

than the previous weighings. There were a good many very small water bubbles clinging to the filaments inside the bulb after it was filled with water, so a correction of 0.25 cc was made on this account.

Weight of bulb exhausted,	40.51 grams.
Weight of bulb with air	40.69 grams.
Weight of bulb with air and wax,	40.87 grams.
Weight of bulb with gas and wax,	40.765 grams.
Weight of air 0.18 gr.; wax, 0.18 gr.; gas, .075 gr.	
Weight of bulb with wax and air,	40.9 grams.
Weight of bulb with wax and water,	190.65 grams.
Weight of water,	149.75 grams.

With the correction for bubbles this gives 150 cc. as the volume of air, gas, or water inside the bulb. So 150 cc of air weighed 0.18 gr. and 150 cc of gas weighed 0.075 gr. Therefore the specific gravity of the air was 0.18-150, and of the gas 0.075-150 at the pressure and temperature prevailing in the room. It remains to reduce these figures, by means of the laws of Boyle and Charles, to the corresponding figures for a pressure of 760 mm. of mercury, and a temperature of 0 degree, centigrade.

The tables of specific gravity of air were then consulted and the result was found to agree very closely with the accepted figures, the variation being less than one-half per cent.

These figures mean that 13 cu. ft. of water weigh as much as 10,000 cu. ft. of air.

—J. H. Bond.