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MONTHLY SERIES.

SUCCESSFUL

MEN

OF

MODERN TIMES.

RELIGIOUS
TRACT SOCIETY,
Paternoster Row.

PRICE SIXPENCE.

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C. K. OGDEN

SUCCESSFUL MEN

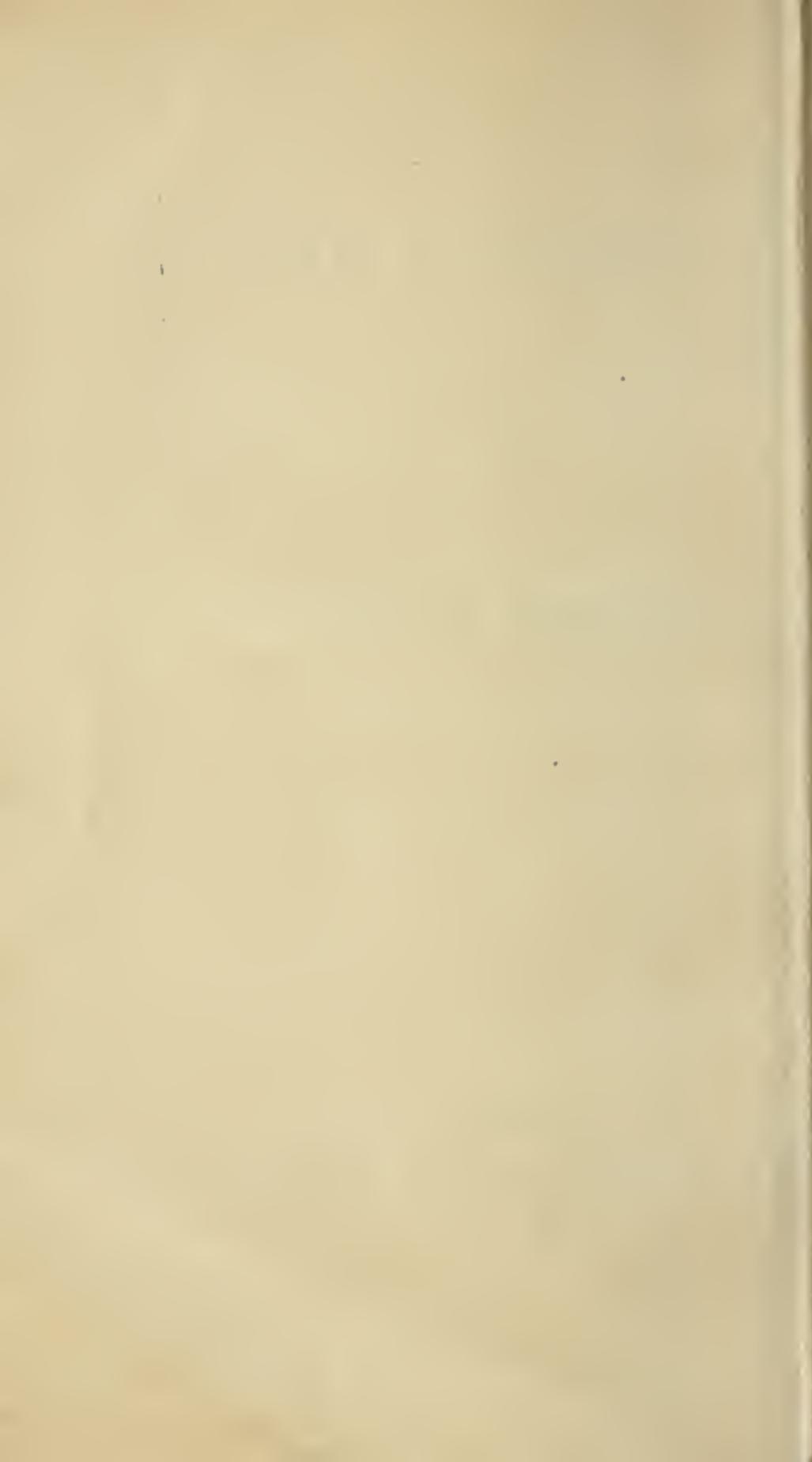
OF

MODERN TIMES.

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SUCCESSFUL MEN

OF MODERN TIMES.

CHAPTER I.

A FEW WORDS ABOUT SUCCESS IN GENERAL.

