

to be saturated. If the temperature is increased further evaporation may take place, and if decreased some of the vapour will be forced back into the liquid state. The saturation point is often called the dew point. The following table gives the weight of the unit volume of saturated vapour at atmospheric pressure for various temperatures.

0°	.553
12°	.910
22°	1.414
32°	2.128
42°	3.080
52°	4.389
62°	6.167
65°	6.965
72°	8.547

The above table shows that at 70° if saturated a cubic foot will contain 8 grains of moisture, at 32° a little more than 2 grains, and at 0° about  $\frac{1}{2}$  grain. Normal air has a humidity varying from 50 to 70 per cent, saturation being 100 per cent, and if much above or below these limits uncomfortable sensations result. If a saturated mixture of air and vapour at 0° is heated to 70° without adding moisture the humidity at the higher temperature will be but 6 per cent or eight times dryer than the lower limit stated above. This is the condition during the winter months, and while the air is not quite so dry as six per cent it is not uncommon to find an average indoor humidity of 28 per cent to 30 per cent during the entire period from December 1st to March 1st. In other words in severe weather so much moisture is precipitated by the low temperatures that when heated, the air is practically devoid of watery vapour, and there is an abnormal tendency for evaporation of moisture from any available source.

With the humidity as low as 30 per cent the effects of dryness are very noticeable. A thermometer registering 70° will drop, if the bulb is covered by a damp cloth, to 53°. Moreover, a temperature of 70° in an atmosphere so dry will not be comfortable, some people demanding from 74° to 76°, and others as high as 78°. The temperature recorded by the wet bulb thermometer is the temperature one would feel if ones clothes were saturated with moisture as after emerging from an accidental bath. Since the body is always kept moist, however, by excretions from the pores of the skin, the wet bulb temperature, plus a few degrees, is the temperature one always feels. On the other hand 70° with a normal relative humidity of 60 per cent would be universally