

Gothard route—the valley of Tremola—and the Grimsel, are infested by these most unwelcome visitors ; and wooden crosses, planted along the traveller's road, invite him to utter a prayer for their victims.

4th, *Summer Avalanches*, or *Glaciers (Sommer-lavinen)*, fall only in the loftier mountain-regions. When you see from afar the rapid flow of one of these icy rivers, filling the air with a glittering dust like the dazzling foam of a cascade, you would think it was a cataract of silver storming down the rugged steep ; a flood of frozen spray thrown up from the depths of some mysterious congealed ocean ! During its descent, the summer-avalanche considerably increases in dimensions. This beautiful cascade of snow and ice may often be observed on the route of the Scheideck, in the Oberland. Like every other kind of avalanche, it heralds its fall by a hoarse dull sound, which warns the mountaineer of the impending danger.

5th, *Drift*, or *Dust Avalanches (Staub-lavinen)*. When in the winter season the temperature—no rare occurrence in the Alps—rises up to 12° or 14° C. (=38° 35' or 39° 45' F.), the softened snow becomes pulverulent, or powdery. An avalanche formed of snow reduced to this physical condition cannot produce the tremendous effects of these dense compact masses formed of ice and solid snow. It is, in fact, nothing more than dust, which spreads abroad on the air, and can no longer operate by its own weight upon any obstacles it may encounter. Yet it is not without peril for the traveller surprised by it. The impetuous winds so common in mountain-regions lift up its incoherent particles, and complete their pulverization ; at the mercy, then, of the slightest atmospheric agitation, you may see them floating, like clouds of sand, around the mountain-peak, even in apparently calm weather ; and if acted upon by a sudden hurricane, they gather into formidable whirlwinds, which destroy more lives than even the headlong descent of the heavier avalanches.

Taking into consideration the etymological sense of the word *avalanche*, we must own that it is wrongly applied to these tornadoes of snow. In tracing them to their origin, we may with more justice compare them to the sand-storms of the immense deserts of Africa ; the poor wretch buried beneath the snows of the Alps perishes of cold, while the dry, scorching, stifling sands of the Sahara threaten the traveller with a still more terrible fate.

Such are the peculiarities presented by the formidable phenomena of avalanches. They are most to be dreaded at the epoch of the thaw—that is, in spring ; in the summer there is less cause to apprehend their occurrence, at least in the region of perpetual snow.

If you are compelled to traverse during the months of spring the defiles of the mighty Alps—sentinelled as they are by ever-watchful snow-helmed peaks—and before the annual landslips have accomplished their predestined work, you must adopt numerous imperative precautions. At such a time of the year, tourists should arrange to travel in small companies, each person at a convenient distance from