What is success?—Maxims—Anticipated advantage from examples.

WE invite the reader of this little volume to a theme which can hardly fail of being listened to with interest. Success in life is an object of almost universal desire. The merchant, the workman, the lawyer, the student, the statesman, the soldier, are alike anxious to obtain it. In this respect, efforts the most dissimilar in their nature have a common character. One person desires wealth, another a reputation for sagacity, another learning, another the helm of political affairs, another victory on the battle-field—but all desire success; give them this, and they are satisfied. At this moment, how many heads are aching, how many hearts are panting, how many hands are working for it! How many phantoms of success are being pursued, some with the warm eagerness of youth, others with the cautious and experienced

diffidence of middle life, and others with the dogged, yet half-despairing footsteps of old age—this one star cheering them on beneath the dark sky above—the hope of grasping it. Enter the thatched cottage here; listen to the conversation which is going on over the dying embers of midnight—it is of some scheme of rustic happiness, on which the future of the lowly inmates seems to hinge, and the burden of every thought which the contemplation of the scheme awakens is—*success*. Venture higher, into some imperial council-chamber, with its hangings of scarlet and gold, its antique busts and pictures, its chair of state, its heaps of weighty documents, its row of “grave and reverend signors;” interpret the half-uttered sentences which pass from tongue to tongue, apparently laden with events too big for more explicit announcement; grand schemes of ambition are now being broached, crowns and sceptres are in the balance, armies are to be levied, navies built, ambassadors recalled, kingdoms conquered: only one question creates a pause—will they realize success? Thus success is naturally the hope alike of the highest and of the lowest; it is the complement of every desire, the fruition of every wish, and the ground on which all mankind may claim sympathy with each other.

We are about to bring together within the mind's eye a few of those men who, in various departments of enterprise, have been most remarkable for success in the particular pursuit

to which they devoted their energies. We shall contemplate the merchant, the man of science, the legislator, the artist, the poet, the philanthropist, in the act of climbing the steep, and at length reposing upon its flowery summit, surrounded with the fruits of their arduous toils. Before entering, however, upon this survey, it will be necessary, in order that our object may be clearly understood, and to guard against any error of sentiment into which, on such a subject, we are peculiarly liable to be led, to make a few preliminary observations in reply to the question—What is success, and what are the maxims on which we are to form our judgment respecting it?

First, what is SUCCESS? In reply to this question it seems obvious to remark, that success is not to be measured by the magnitude of any actual results, but is to be determined solely by comparison. For example, a merchant whose present fortune amounts to a quarter of a million sterling, has not necessarily realized five times as much success as another who has acquired only fifty thousand pounds; nor is a lawyer, who has risen to such a position as that of judge in a county court, necessarily less successful than another who has climbed to the woolsack and a peerage. On the contrary, the amount of success in either case may have been equal; nay, it is even possible that in any given number of cases, the smallest actual results may embody the largest amount of success. Whether or not a man has a right to

be regarded as successful, or more successful than another, depends upon the point at which he started, and the means he subsequently enjoyed. Some persons begin trade with a capital of five thousand pounds, others with no more than five shillings; one person, perhaps, commences a professional career on the foundation of long and careful preliminary training, with the aid of influential connexions, and under circumstances peculiarly favourable to his advancement; while another, by no fault of his own, commenced with fewer educational advantages, had no powerful patron whose aid he might invoke in an hour of need, and no golden opportunities which his ingenuity might have improved. In the one case, one-half the actual result must in all fairness be ascribed to causes altogether distinct from the individual; while in the other, the whole of it seems due, under God, to personal ability. Discrimination is necessary in settling such opposite claims. We must clearly ask, not only how much has been done, but what facilities have been enjoyed in doing it? The shopkeeper, who manages a tolerable business on a capital of some thousand pounds, may possibly have realized more success, regard being had to this maxim of proportion, than a merchant whose dealings absorb annually two or three hundred times that sum.

We shall keep this principle in view in the examples which will be introduced. There is a certain point at which success, though perhaps great in proportion to the advantages which

were enjoyed, may not be sufficiently important in actual amount to attract the attention of the world. So low in the scale it would be useless to descend, because it would not interest, and therefore could not instruct. We know not how many gems "of purest ray" may be found in the "dark unfathomed caves" of humble life, nor how many flowers may fling their odours where there is no one present to be delighted with the fragrance. Our object is not, however, to draw questionable instances of success from obscurity, or to advocate any theory as to what may or may not constitute success; but to contemplate, for the sake of practical usefulness, such examples as may be acknowledged on all sides to have been successful. Within these limits, however, we shall keep in view the principle we have just laid down, and shall regard those instances of success as the most entitled to notice, and the most appropriate to our purpose, in which the greatest results have been accomplished by the smallest means.

