

the normal rate of pulsation, or how the lungs are inflated. So anxious are they to keep up the traditions of 2000 years ago, they neglect to study the structure and functions of their own bodies.

"Science is only now receiving a grudging recognition. But we are fast coming to the *denouement*, when the positions will be changed, and while its haughty sisters sink into unmerited neglect, Science, proclaimed as highest alike in work and beauty, will reign supreme."

The productiveness of any people is limited by their knowledge of science. One industry is one science and that science on another, and so on. Take Navigation; it depends on astronomy, which in turn depends on the glass manufacture, which again depends on chemistry, and other arts. Industry, then, will be retarded by ignorance of scientific subjects, and the rank and file of our industrial army cannot keep pace with those who possess a better mental equipment in science to help them.

I have directed your attention mainly to the assistance which increased intelligence lends to labor; now I wish briefly to point out that want of education affords great hindrances to industry, for everything which prevents the laborer from using his powers to their fullest extent is a hindrance. Two of the chief of these are the twin sisters, Ignorance and Intemperance. Ignorance leads to crime. The ignorant man cannot enjoy rational amusement. He frequents the public-house, becomes intemperate, and then the aching head and the trembling hand refuse to perform their ordinary labors. Thus ignorance leads to poverty, and poverty leads to crime. Then the tax-payer is put to the expense of supporting gaols and lunatic asylums, thus hindering the industry of the whole community.

Again, education and extreme poverty are two incompatibles.

People who are educated will, as a rule, refuse to herd in these hovels where the ordinary decencies of life are absent, and where the germs of disease find a secure hiding place. Education enables the people to take such hygienic precautions as to prevent the spread of epidemics.

In Cromwell's time the death rate was 70 per thousand per annum, now it is only 22. Life has been made several years longer during the last two centuries, as shown by the statistics of life insurance societies. Sierra Leone has been called "the white man's grave." Yet, now by taking sanitary precautions, the Englishman is as safe there as in his own country.

Again, the want of thrift hinders labor, and this is a mark of the uneducated man. He has not the foresight and prudence of his educated brother. Consequently, when thrown out of work, the State has to bear the additional burden of supporting both him and his family, often for considerable periods.

Now, industry is very largely carried on by co-operation, partnerships, and joint stock companies, etc., where trustworthiness is essential to their formation. The savage could never form a partnership; he could not trust the other partner.

We see then how essential it is that an industrial community should be honest and trustworthy, and how any education which neglects to cultivate the moral qualities is sadly at fault.

We, in Victoria, have gone in for secularism with a vengeance, prohibiting Bible-reading except by visitors, and we have also abolished the teaching of moral lessons except such as occur incidentally in the reading books etc. The teacher may, of course, by his example, inculcate the most valuable moral lessons daily. Still, we have no guarantee that the cardinal virtues are taught, and surely