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? WHY THE WEATHER ? Mailed February 1, 1929.

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IDEAL INDOOR ATMOSPHERES

Thanks to the new art of air-conditioning, we now know how to regulate the humidity and the temperature of indoor air. "Artificial weather" is desirable or essential in many industrial operations, such as cotton-weaving, candy-making, etc., and, as a rule, experience has shown just what atmospheric conditions are best for each of these processes. When it comes, however, to conditioning air for the sake of human health and comfort, there is still much difference of opinion as to what combinations of temperature and humidity are most satisfactory. Thus on an intensely hot summer day people welcome the opportunity of entering an artificially cooled theatre, but often find the atmosphere inside too cool for comfort. This is because in cooling such buildings engineers have generally ignored the fact that, in hot weather, the human system tends to adapt itself to the heat. The result is that a temperature that, in ordinary weather, would be comfortable feels uncomfortably cool, by contrast with that to which one has become accustomed.

During the years 1921-24 the American Society of Heating and Ventilating Engineers carried out a series of researches at its Pittsburgh laboratory and determined what is known as the "atmospheric comfort zone," or the combined values of temperature, humidity and air movement most conducive to human health, comfort and efficiency. This work is to be continued along somewhat different lines at a new laboratory endowed by P. H. Johnston, president of the Chemical National Bank, New York, and located at the University of Kentucky, in Lexington, Ky. The investigations will take account of the effects of sunlight as well as of atmospheric conditions, and studies will be made of the responses of plants and the lower animals, as well as mankind. Dean F. Paul Anderson, who conducted the Pittsburgh experiments, will be in charge.

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