Adopting this definition of success, what are the maxims on which it must be viewed:—First, it must be admitted in order to view it aright, that *success is no chance product, no fortuitous gold-shower, but the natural issue of well-directed exertion.* The admission of this principle is necessary to vindicate the character of successful men. If it is not true, then are they mere jugglers, the practisers of some occult art, or the passive recipients of such

favours as may be showered upon them by a capricious and arbitrary fortune. But such an inference gives us a totally false view of life—a view which squares with an infidel philosophy, but is at variance with religion and common sense. Reason and Scripture alike teach us that a connexion has been established by our Creator between the exercise of our faculties, and the attainment of the various objects of human desire, and that industry, prudence, knowledge, and perseverance, have a certain definite value in the business of the world. A belief in this principle is the source of the boundless activity which prevails, and it furnishes the most powerful secondary motive to self-improvement and the practice of the social virtues. Once let this connexion be severed in public opinion, once let it be generally believed that chance or blind fate holds empire in the affairs of life, and instances of success will become fewer and fewer, till society will present a dead level of contented and incurable poverty. This connexion between the use of means and the attainment of success is not, when properly viewed, inconsistent with that doctrine of Holy Writ, which teaches us that God sometimes, for wise and special purposes, disappoints our best efforts. All the events of time are made subservient to the ends of a moral government. The race is not always to the swift, nor the battle always to the strong. In order to try our faith, wean us from an undue attachment to temporal things, and purify our hearts for

hallowed communion with himself, God sometimes sees fit to blight our fairest prospects, and disappoint our most fondly cherished hopes. But He never takes such measures except in order to promote our real welfare, and they still leave in full force the rule which is also found upon the inspired page—"The hand of the diligent maketh rich; but the drunkard and the glutton shall come to poverty."

A second maxim is, that *we ought to aim at success*. Religion not only permits, but enjoins this. Putting aside all the benefits which spring from success, it would still be our duty to act in the way which Providence generally renders successful. Our faculties were given us to be wisely employed; indolence is a disgrace and a sin; there is no pursuit into which it is lawful for us to enter, which we ought not to follow out with all the ardour which can be infused into it, without neglecting more important pursuits. Individual success is necessary to the welfare of society; if we analyze it to its first elements, we shall find that they are identical with the increased subjection of the earth to man, a better use of the bounties of God's providence, and a multiplication of the means of common enjoyment. Whatever sort of business we are engaged in, provided only that it is "honest," and of "good report," we cannot, subject to the limitations above given, push it with too much energy. We may employ here the all-embracing exhortation of

the wise man, "Whatsoever thy hand findeth to do, do it with thy might."

A third maxim is, that *success, however brilliant, is a real loss, if it has been attained at the cost of higher interests.* Nothing is so intoxicating as the prospect of obtaining a large amount of greatness, fame, or wealth; in the presence of this powerful motive, the sense of what is right has often melted away. Many persons have resolved, at the outset of life, that they would overleap any obstacle which might stand in their way, though it should be the rights of their fellow-men intrenched in the sacred command of God. In such cases real success is impossible. Crowns won by such means are wreaths of curses; wealth brought into the coffers through such channels is a canker to reputation and happiness. But even when the obligations of morality are observed, the soul is sometimes offered up at the shrine of success. Men, who are far too honourable to tell a falsehood for the sake of a good bargain, nevertheless too often pay such intense and exclusive attention to business, that no energy or time is left for the cultivation of that part of their nature which will live for ever. To say that this is folly, is to speak with culpable mildness; it is more truly insanity. Nothing is more certain, than that except in so far as our responsibility will have been increased by the possession of great talents, it will ere long be of no consequence whether in

this life we have been rich or poor, princes or beggars, and that the only consideration of any value will be, whether our souls have been renewed by the Spirit of God, and our sins forgiven through faith in the atoning blood of Christ.

