

in a severe Night, they are surely split to pieces before Morning, not being able to withstand the expansive Force of the inclosed Ice.

The Air is filled with innumerable Particles of Ice, very sharp and angular, and plainly perceptible to the naked Eye. I have several times this Winter tried to make Observations of some celestial Bodies, particularly the Emerfions of the Satellites of *Jupiter*, with reflecting and refracting Telescopes; but the Metals and Glasses, by that Time I could fix them to the Object, were covered a quarter of an Inch thick with Ice, and thereby the Object rendered indistinct, so that it is not without great Difficulties that any Observations can be taken.

Bottles of *strong Beer, Brandy, strong Brine, Spirits of Wine*, set out in the open Air for three or four Hours, freeze to solid Ice. I have tried to get the Sun's Refraction here to every Degree above the Horizon, with *Elton's* Quadrant, but to no purpose, for the Spirits froze almost as soon as brought into open Air.

The Frost is never out of the Ground, how deep we cannot be certain. We have dug down 10 or 12 Feet, and found the Earth hard frozen in the two Summer Months; and what Moisture we find five or six Feet down, is white like Ice.

The Waters or Rivers near the Sea, where the Current of the Tide flows strong, do not freeze above 9 or 10 Feet deep.

All the Water we use for Cooking, Brewing, &c. is melted Snow and Ice; no Spring is yet found free from freezing, though dug never so deep down. All Waters inland are frozen fast by the Beginning of *October*, and continue so till the Middle of *May*.

The Walls of the House we live in are of Stone, two Feet thick, the Windows very small, with thick wooden Shutters, which are close shut 18 Hours every Day in the Winter. There are Cellars