.—All these connections with the main collecting-box to be provided with dampers for the primary adjustment of the air-currents. These dampers to be capable of adjustment from within the lantern only, and of being permanently fixed.

Main Exit controlled by Adjustable Valve.—The exit from the main collecting-box to the air-pump ventilator to be controlled by a valve actuated from the floor of the House, but under the sole control of the ventilation attendant. This will be the only adjustable valve in the system.

Exit-pipes, if external, to be jacketed.—If it is found necessary to lead the discharge-pipes from the galleries outside the roof, they must be protected by an external casing giving at least 3 in. of dead-air space around them.

C. DETAILS OF THE ARRANGEMENTS FOR THE SUPPLY OF WARMED OR COOLED AND MOISTENED AIR.

Intake.—The intake is to be screened from wind-action in such a manner as to maintain the air-pressure thereat as nearly constant as possible.

Rain-screens; Fan and Engine; Hot and Cold Delivery.—The air is to be drawn through double filtering-screens and rain-curtains by a Sturtevant slow-speed fan, actuated by a single-cylinder directly-connected low-pressure steam-engine, and discharged through or past a Sturtevant steam-coil heater into two (hot and cold air) receivers. The hot receiver to be fitted with a moistening-jet.

Main Delivery-trunks; Control of Temperature by Thermostats.—From these receivers the air is to be led off by thirteen main trunks; each trunk is to be arranged to communicate with both receivers through valves controlled by thermostats in such a way that a uniform temperature of delivery is maintained by the action of the thermostats varying the proportion of warmed to cold air, the total quantity discharged into the trunks remaining constant.

Permissible Variation in Temperature 2° Fahr. from Particular Temperature for which Thermostat set.—Each Thermostat is to be capable of being set to effect such control within 2° Fahr. variation over a range of temperature of at least 20° Fahr.

Primary Adjustment.—Hand-adjusted dampers are to be placed in each of the thirteen trunks, and an adjustable deflecting-plate is to be fitted at each duct-offtake. By these means it will be possible to so adjust the resistances of the various channels and the relative temperature of the air entering them as to insure uniformity of ventilation and temperature throughout the House.

Thermostats maintain Temperatures constant irrespective of Amount of Delivery; Amount varied by varying Engine-speed.—After such an adjustment has been once made and the movable devices clamped, the thermostats will automatically take care of the temperature, and no hand-adjustment will be required. Should, however, it be desirable to vary the quantity of air delivered, this could at once be done by varying the speed of the fan-engine.

Distribution of Air-trunks.—The thirteen air-trunks are to be led as follows: Centre of chamber and main passage-way (floor), 1; sides of chamber, side passages, and intermediate arc (floor), 2; ends of chamber (skirting-board), 2; walls of chamber (half height, existing), 2; lobbies (quarter height, existing), 2; Public Gallery (floor), 1; Ladies' Gallery (floor), 1; private galleries (floor), 1; Press and Hansard Galleries (skirting-boards), 1.

Velocities of Flow.—The trunks and ducts to be so proportioned that a velocity of about 750 ft. per minute near the trunk-entrances may be gradually reduced to something approaching 120 ft. per minute in the ducts, at maximum flow.

D. DETAILS OF ARRANGEMENTS FOR DISTRIBUTION OF AIR IN HOUSE.

Limited Number Wall-ports retained.—The four wall admission-ports on either side of the chamber, the two in the recess of the Ladies' Gallery, and the admission-ports in the lobbies are to be retained, but the regulating-dampers are to be removed from them, and they are to be fitted with bell-mouthed upward-discharge orifices faced with wire gauze.