

exists in a liquid state: and important indeed is that fact; for, of the three states under which it is capable of existing, namely of ice, water, and vapour, if its predominant state had been that of ice or of vapour, philosophers might possibly have conjectured, but the world could never have seen realized, the mighty results of commerce as depending on the art of navigation.

From the same physical character of water, above described, namely, its fluidity, manifesting itself actively instead of passively, are daily produced results of equal importance to society, and equally surprising in themselves. Who indeed can adequately describe the advantages derived from water in aiding the powers of mechanism, from the half-decayed and moss-grown wheel that scarcely sets in motion the grinding-stone of the village mill, to the astonishing momentum of the steam engine which kneads a hundred tons of heated iron with as much ease as the hands of the potter knead a lump of clay!

And here, since it is of the utmost importance to mankind that this element should usually exist in a liquid state, let us pause a while to investigate the means employed by nature to prevent its rapid conversion either into vapour or into ice. For although its partial existence in both those states is perhaps eventually as necessary to the general good of the world as its more common state of water, yet, if its sudden or rapid