A fourth maxim is, that *all success comes from God*. He endowed us with the faculties by which it is acquired; he created the objects which kindle our desires; he gives them that correspondence with our bodily and mental constitution which renders them pleasing; he gives that efficiency to the use of means which makes industry and skill successful; he arranges those circumstances which favour our efforts, and on which genius and capacity lay hold. Thus all success which is won by honest means should raise our thoughts to the Father of lights, by whom the power of acquiring it was inspired. The pious mind will regard it as the gift of his overflowing bounty, and love him the more for it. But success is sometimes obtained by means which are not honest—by means which are most unrighteous. In such a case the goodness of the Almighty is abused; conscience is silenced; the faculties with which we are endowed are desecrated; the success which follows is only temporary, like the crackling of thorns under a pot, or the lurid glare of a gunpowder explosion, to be followed, ere long, by thicker and more noisome darkness.

Armed with these maxims, we may proceed to the contemplation of successful men; but

before finally entering upon it, let us ask, What are the precise advantages which we anticipate from the process? We hope, then, that *a brief interview with those who have risen to eminent success will be the means of stimulating ourselves to more energetic exertion.* Nothing is more easy than to fall into a drowsy or careless way of living. Laziness and recklessness are in fact twin evils, the Scylla and Charybdis of existence; on both sides the youthful mariner is in equal danger; tempted either to do nothing or to do anything; whereas the true end of life is to be gained, not only by resolving to do something, but by patiently and laboriously considering what it would be best to do. Energy of character is, to some extent, dependent on physical temperament; but energy of the proper sort and proper degree of intensity is always within our power. The acquisition of the qualities which command success lies, to a very great extent—we know not how greatly—with the individual himself. Let him only resolve that, in the strength of God, he will never tolerate a single unprofitable hour; that he will endeavour to improve his talents to the very utmost, and employ them to the very best advantage. Let him do this, not on selfish grounds, not from an undue anxiety to obtain the blessings or to avoid the ills of life, but on the high ground of duty—and who will predict the result? We only know that such resolves have always been the harbingers of success, and are, therefore, likely to prove so again.

If intercourse with successful men awakens emulation in our breast, it will also show *us how they realized success*. To a reflecting mind this will be no slight benefit. There is unquestionably an art of "getting on;" there are certain qualities, mental and moral, which render success, with the Divine blessing, much more likely than otherwise. Hence, whoever wishes to succeed must first become a learner. Nothing is so dangerous to him as self-confidence. Docility, a willingness to learn his defects, and be taught by the experience of others, are more valuable to the young tradesman, the artist, or the aspirant after excellence in any profession, than a hundred purses of gold. A particular business must be learned by apprenticeship before it is practised; so also must the logic of all business, the general method of success in life.

While the contemplation of successful men, to which we are now about to proceed, may teach us how to be successful ourselves, it will also teach us *to estimate success at its true value*. In the first place, it will make us feel the vanity of all success which is realized at the cost of religion, whether it be the sacrifice of morality, or inattention to our spiritual interests. We shall behold men rising by slow steps to worldly happiness and fame, gathering in the fulfilment of one aspiration after another, till at length they stand crowned with victory on the pinnacle of grandeur or ambition, and then vanish suddenly into the unseen world. We shall

behold other men, endowed with high powers, expending their lives upon mere self-culture; sedulously aiming to improve their taste, augment their stores of knowledge, render their intellectual perceptions more apt and accurate; living for the beautiful in art, or science, or song, till they die. Such facts will speak to us more loudly than words. We shall feel, while meditating upon them, the wretchedness of those who have laid up treasure for themselves, and are not rich towards God. But apart from these instances, the contemplation of earthly success will touch us with a sense of its nothingness as a final good for man. As the eye glances from peak to peak of this moral alp, dazzled at every transition by the rainbow colours with which the sunbeams mock the coldness of eternal snows, we shall ascend from the highest pinnacle into the blue heavens above, with an instinctive feeling that *there* lies the incorruptible inheritance of man; and the sentiment of the poet will be imprinted ineffaceably on the heart, that, however high the pile of grandeur may be raised,

“ He builds too low who builds beneath the skies.”

CHAPTER II.

SUCCESSFUL MERCHANTS, TRADESMEN, AND MANUFACTURERS.

Different qualities necessary to success in the departments of trade and manufacture—Jacob Astor—Thomas Caddick—Sir Robert Peel—Samuel Budget.

