

twenty-one tons. Sometimes one came on groups of men, who were saturating the rough bands of sacking in which they were enveloped with water, before going to wrestle with some white-heat forging; sometimes on men nearly naked, with the perspiration pouring from them, who had come to rest for a moment from the puddling furnaces, and to take a long drink of the thick oatmeal and water, which is all that they venture on drinking during their labor, and which long experience has proved to be *the most sustaining of all drinks*, under the tremendous heats to which they are subjected." Dr. Beddoes records the fact that "total abstainers worked far better, and with less subsequent fatigue, than those who drank alcoholic liquors."

"The Temperance Provident and General Life Assurance Society, of England," taking the most favorable adult period for each class of risk, shows that for a period of years, the rate of mortality amongst abstainers has been eleven per thousand, while in other offices, very careful in their selections of lives, the death-rate is from 16 to 23, at the same age. In the Provident, separate books are kept for abstainers, and respectable limited drinkers; but when the quin-quennial profits were divided, one-third more profit accrued to the teetotalers, than to the respectable limited drinkers, owing to a much larger proportion of the latter dying than of the teetotalers. In the Moderate Section, from 1866 to 1880, the estimated deaths were 3,761, the actual deaths were 3,754, or within seven of the estimate. In the abstaining section, at the same rate of mortality and for a similar number, the deaths would have been 2,205, but the actual deaths were only 1,573. In other

words, 632 teetotalers refused to fulfil the calculation of the actuary, who remarks: "Count how much more time is given to the human race, time to improve, time to repent, time to amend. Listen to the home rejoicings of the women and children, for the further years granted to their protectors! Reckon how many thousand more children can be educated into good men and women by the prolonged existence of sober fathers. Estimate, if you can, the value of a matured citizen, who is spared to complete the schemes ripened by experience."

The great navigators to the polar regions, both British and American—Ross, Parry, Franklin, Richardson, Kennedy, Hays, Hall and Kane, have all with one voice asserted the pernicious, the evil results which follow from using alcoholic liquors in cold latitudes. Whatever tends to lower the vital activity, or to depress the heat-generating powers of the living frame, must be absolutely avoided in the rigorous climate prevailing in the arctic and antarctic circles. I might swell the host of witnesses, who, from actual experience, have testified, that all alcoholic liquors excite the nervous system, weaken the muscular action, increase the beating of the heart; but impart not one atom of strength-giving, or warming material, to sustain the increased nervous and muscular action it causes, and hence the lassitude, and craving for more of the poison, to raise the excitement again. Dr. Carpenter, in his Manual of Physiology, says: "Alcohol cannot supply any one of the important purposes for which the use of water is required in the system; while on the other hand, *it tends to antagonize many of those purposes*, by its power of precipitating