The time required for paper to become temperature-conditioned is shown by the chart, Figure 36. To find the approximate temperature of the paper, make a small hole in the moisture-proof wrapping and insert a steel-jacketed thermometer into the pile. Read the temperature after it becomes constant, remove the thermometer, and seal the hole with tape. Then, knowing the approximate difference in temperature between the paper and the pressroom, and the volume of the pile in cubic feet, it is a simple matter to refer to the chart and find the length of time the pile needs to be stored to reach pressroom temperature.

Example: A skid of 40 x 54-inch paper, 48 inches high, is found to be at 45°F. The pressroom temperature is 75°F.

$$\text{Size of pile is } \frac{40'' \times 54'' \times 48''}{1{,}728} = 60 \text{ cubic feet}$$

Temperature difference is $75° - 45° = 30°$F.

To find the time required for the paper to reach the pressroom temperature, find 30°F on the base line of the chart, follow the vertical line from this point to the curve for the number of cubic feet nearest 60 (48 cu. ft.), then follow the horizontal line to the time axis on the left. In the above example, the minimum time for temperature conditioning before unwrapping the skid is 38 hours.

Testing for Moisture Balance

After sheet paper has been temperature-conditioned, it can be unwrapped. It should then be tested immediately for moisture balance. To do this, insert the Paper Hygroscope or other sword-type hygrometer into the pile about 6 inches from the top and read the difference in humidity between the paper and the pressroom atmosphere. Instructions for using these instruments are given in Chapter 9, page 146.

Figure 37: he GATF Paper Hygroscope being used to st the moisture balance of paper.