WHETHER we consider the number of persons engaged in them, or their importance to the well-being of society, manufactures and trade unquestionably hold the first place among the industrial occupations of mankind. Others may contribute in a higher degree to mere elegance and refinement; science may instruct, and poetry elevate the mind: this, however, is the mere gilding of the structure; the solid materials of which it is composed are furnished by very different pursuits. If the world were reduced to such an alternative, it could much more easily part with its painters, its sculptors, its poets, its professors, however important these may be in their place, than it could with the workmen of the forge, the plough, and the loom, and those who, by means of exchange, disperse and equalize the various products of human labour.

Let us survey for a moment this twofold

department of enterprise—manufactures and commerce, production and exchange, making and selling—with a view to ascertain the qualities required for success therein. In the minor branches of handicraft little is required beyond hard work ; when once a seven years' apprenticeship has been served, and knowledge duly obtained in their respective "arts and mysteries," then success lies in putting the latter into practice with as much energy as possible. In the staple manufactures of cotton, wool, flax, silk, etc., a greater demand is made on the intellectual capacities. An eye must then be kept upon the market to observe the state of prices, the kind of goods in demand, and probable changes of fashion. The probable scarcity or abundance of the raw material calls for caution and sagacity ; the fickleness of taste, and the appearance from time to time of successful rivals, require boldness and ingenuity in striking out new paths, while the scale on which operations are carried on offers a premium upon economy and invention. Still, in manufacturing pursuits, when a path has once been entered upon, the chief requisites are energy and perseverance. Trade is a totally different thing ; its essence lies in buying and selling. To the trader, the articles of commerce resemble the characters of algebra ; he is concerned with the process merely, and they are considered only so far as they bear upon it. To make what is termed "a clever bargain" requires no small amount of judgment and

decision; the power of rapidly taking in the various conditions of the case; weighing calmly and dispassionately all that can bear upon it, and forming an opinion which subsequent reflection will only confirm; this is as intellectual a feat as the solution of a mathematical problem. But even this gives us a very inadequate view of the sphere which *business* comprehends, and the mental qualities which its successful prosecution requires. The merchant must be a geographer, an economist, a politician, and even genius may be pronounced requisite to the attainment of the highest degree of success.

The commercial progress of the United States of America, since the period of their separation from Great Britain, will be regarded hereafter as one of the most astonishing facts of history. To account for this forms no part of our present design; but the following narrative, while it is selected for the purpose of illustrating the remarks just made, will also afford a clue to the cause of that remarkable development which we witness with so much pleasure among our kindred on the other side of the Atlantic. About seventy years ago, in the quiet village of Waldorf, near the famous city of Heidelberg, a youth might have been seen reclining under the shade of a linden tree, apparently immersed in deep thought. One might have judged from his changing countenance, that some enterprise of no ordinary importance was being revolved within his breast,

perhaps some phantasy peculiar to the bright morning of life, fascinating his imagination by its brilliant form and colouring. JOHN JACOB ASTOR* was then about to leave his father's house, the humble, yet loved abode of his ancestors; his eye was surveying in silence the blue waves of a distant ocean, and pursuing the outline of a strange shore. A new position often has the power of impressing important lessons on the mind, and rousing the will to high resolves. It was so with him. About to bid farewell for ever to his fatherland, and to enter upon a sphere where everything would depend, under God, on his own exertions, he solemnly resolved to be honest and industrious, and never to swerve from the path of duty. Happy would it be if every emigrant, in setting out from his native shores, carried with him a similar determination! Let us see how it fared with Astor.

He was twenty years of age when he found himself in London on his way to the American settlements of Great Britain, then about obtaining from this country a ratification of their independence. He had a brother in the metropolis, a music seller in an humble way, who gave him as his capital a few musical instruments. In November, 1783, he embarked at London, and after being detained three months by the ice in Chesapeak Bay, landed at Baltimore in March. At the commencement of his emigrant life, he furnishes us with another

* Hunt's American Merchant's Magazine.

