saturation deficit, such air passing with every inspiration over the moistening surfaces nature has provided in the mucous membranes calls for an enormous output of the fluid elements of these tissues. This leads to glandular overactivity, and its consequent evils, the elaboration of which subject the scope of this paper does not permit."

The saturation deficit mentioned by Dr. Smith is the amount of moisture required to bring the vapour to saturation point, and is perhaps a better figure for comparison than the relative humidities. The following table gives statistics for various climates:—

CLIMATES ON AN AVERAGE FROM OCTOBER TO APRIL INCLUSIVE.

Location	Average Temp. of	Ave. Rel. Hdty. of 100 p. c. being saturation	Absolute Gr. per cu. ft. at rel. Humidity Col. 3	Humidities Satn. Gr. per cu. ft.	Satn. Deft. Gr. per cu. ft.
New York	44	73	2.404	3.294	.860
Montreal	24	78	1.199	1.550	.351
Denver	51	50 (ap'rox.)	2.111	4.222	2.111
Common indoor conditions	72	30 "	2.564	8.547	5.983
Satisfactory indoor conditions	65	60% "	4.179	6.965	2.786

Column 6 of the above table shows that the indoor air in Montreal has a capacity to absorb about 14 times as much moisture as the outdoor air during the same period. It also shows the indoor air almost twice as dry as the atmosphere at Denver, Col., and if the figures were available we should find the indoor air actually dryer than the atmosphere of any desert.

To improve conditions the apparatus illustrated in figures I and II have been successfully applied. The apparatus illustrated in Figure I is designed to supply fresh air warmed to the temperature of the room, and to moisten the air supplied to maintain a constant humidity. In Figure II more heating coils are added, which raise the temperature above that of the rooms, the sprays being used as before to regulate the humidity. With this equipment, however, no radiators are required in the building for a comfortable temperature may be mantained by the surplus heat of the entering air.

The apparatus in Figure I will be recognized as an indirect ventilating system. It is called indirect because the coils are located in the base-