CLAIMS

1. A storage shelf comprising:

a main frame;

a plurality of shelf modules each having a base plate detachably provided on the main frame, and a supply nozzle provided on the base plate;

a main pipe through which purge gas supplied from a supply source flows; and

a first branch that is provided in the main pipe and branches a flow path from the main pipe, wherein

the shelf modules are each provided with a mass flow controller configured to adjust the flow rate of the purge gas supplied to the supply nozzle,

the first branch is connected to a module pipe via an open/close valve for opening/closing the flow path

the module pipe is connected to the supply nozzle via the mass flow controller,

the supply nozzle is connected to the main pipe via the open/close valve and the mass flow controller, and

the module pipe is detachably provided on the main frame.

2. The storage shelf according to claim 1, wherein

the shelf module is provided with a plurality of the supply nozzles and a plurality of the mass flow controllers corresponding to the respective supply nozzles,

the storage shelf further includes a second branch that is provided in the module pipe and branches the flow path from the module pipe, and

each of the mass flow controllers is connected to the module pipe via the second branch.

3. The storage shelf according to claim 1 or 2, wherein the module pipe and/or the open/close valve is supported by the main frame.

4. The storage shelf according to any one of claims 1 to 3, wherein

the main frame is a suspended member that is suspended from a ceiling or from a member fixed to the ceiling and is arranged in one direction,

the base plate is bridged over the main frame arranged in the one direction, and

the module pipe and/or the open/close valve is supported by a straddle member that is a different member from the base plate and that is bridged over the main frame arranged in the one direction.

5. The storage shelf according to any one of claims 1 to 4, further comprising;

a main wiring that is connected to a main controller or a power supply;

a module wiring that is connected to the mass flow controller or the supply nozzle provided in the shelf module and that is connected to a detection sensor configured to detect a container; and

a third branch that is provided in the main wiring, electrically branches from the main wiring, and detachably connects the module wiring.