the air against deflector baffles which spread the air over the element face, and the usual drip pan for precipitation is provided. When this unit is installed for cooling only, the heating element is simply omitted and this arrangement of two elements—one for heating and one for cooling—possesses the advantage of allowing the heating element to be connected to the source of heat with piping entirely separate from the lines used for carrying the refrigerant to the cooling element and without any cross connecting. Thus the unit may be used for warming in the morning and cooling at noon if desired and without the manipulation of special valves. The refrigerant is used direct in the cooling element and units of this type are for service in the home, office or other location where appearances are highly important. The refrigeration machine may be placed at any point where water, drain and electric connections are available.

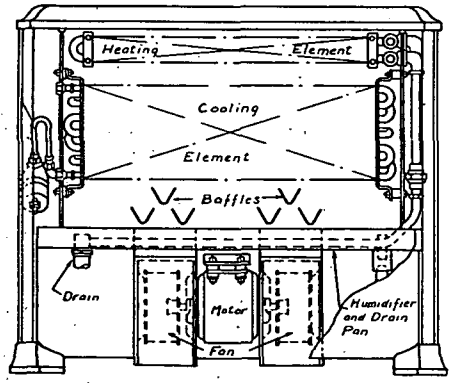

FIG. 6. FLOOR UNIT FOR HEATING AND COOLING

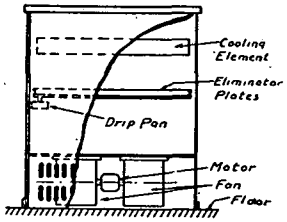

FIG. 7. UNIT FOR COOLING SERVICE

Fig. 7 is a unit for cooling only and consists of two fans operated by a motor, a cooling element and a drip pan all enclosed in a specially insulated cabinet. The element is of copper and may be supplied with cooled water or with any refrigerant which does not attack copper or its derivatives. When occasion demands, a heating element can be added and cross connected to the cooling surface.

A winter and summer conditioning unit, Fig. 8, employs propeller type fans to draw the air in from a horizontal direction, a deflector changes the direction to vertical and the air passes through cooling and heating elements successively before being discharged vertically from the top of the unit. The separate heating and cooling elements make it possible to use this unit for either heating or cooling as desired without alteration of the valving. The refrigerant is in the cooling element, and to prevent waste of cooling water, a solenoid valve closes the flow to the condenser and compressor whenever the fans are stopped.

The unit in Fig. 9 differs from that illustrated in Fig. 5 in that the refrigerant is supplied direct to the cooling element, isobutane being used as the refrigerant in the smaller sizes and methol chloride in the larger units. This unit for the ordinary size office or room requires small space, and operates with the automatic control arrangement indicated. This unit is intended exclusively for cooling.

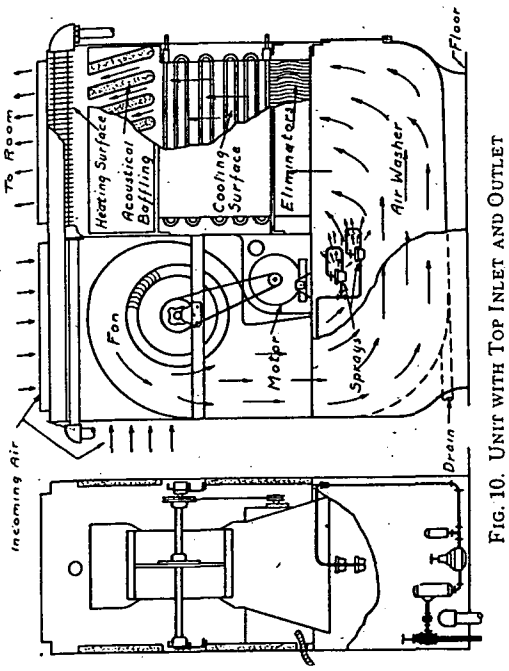

FIG. 10. UNIT WITH TOP INLET AND OUTLET

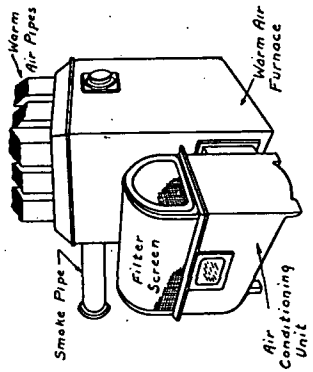

FIG. 11. PORTABLE ICE UNIT

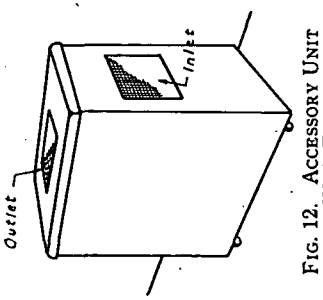

FIG. 12. ACCESSORY UNIT FOR W. A. FURNACE

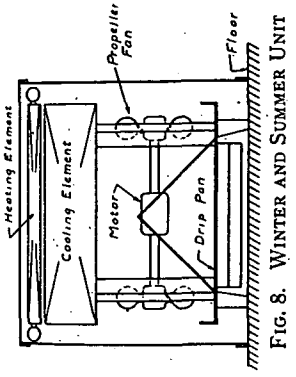

FIG. 8. WINTER AND SUMMER UNIT

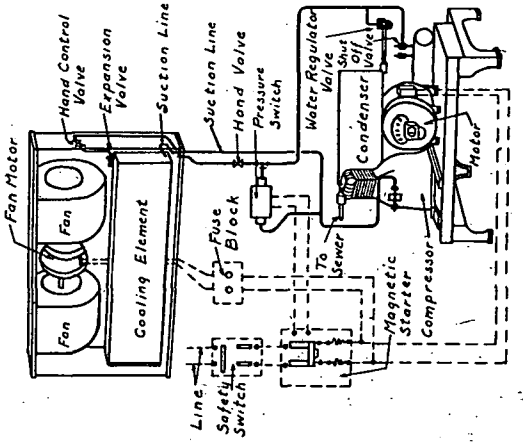

FIG. 9. ROOM COOLING UNIT