season and engaged in the customary sedentary activity of office workers.

The 66 deg ET indicated as giving optimum comfort for winter conditions in Fig. 6 and determined prior to 1932, has more recently been checked; first, by occasional observations, and second, by consistent laboratory study[33], indicating that a higher optimum of 67 deg ET was preferred by a majority of the eight male college students whose opinions were ascertained. This can be checked with larger groups when conditions permit.

On the basis of present knowledge, for different geographical regions

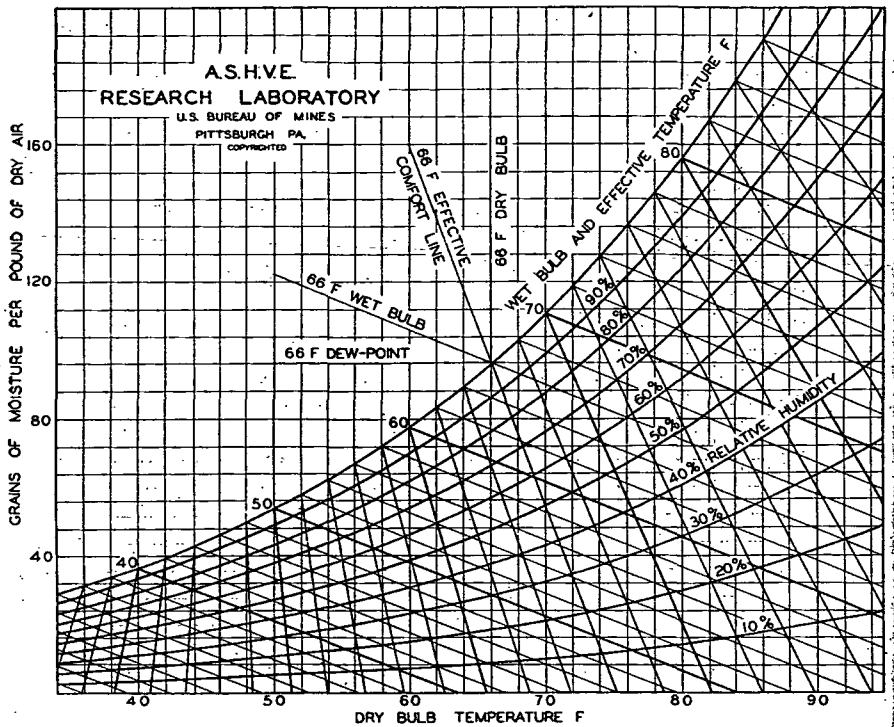


FIG. 8. PSYCHROMETRIC CHART, PERSONS AT REST, NORMALLY CLOTHED, IN STILL AIR

and age groups, the total spread in optimum comfort conditions ranges from a low of 66 deg ET for winter heating and air conditioning, to a high of 73 deg ET for summer cooling and air conditioning.

The spread for summer cooling and air conditioning for optimum comfort is confined entirely to an effective temperature range of from 69 to 73 deg, and it may be presumed that for winter conditioning a like spread would be had; while for inter-seasonal conditions there will be a fluctuation between these two ranges.

Recent studies[34] indicate that for the average individual a temperature

[33] A.S.H.V.E. RESEARCH REPORT No. 1172—Radiation as a Factor in the Sensation of Warmth, by F. C. Houghten, S. B. Gunst and J. Suciu, Jr. (A.S.H.V.E. TRANSACTIONS, Vol. 47, 1941, p. 93).

[34] Loc. Cit. Note 33.

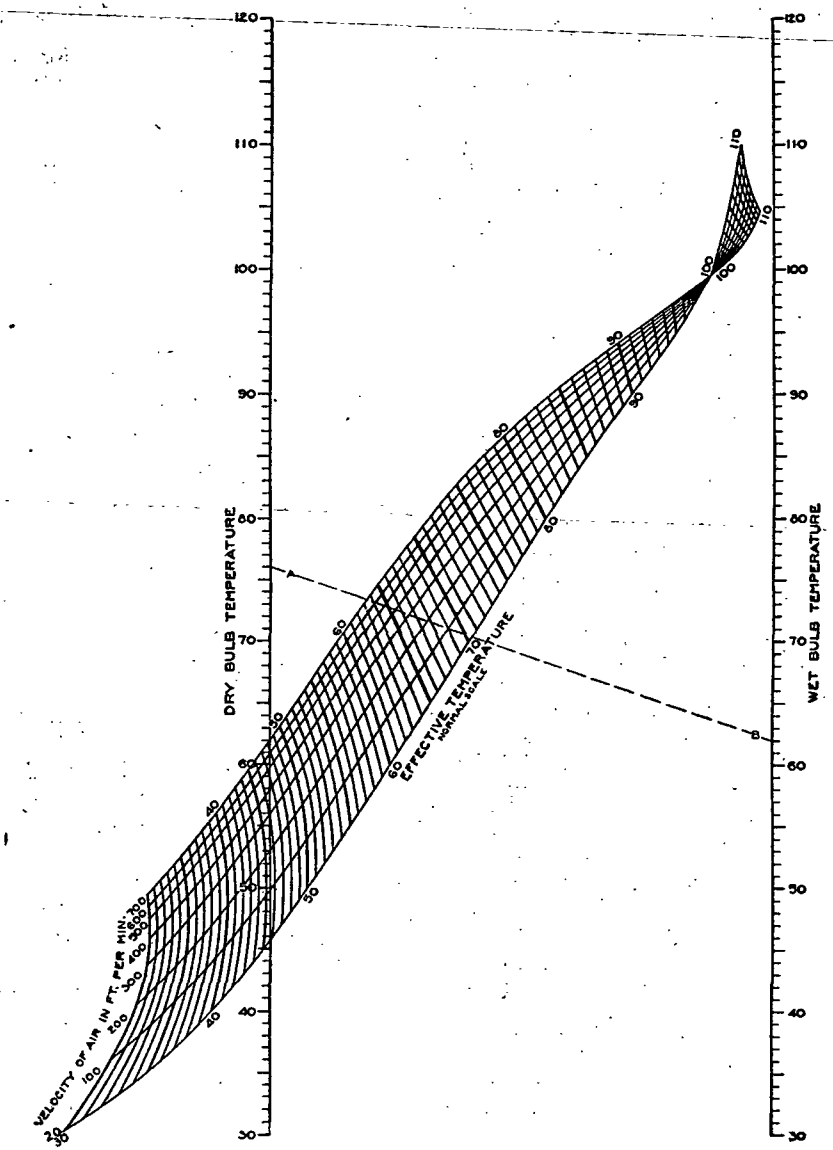


FIG. 9. EFFECTIVE TEMPERATURE CHART SHOWING NORMAL SCALE OF EFFECTIVE TEMPERATURE. APPLICABLE TO INHABITANTS OF THE UNITED STATES UNDER FOLLOWING CONDITIONS:

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.