A Science Service Feature

Released on receipt
but intended for use
October 21,1926

? WHY THE WEATHER ? Mailed October 14,1926

By Dr. Charles F. Brooks
of Clark University

THE FAHRENHEIT SCALE

When liquid filled thermometers came into use in the 17th cantury, there were at first no standard scales. In 1664 Hooke, of London, proposed that the melting point of ice serve as a standard temperature, and shortly afterward Huygens, a Dutch scientist, suggested the boiling point of water. But to construct a scale, of course, two fixed points are necessary. This was recognized later. One scale employed the melting point of ice and the melting point of butter as fixed points, while Newton made a scale with 12 degrees between the freezing point and blood temperature, filling his thermometer with linseed oil.

Early in the 18th century, Ole Roemer, a Danish scientist, proposed a scale containing in all 60 degrees, 60 being boiling. He divided his scale into 8 equal parts, at first, with one part below freezing, which therefore was called 7.5 degrees. His zero was about the temperature obtained by a mixture of ice and salt and also, he believed, about the lowest air temperature. In the cold winter of 1708-1709, however, he recorded a temperature 8 degrees below freezing; hence, he concluded his zero was not low enough and called freezing 8 instead of 7.5. Fahrenheit, one of the first makers of mercury thermometers, evidently used Roemer's scale, for the earliest Fahrenheit thermometers of which there is a description showed the freezing point at 7.5 degrees. Next it was placed at 8, while blood temperature was called 24. Still later Fahrenheit made his thermometers with degrees a quarter as large, marking the freezing point 32 and blood temperature 96 degrees.

SCIENCE SERVICE,
21st and B Sts.,
Washington, D.C.