taken as a point levelwith the eye.

Accepting the height of the base of the thundercloud as one mile, its distance in miles is the ratio of the height-of-pencil measurement to the eye-to-pencil distance. If, for example, the height-of-pencil measurement is 3 inches and the eye-to-pencil distance 24 inches, the ratio is 3 to 24 or 1 to 8, and the distance of the approaching storm is 8 miles. If the height-of-pencil distance is 2 inches, the ratio is 1 to 12, the distance of the storm being 12 miles.

Accepting the average speed of the approaching storm as 25 miles an hour, if it is 8 miles away it is due to arrive in 20 minutes; if 12 miles away, in about half an hour. Of course, these results are only roughly approximate. But in any case, the simple method will tell whether the storm is close at hand or a long way off.

TIMING DISTANT THUNDERSTORMS

Thunderheads are very often seen so far away that their flat bases are hidden by intervening elevations or are actually below the horizon. In such cases, the distance of the storm and, if it is approaching, the time of its arrival, may be closely estimated by the use of a measure or pencil, in the same manner as that employed where the cloud base is used. The pencil or measure is held upright in the bend of the forefinger, supported firmly by the thumb-nail. The arm is held at full length and the distance measured from the eye to the pencil. The pencil is shifted up and down until the distance from pencil end to thumbnail covers the space between the level of the eye, taken as the horizon, and the summit of the tallest turreted cloud which is assumed to be four miles above the ground, instead of the one mile employed when the base of the cloud is considered.

The ratio of the height-of-pencil measurement to the eye-to-pencil distance determines the distance of the storm.

Thus, assuming the height-of-pencil measurement to be 3 inches, and the

eye-to-pencil distance 24 inches, the ratio is one to eight, which, with the 4 mile cloud height, gives a distance of 32 miles. Or, if the height-of-pencil distance is 4 inches, the ratio being 1 to 6, the distance is 24 miles. Assuming the rate of travel of the storm to be 25 miles an hour, a storm 32 miles away if approaching the observer directly, should arrive in not over 1 hour and 20 minutes; a storm 24 miles away in about one hour.

THUNDER DOES NOT SOUR MILK

It is often said that a thunderstorm sours milk. The lightning and thunder, however, really do not affect the milk at all. It appears, rather, that hot, moist weather which produces heat thunderstorms, also favors bacterial growth and the spoiling of food. On a hot day the ice box temperature will probably be higher than usual, unless particular care is taken to replenish the ice. During the day the lactic acid bacteria in the milk will multiply more rapidly than usual, so that by evening milk which tasted all right at noon may be distinctly sour. Now heat thunderstorms commonly occur in the late afternoon; therefore, we may say that the milk was soured by the thunderstorm, and jump at the wrong conclusion. The process of souring had been going on all day, favored by the thunderstorm conditions, not suddenly evoked by the storm itself.