

### Remarkable Voyage in the Air.

John Wise of Lancaster, Pa., made his 131st aerial voyage from Portsmouth, Ohio, on the 3rd instant. His balloon voyage was a remarkable one, and the grandest he ever performed so far as magnificent sights are concerned. He ascended a little after 4 o'clock in the afternoon, and soon rose to an elevation of 2,000 feet. While slowly sailing along at this elevation, by the range of a hill in Kentucky, three rifle shots were fired at him, one struck the car, but so very lightly that it did no harm. Those persons who fired the shots, we have no doubt, did not imagine that there was any person in the balloon. He believes the striking part was mere chance. Some exceedingly useful meteorological information was obtained by Mr. Wise in his voyage. These he states are as follows:

1st. Thunder storms have two plates of clouds, the upper discharging the contents, whatever it may be, rain, hail or snow.

2d. Sheet lightning of an orange color undulates slightly between the upper and lower cloud, in a wailing motion.

3d. The discharges of electricity take place in the lower cloud, by discharges are meant thunder and lightning.)

4th. The distance between the upper and lower cloud is not less than 2,000 feet, (this is mere eye measurement.)

5th. The uprising current was not continued higher than the lower cloud, and was raging and whirling as long as I was in the margin of the storm, being in twenty-five minutes.

6th. The storm was much wider below than above, and the deposit diverging at least 25 degrees from a perpendicular line.

7th. The deposition of hail and rain was thickest in the centre of the storm. I could not, of course, look through it, but I viewed one from its front, the other from behind its line of direction, and they both appeared the same.

8th. Under the shadow of the upper cloud it is very cold, and in the lower cloud it is quite warm.

9th. The upper cloud was moved by the current which always blows from the west to the east.

10th. Other causes than the upper current may affect the horizontal course of a thunder storm so as to increase or diminish in their violence.

I might here deduce some data from what was so distinctly observed on this occasion, but will for the present leave to abler hands, and particularly to Prof. Epsy and the Smithsonian Institution.

Mr. Wise enjoyed the grand and terrible spectacle of looking down upon the war of elements upon a scale far surpassing Waterloo. We advise Prof. Epsy and Dr. Hare to make a number of aerial voyages to settle their disputes. We think it would be a grand plan for them; much better than writing and printing long papers on the subject. Let them get up into the regions above along with Mr. Wise, and make observations. This point might be useful to the Smithsonian Institution in getting meteorological information.—*Scientific American*.

**THE USE AND APPLICATION OF CHLOROFORM.**—The medical journals have been discussing the chloroform question again. A few deaths by its use have excited much attention, and some have come to the conclusion that it should not be used to render people insensible during severe surgical operations. The hy-

dropathists have thus expressed themselves. We believe that there is no danger in the use of chloroform, if applied with direction. The deaths which have resulted from its application have been very few, considering the extensive use which is made of it. Its uniform success and safety rendered these incautious under whose superintendence the deaths were produced.—In every case the quantity employed should be weighed or measured, but it is often given without the least attention being paid to the exact quantity employed.

### EFFECTS OF LIGHTNING.

In the *Annales de Hori. Soc. de Paris*, vol. xxii. p. 120 to 134, an account is given of sixteen trees which have been struck by lightning in different parts of France, at various periods, from 1813 to 1837.

The effects appear to have been very different on different trees. In some, the leaves only were destroyed; in others, the leaves were but very slightly injured, but strips of bark appeared to be torn off; in some the branches were broken, and no other injury done; in some the trunks were split; and in others, no injury was done to the top of the tree, but the roots were laid bare, and torn in pieces. In several cases, where the trees were standing near houses, or hay or corn ricks, they seem to have acted as conductors to the electric fluid, and saved the cottage or the corn-stack or hayrick from being struck by the lightning. This was particularly the case where the Lombardy poplar or the silver fir had attained a great height.—The author of the article, Vicomte Haricart de Thury, concludes with the following advice:—

1. Travellers and country people, reapers, hay-makers, &c., during the time of a thunder storm, should never take shelter under detached trees; more especially under a tree which stands at a distance from any other, such trees acting as conductors.

2. To take shelter rather under a bush, than a tree, and the lower and more spreading it is, the better.

3. Never to take shelter on that side of an object, from which the wind or the storm comes, or, indeed, in the direction of the wind or the storm. Thus, supposing the storm proceeded in the direction of the east and west, then the north and south side of a bush, or other sheltering objects, are to be chosen, and not the east and west side.

4. In the moment of danger, the safest way is to recline at length on the ground, choosing a furrow or ditch, if any should be at hand; but no time should be lost in searching for a furrow or ditch, or for a bush or a hedge, because the upright position, maintained during the search, is incomparably more dangerous than the horizontal one.

5. Always to bear in mind that the danger is great in proportion to the shortness of the time which elapses between the appearance of the lightning and the noise of the thunder.

6. Those who cannot afford the expense of lightning conductors to their houses, farm buildings and ricks, should plant near them late growing trees, such as the pyramidal oak (*Quercus pedunculata pyramidalis*) the Lombardy poplar (*Populus festigiata*) the cyprus, the larch, the silver fir, the spruce fir, &c.

**SHIFTING BRICK HOUSES.**—A block, three stories high, has been safely removed 10 feet 6 inches backwards, at the instance of the commissioners for widening the streets of an American Town. As possibly the plan might be of use in some of the towns of old England, where the old and narrow thoroughfares are choked by the traffic of our free-trade age, we