INSTRUCTIONS

FOR OBSERVATIONS OF THUNDER STORMS.

1. Give the time of *beginning* and *ending* of the storm.
2. Give the general *direction of the approach* of the storm, or the point of the horizon where the storm cloud first appears.
3. Give the direction of the *wind* before, at the time of, and after the storm.
4. Note the color of the *lightning*, particularly if it be violet, which probably indicates a cloud of great elevation.
5. Does the *thunder cloud* frequently separate into two parts near your residence? If so, what is the topography of the surface of the earth below?
6. Record every instance of the *striking of trees and other objects*, and every accident by lightning in your vicinity.
7. Note the number of seconds the *sound* of a discharge continues this will give approximately the length of the flash.*
8. Note the time between the *appearance of the flash* and the *hearing of the thunder;* also the angle of elevation; these will give approximately the *height of the cloud.*
9. Note the *temperature* of the *air* before and after the storm.
10. Note the *depth* and *temperature* of the *rain* immediately after the storm.
11. Note whether any *hail* fell, how long it continued, the form and size of the hail-stones.

* The velocity of sound at the temperature of 62° is 1125 feet a second, or nearly a mile in $4\frac{7}{10}$ seconds.

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