instance of the trivial incidents which, in the providence of God, often determine our career. On board the vessel in which he crossed the Atlantic there happened to be a furrier, between whom and Astor an intimacy soon sprang up. How many would have gathered from this acquaintance merely the solace of a few idle hours! Not so with Astor; he learned from the man everything connected with the "arts and mysteries" of a furrier's business which could be communicated on board a ship, and was induced by him to resolve that, on landing, he would exchange his musical instruments for peltries, and enter fully upon this new profession. He had intended to turn farmer, but the back settlements and untrodden wilds of the far west opened to his view a source of much greater profit than he could hope to obtain from the culture of the soil. At this time, peace had been proclaimed between Great Britain and the United States; but many fortified posts within the boundaries of the latter were not yet given up, and he saw that ten years would probably elapse before they would be abandoned, and the immense tracts of Michigan and Upper Canada laid open to American enterprise; still he resolved to hold himself in readiness to profit by the opportunity as soon as it might be offered. This happened in 1795, and so well did he avail himself of it, that in six years he accumulated a fortune of 250,000 dollars. In 1808, he succeeded in establishing the American Fur

Company, intended to compete with that of Hudson's Bay. In connexion with this company, he established hunting posts due west to the foot of the Rocky Mountains, and across them to the Pacific, at which he collected in vast quantities the skins of otters, beavers, buffaloes, etc., to be exported to all parts of the world.

The comprehensiveness and enterprising character of his mind contemplated still bolder schemes. He foresaw that the strip of land lying between the western declivity of the Rocky Mountains and the Pacific Ocean must soon become of great political and commercial importance. Having established his hunting posts right across, he resolved to form a settlement at the mouth of the Columbia to serve as an emporium of commerce for the west. This settlement he designed to supply with provisions and clothing by a ship to be sent annually from New York, which was to receive from the settlers the skins collected during the season, carry them over to Canton, and bring back their value in teas, silks, and nankeens. He expected that for the first ten years the enterprise would be a loss; that it would barely pay during the following ten; but that at the commencement of the next decade it would bring in a yearly revenue of a million dollars. The formation of these plans and the energy with which they were carried out, prove the far-seeing character of his intellect, and furnish an illustration of the courage which is required

in the larger operations of commerce. The scheme, however, failed, not from any want of prudence or determination on his part, but from disaster at sea, and want of a steady co-operation on the part of the United States government. Without this addition his operations were sufficiently extensive. His vessels ploughed every sea, and the disposal of his cargoes included a circumnavigation of the globe. England, France, Germany, Russia, India, and China, were all comprised within the circle of his regular transactions. His business tact was signally displayed at home. He had agents in every principal town and district throughout the United States, advising him daily of the state of prices, and thus enabling him to send his merchandise to the most profitable market. The railway and electric telegraph have done much to neutralize the special advantages of such an arrangement; but in the days of slow coaches and scanty news it must have been very great. In 1844, his fortune amounted to 20,000,000 dollars, and a large number of the best houses and public buildings of New York were his property; and what is better, he possessed the esteem of his fellow-citizens, and was known among his own countrymen on both sides of the Atlantic as their munificent friend and protector. Wolfgang Menzel, the celebrated historian of Germany, pays him the compliment of a special notice in his great work, as the most distinguished member of that Teutonic

band who have gone to seek their fortunes in the far west.

The causes of Astor's success are sufficiently obvious in the sketch we have given of his career. Enterprise, grasp of mind, great practical decision and energy, are among its leading features ; to these we may add two or three less noticeable but equally important traits of his character. He had an unusually tenacious memory, an intimate knowledge of detail, and a lucidity of combination which nothing could confuse. He did not spend half the time that some merchants spend in the counting-house. He rose early, was never idle, was always diligent and punctual, and at or before two p.m., he invariably quitted his desk for the quiet retreat of home. It was observed by a friend, since the representative of the United States at the court of St. Petersburg, that he would have been equal to the command of an army of 500,000 men. No doubt he was peculiarly favoured by natural endowments, but most of these endowments are capable of being acquired or greatly improved. A good memory, habits of order, punctuality, and application, are to a great extent within the reach of all who may choose to cultivate what little they now possess of those qualities. Let no one sit down in despair, because he fancies himself destitute of those qualities ; let him rather try to possess them, and patience will go far to render him successful.

