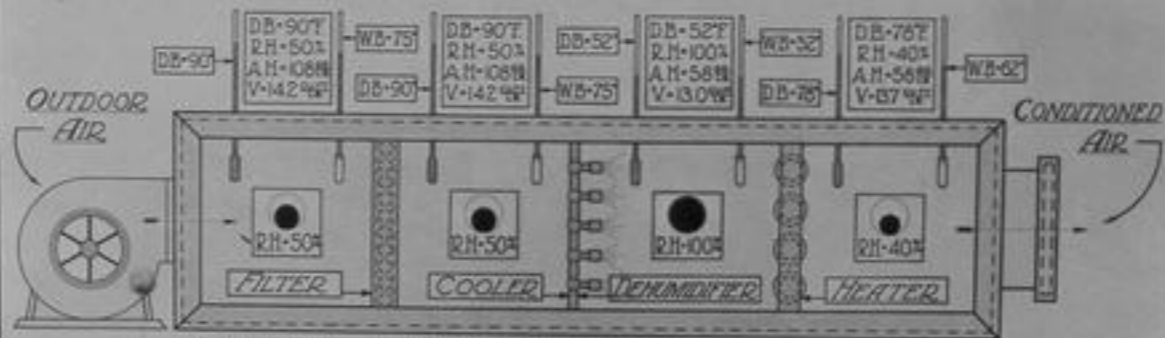


DEPARTMENT OF MECHANICAL ENGINEERING

STEPS TO CONDITION SUMMER AIR



THE FAN DRAWS AIR FROM OUTSIDE AND FORCES IT THRU THE CONDITIONER. THE FILTER REMOVES DUST PARTICLES FROM THE AIR. THE AIR IS COOLED IN THE DEHUMIDIFIER BY CONTACT WITH COLD WATER. THE DESIRED DEW POINT IS OBTAINED BY REGULATING THE TEMPERATURE OF THE SPRAY. THE AIR IS BROUGHT TO THE DESIRED DRY BULB TEMPERATURE AS IT PASSES THRU THE HEATER, THE RELATIVE HUMIDITY BEING DECREASED.

FILTERING

Dry Filters
Viscous Filters
Washing

Air should be distributed so as to get produce a draft

Velocity of air should be low enough not to produce noise

DEHUMIDIFYING

Water
Ice
Direct Expanding
Chemicals

HEATING

Steam
Hot Water
Warm Air

Insulation is used to prevent pipe sweating and reduce heat gain

Automatic Controls are used for maintaining desired conditions

COOLING

Water (25%
Brine
Direct Exp Coils
Ice

DYNAMIC PRECIPITATOR
& Dimer and Salt Collector

OZONIZER
Air Oxide (O₃) Generator