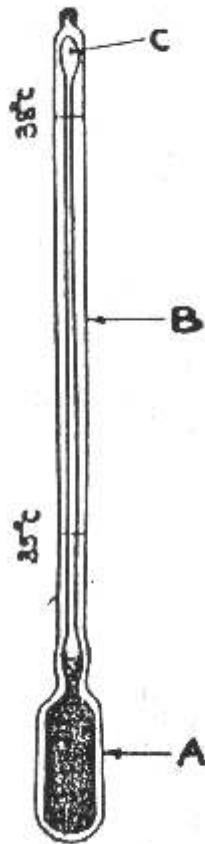


## KATA THERMOMETER



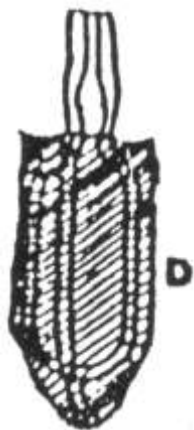
The Kata Thermometer :- The Kata Thermometer consists of an alcohol thermometer with a large bulb A 4 cm. long and 2 cm. In diameter and a stem 20 cm. long. graduated only at two points namely 38°C and 35°C It may be used for dry or wet. For wet Kata Cooling power reading the bulb Is first placed In hot water so that the liquid rises and partly fills the upper reservoir C. It Is then exposed to the air. The bulb is surrounded by a wet muslin thimble D and time In seconds taken for the liquid to fall from 38°C-35°C Is observed.

In case column is broken, keep the bulb in cold water till the whole column of red Alcohol collects In the bulb.

The wet cooling power is then found by dividing the factor marked by the number of seconds observed.

The dry Kata reading gives only the cooling power due to radiation and conduction, but the wet Kata reading Includes the effect of evaporation and is thus a more useful guide as to the cooling power In reference to the human body.

Table 1 shows the effect or sensation produced In atmosphere with, various wet Kata cooling power.



### COOLING POWER REFERRED TO WET KATA READINGS

| Wet Kata cooling power | Effect                                    |
|------------------------|---|
| 5                      | Extremely oppressive                      |
| 10                     | oppressive                                |
| 15                     | Lowest value for satisfactory conditions. |
| 20 - 25                | Best conditions for work                  |
| 30                     | Feeling ofchill unless well clothed.      |
| 35                     | Uncomfortably cold.                       |

### OTHER VENTILATION INSTRUMENTS

- Anemometer
- Aneroid Barometer
- Portable Manometer
- Smoke Generator  
For low Velocity Measurement
- Gas Sampling Tubes
- Inclined Manometer
- Maximum and Minimum Thermometer
- Veoltmeter
- Whirling Hygrometer
- Wet & Dry Bulb Hygrometer
- Wall Thermometer