If we were to enumerate in the order suggested by their importance the intellectual

qualities which are most requisite to success in business, we should name first, a *sound judgment*. This is above all others the regal power; without its exercise a bargain is a game of chance. At every step, indeed, in the smallest as well as in the largest concern, this faculty is called for. If a tradesman is satisfied, by repeated failures, that he does not possess an accurate judgment, he had better lose no time in putting himself under the guidance of others. Although he might perhaps be ruined as a principal, he may excel as a servant, when other heads do all the scheming, leaving him to follow out their plans. It is very fine, no doubt, to hold the marshal's baton, and have a great victory associated with one's name; but if impetuous valour has the better of discretion, it will be preferable perhaps to serve in the ranks. Next to judgment is *decision*. This quality, as distinguished from rashness, supposes the former. If an opinion is correct, it cannot be too speedily carried out. He who combines the most accurate judgment with the greatest rapidity of thought and energy of determination, will push his way fastest and climb the highest. But woe to the individual who gives rein in business to an impetuous will, before he has carefully ascertained by experiment that his judgment may be trusted. It is like putting an engine at high pressure when its fly-wheel is of insufficient strength; the centrifugal motion will soon scatter it in fragments. With a well-balanced judgment,

a business man may make *safe* progress ; with decision of character added, his progress may be *rapid* as well as safe. To complete our idea of a model man of business, there must be, in perfect subordination to the higher intellectual faculty, but still in vigorous development, *imagination*. This will probably sound strange in the ears of many who think that imagination is only needed by the poet and novelist. This, however, is false. The greatest discoverers have been eminently imaginative. Bacon was so ; Kepler too. If Columbus had never first visited the western world in his fancy, he would never have visited it in his ships. Hypothesis has long been realized as a valuable aid to scientific discovery, by pointing out the path of actual experiment ; but imagination lies at the basis of every hypothesis. The merchant of the highest class is a discoverer. He finds out new spheres of enterprise, new modes of meeting the various wants of man, and such discoveries are entitled to rank with those of science. If Jacob Astor had been destitute of imagination, he would probably have died at Waldorf, or have ended his days as a quiet farmer in the neighbourhood of Baltimore ; it was that faculty which turned him into a gigantic Nimrod, and led him to seek wealth by driving into his snares the buffalo herds which roamed over the pathless prairies.

If we want the type of a quiet, steady-going tradesman, in whom judgment and perseverance are the chief features, we may find it in

the late Mr. THOMAS CADDICK, of Tewkesbury. His father was a respectable Staffordshire farmer, and he himself was born at Clyangor, between Walsall and Litchfield, in 1763. When twenty-six years of age, he established himself in the above-named town as a druggist, tea dealer, and grocer, and remained in the same house at the bottom of High-street till he retired from trade. He continued in business thirty years, and during that long period of more than fifteen hundred market days, how many found him absent from the counter? One only, and that was on the occasion of his father's death. So extraordinary was his assiduity and judgment, that during the whole thirty years he did not lose £20 in bad debts, though his average yearly receipts exceeded £5,000. The amount of his sales and profits steadily increased every succeeding year till they averaged £6,000. He was a true English tradesman, who did not forget in his diligent prosecution of business the social and corporate claims which might justly be made on him as the member of a free community. He never evaded any parochial or other responsible office. For more than twenty years he carried on a coal trade for the sole benefit of the poor of Tewkesbury. His friend, Mr. Thomas Easthorpe, father of sir John Easthorpe, used to purchase the coal at the pits; it was then sold at Tewkesbury at a price which would just cover the expenses, Mr. Caddick managing all the details of the sale gratuitously. In

1820 he retired from business. He gave up then all idea of increasing his wealth, and as his personal expenditure did not exceed a third of his income, he devoted seven or eight hundred pounds annually to charitable and religious purposes. Besides this, he distributed on one occasion more than £5,000 in the course of a few months. In the last twenty-five years of his life, he gave away altogether not less than £20,000. In his mode of living he was an example of economy without a shadow of parsimony. At his death he left £12,700 to various evangelical institutions.

We have mentioned the power of forming a correct judgment as one of the first things requisite to success in business; this granted, then the rapidity with which business may be done depends upon the rapidity with which this faculty can be exercised, and the energy with which its determinations can be carried into effect. Hence the two things requisite to rapid success are a ready judgment and an energetic will. Some persons seem gifted with a sort of intuitional power in business; they see both sides of a bargain, with miles of circumjacent territory, at a glance, and at the same time their constitutional activity gives a kind of magical suddenness to their elevation. It is well when first-rate business talents are found blended with Christian principles; for it must be owned that the acquisition of wealth is always accompanied with great spiritual peril. Business is so engrossing in its influence, it

presents so many temptations to departure from strict integrity, and exerts withal so chilling a power upon the religious affections, that a person who gives himself to it "diligently" has much need of Divine aid to be at the same time fervent in spirit. Yet are there nevertheless many instances in which eminent success in business, and eminent Christian virtues have been found together. Nor is this anything more than, upon reflection, we might expect to find. The moral qualities which true religion produces are peculiarly favourable to success. Honesty, industry, economy, punctuality, and perseverance, are either expressly enforced in the word of God, or spring directly from the habit of mind which its precepts are fitted to inspire; and we all know the important relation which those virtues sustain to our social advancement.

