nearly horizontal. It therefore appears that the slope of the ET lines may vary, depending upon the rate of work being performed.

Fig. 10 shows the A.S.H.V.E. Comfort Chart[22] modified in several respects from the chart previously shown. The former areas and arrows indicating the summer and winter comfort zones have been removed. The summer comfort zone was removed because it extended to temperatures where too large a percentage of the people would be uncomfortable. The winter comfort zone was removed for the same reason, and because of inadequate data in later studies.

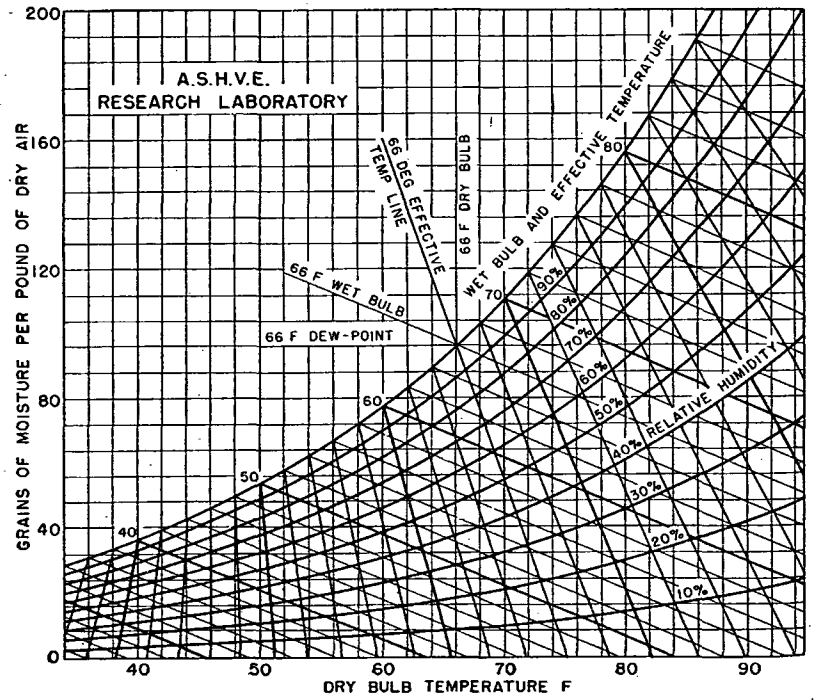

FIG. 8. PSYCHROMETRIC CHART, PERSONS AT REST, NORMALLY CLOTHED, IN STILL AIR

The distribution curve, showing the percent of people feeling comfortable at various effective temperatures in *summer*, indicates that a maximum of 98 percent of the people were comfortable at 71 ET. The study was conducted with relative humidities between 30 and 70 percent.

The distribution curve shown on the previously used chart, showing the percent of people feeling comfortable at various effective temperatures in the *winter*, was based on research prior to 1932. This curve indicated that at 66 ET a maximum number of people were comfortable. Later studies[23] by the A.S.H.V.E. Research Laboratory indicated that a maximum of 97.7 percent of the people were comfortable at 68 ET, and this finding has been confirmed by current practice.[24] However, adequate data from the later studies were available only for the ET range of 65 to 69,

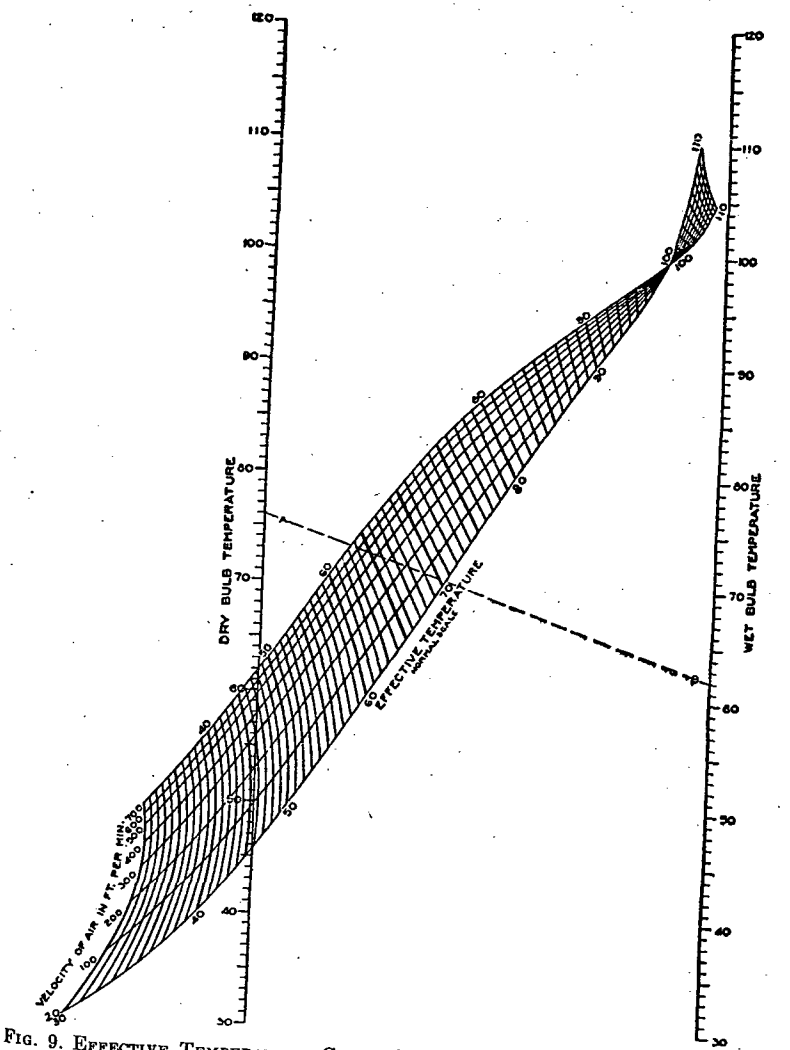

FIG. 9. EFFECTIVE TEMPERATURE CHART SHOWING NORMAL SCALE OF EFFECTIVE TEMPERATURE, APPLICABLE TO INHABITANTS OF THE UNITED STATES UNDER FOLLOWING CONDITIONS:

A. Clothing: Customary indoor clothing. *B. Activity:* Sedentary or light muscular work. *C. Heating Methods:* Convection type, i.e., warm air, direct steam or hot water radiators, plenum systems.

as presented in Fig. 10. The studies should be extended to cover a wider range. The lighter weight clothing, probably worn in the later studies, accounts for the higher desirable ET.

Radiation from occupants to room surfaces, and between the occupants, has an important bearing on the feeling of warmth, and may alter to some