in a natural atmosphere ranging in relative humidity from 69 to 100 a 1·426 sample decreased by only 0·003 in nine days. Furthermore, in the relatively very dry atmosphere of the desiccator at about 67° F. a 1·426 honey sample actually increased in specific gravity by 0·002 in five days eighteen hours.

4. It follows, therefore, that in atmospheric humidity there is a point somewhere at which honey would neither lose nor gain water—a point at which the atmosphere and honey would attract moisture with equal force; in such a state of equilibrium there would be no interchange of moisture. Conversely, it follows that if honey is left exposed to the atmosphere it will slowly make its way to this point of equilibrium with its surrounding atmosphere, and when it has reached this point it will then follow, though not keep pace with, the humidity fluctuations of the atmosphere. The higher the temperature the closer it will keep pace with the humidity of the atmosphere, for evaporation is quicker at high than at low temperatures.

EXPOSURE OF HONEY TO A NATURAL ATMOSPHERE DURING ONLY THE BEST DRYING-HOURS OF THE DAY.

The foregoing has shown the effects of exposing honey continuously night and day in the shade. As, however, the relative humidity commonly drops as the temperature rises during the hours of sunshine, exposed honey would therefore commonly collect more moisture during the period from the evening through the night till next morning than it would during the hours of light. The following conclusions relate to the exposure of honey only during the best drying-hours of the day—namely, during the hours of sunshine:—

1. Exposure in the shade: Honey of a specific gravity of 1·421 to 1·426 exposed with a large surface in the shade to an atmosphere with a relative humidity ranging from 70 to 90 hygrometric degrees and a temperature ranging from 50° to 60° F. will attract atmospheric moisture and decrease in specific gravity at the rate of 0·001 every two or three days. The rate of decrease in specific gravity will, of course, be slower the lower the specific gravity falls or the lower the initial specific gravity of the honey.

2. Exposure in the sun: Honey of a specific gravity of 1·414 or less, protected from the atmosphere when the sun is not shining, but exposed with a large surface in the radiant heat of the sun to an atmosphere with a relative humidity ranging from 70 to 90 hygrometric degrees and a temperature ranging from 60° to 80° F., will part with its moisture and increase in specific gravity at the rate of 0·001 every eight or nine hours. The rate of increase in specific gravity will, of course, be slower the higher the specific gravity becomes or the higher the initial specific gravity of the honey.

3. Under the same conditions of relative humidity (that is, 70° to 90°) exposed honey may be either damaged by attracting water or improved by parting with it, according to whether its temperature at the time is low or high. For at 50° to 60° F. a good honey decreased in specific gravity 0·001 in two or three days, whereas at 60° to 80° F. poor honey increased in specific gravity at the rate of 0·001 every eight or nine hours—in fact, eventually became high enough in specific gravity for export.