

The Transforming Power of Science

The prerogative of man is to ask for reasons for what he is enjoined to do or believe. The brute does not ask for reasons the savage, the child and the lowest class of operative work men may not but a well developed human being has a dignity about him with which mere blind obedience and unreasoning assent all felt to be inconsistent.

We feel it as much our duty to investigate national as well as state affairs, the unnatural as well as the natural, metaphysics as well as physics. Justice, right, duty and truth should be impressed from the babe, nestling in its mother's arms until the old man, snow covered, extends his hand with a smile to death. And these have been the missions of science every since progress was born of discontent, and these are the missions now as it rocks progress in the cradle of doubt.

and nurtures it by the food of truth

It was science that discovered the laws and energies which make the application of natural forces to invention possible, that drew the lightning from the clouds and connected two continents by an electric spark, that gave to commerce the grandest impetus it ever had when it bound by iron bands this glorious republic from Plymouth Rock to the Golden Gate. It was science that supplanted human fingers by the cotton gin, the sewing machine and the power loom, that invented the telephone, the microphone, and the phonograph, which but a few years old have already taken their places as important factors in progressive civilization and research. Over step science has taken she has increased wealth by facilitating the means of production, distribution, and man's ability to work. She is constantly leading to better and cheaper methods of doing things. The modern arts

of photography, the printing and dyeing of cloth, the cheap production of steel and lately of aluminum are but a few of the practical inventions that have followed recently in her path.

In former days when little was known concerning the laws of health, when men's minds were filled with superstitious fear, and disease was supposed to be a punishment sent by some angry god, little could be done toward the alleviation of human suffering. But here too science has placed her trained and tender fingers. She studied the rules of physiology and hygiene and investigated the laws under which diseases originate and spread, and has taught men to regard such calamities as consequences following from a disobedience of nature's laws; and revealed and is constantly revealing new laws for their prevention and cure. The history of parasites which infect men and animals with such deadly results

has been cleared up and effectual modes of prevention devised from the data obtained by experiment. The terrible agency of parasitic fungi and bacteria, which work such havoc, has been brought to light and the germ theory of disease established. Two centuries ago plague and pestilences devastated whole communities and were attributed to a lack of prayer and divine worship. Science has shown them to be the result of filth and dirt, and that cleanliness and common sense will free us from their ravages. A century ago small-pox was as dreaded, but now it is reduced to almost insignificance. But a few years ago Pasteur initiated his wonderful cure for hydrophobia and now Keeley comes forward with a discovery which bids fair to eliminate the greatest curse of modern civilization. So great has the influence of science been upon the morals, the life and the health of individuals that the average length of human life has been doubled in less than one hundred years.

Had she done nothing else for the human race it owes her a debt of lasting gratitude for this. But on every hand her power and influence toward progression has been felt. She has taught men to think according to the laws of cause and effect and shown the absurdity of defending supposed truths because of their apparent usefulness. She has made humanity an army on the march and whatever places itself in its way must be transformed or swept aside for the better things of life.

And every page of human history contains its story of transformation. Gods have transformed, institutions have transformed, opinions have been transformed and religions have transformed. The search for truth dethroned the gods of Olympus, depopulated the Roman Pantheon, and has transformed Christianity itself; ^{proof of which only needs the mention of the} the Thirty Years War which put civilization back for a century. The Spanish Inquisition with its cruelty, torture and barbarity.

The Civil War of France. The extermination of the Albigenses, and the Salem Witchcraft. Think of the hundreds of thousands of innocent human victims who perished at the stake, in dungeons, stocks and racks. The human mind was cruel and reached the zenith of its power in devising barbarous and brutal means of punishment and torture. Yes think of these and say Christianity has not transformed. Think of these and give all honor to the men who have braved the sneers of a scoffing world, and dared to doubt amid the threats of church and state of torture and of death, who have made the world to feel that it can never be satisfied with a religion which has not for its foundation the utmost liberty of thought and the superstructure built on the broadest principles of intelligence, reason, justice, mercy, sympathy and love.

The time was when dark and threatening clouds enshrouded human understanding in a pall of egotism

and superstition, when men's minds were filled with fantasism and the seeker after truth was condemned to death for skepticism and heresy. But through the efforts of science those days are past. We no longer dress as the savage, till the soil with a forked stick, and live in an age of superstitious fear. At every step the torch of science has flamed into greater brightness dispelling the darkness of rudelusive fancies and now through those clouds can be seen the light of the morning sun foretelling the advent of that glorious day when intelligence, reason, justice and truth shall be moved supreme. Then will men know each other as men, respect each other as men and judge each other according to true worth. Then will it need no courage to seek the truth whatever it be. Then will minds be free to grasp and struggle with the problems of the age. Then will minds be broad and deep and pure enough to take in the interests of the world, and all over the earth the hearts of men will beat in concert with the joys and sorrows of humanity.