The late Mr. SAMUEL BUDGET of Bristol may be referred to as an instance in which first-rate business talents, and a large amount of success, were found in unison with piety. His memoir, from the pen of the rev. W. Arthur, have already familiarized a numerous class of readers with the incidents of his life; but probably even to such persons it will not be unacceptable to give, in a few sentences, a summary of his instructive career. In the life of such a man there are two points of special interest—the starting-post and the goal; what was he when he began? what did he at last become? Mr. Budget commenced life as a poor boy; without money, without friends, without much

learning, with absolutely no help but such as was furnished by an ordinary understanding, keen observation, remarkable prudence, a good character, untiring industry, and the blessing of God ; on this foundation he was enabled to rear an immense business and a considerable fortune. Here is the picture of his establishment just before his death :—“ The warehouse is one hundred and eighty feet long, by three hundred and fifty at its greatest depth. You pass from office to office, from yard to yard, from loft to loft, and from loft to cellar, till you wonder how all this has been brought under one roof. Then you are led across the street to commence a similar process on a smaller scale in a bonded warehouse. Here you come upon a region of loaf sugar which is stored up, pile upon pile, as if seven years of saccharine famine had been foretold. There you find a territory overgrown with tea chests ; here, a colony of casks replenished with nutmegs, cassia, and all spicery. Again, you are environed with piled-up boxes of fruit ; then, with a vast snowy region of flour. Presently, you are in a land of coffee ; then, in a realm where treacle reigns alone. Now you are wandering in a wilderness of cheeses, then on lofts which groan under mountains of peas. Here tobacco abounds, there bacon. And as if to mock your surprise at the large store of articles which rank among the necessaries of life, you find a heap of canary seed, which in a barn would look respectable as a heap of corn. As you

prosecute your journey, here you are in stables with stalls for forty or fifty horses ; then in a carpenter's shop ; again, amongst a band of coopers. Below you find a troop of wagoners, loading their capacious carts, and marching off to distribute the contents to steamboats and railways in an array that would do no discredit to a military commissariat."

Here are the starting post and the goal—by what means did Mr. Budget get through the interval between? How did the penniless boy become in due time the wealthy merchant? We shall be able to answer this question by knowing the man, and one or two incidents will give us this knowledge. Mr. Budget says, "The first money I ever recollect possessing was gained in the following way:—I went to Mr. Milks, of Kilmersdon, to school, a distance of three miles. One day on my way I picked up a horseshoe, and carried it about three miles, and sold it to a blacksmith for a penny. The next addition to my stock of money was when one of my sisters, in drawing treacle, had let it run over, and a considerable quantity was wasted. After taking up what she thought was worth saving, and being about to wash away the remainder, I ran to my mother and said, 'Mother, may I scrape up that treacle and sell it for myself?' Having gained her consent, I set to work, scraped it up as clean as possible, and sold it for three halfpence. Thus, by little and little, my fund augmented, until I had enough to purchase Wesley's Hymns,

and I considered myself a rich and happy boy. I remember, about 1806 or 1807, a young man called on my mother from Mr. D. of Shepton, to solicit orders in the grocery trade. His introduction and mode of treating my mother were narrowly watched by me, particularly when she asked the price of several articles. On going in to my father, she remarked that there would be no advantage in dealing with Mr. D., as she could not see that his prices were any lower than those she was in the habit of giving. I slipped aside and began to think, 'Why, that young man might have got my mother's trade if he had known how; if, instead of mentioning so many articles, he had just offered one or two at a lower price than we have been in the habit of giving, she would have been induced to try those articles, and thus he would have been introduced most likely to her whole trade. Besides, his manner was rather loose, and not of the modest and attractive kind.' I believe the practical lesson then learned has, since that, been worth to me thousands of pounds." These reflections will show that he was already an adept in the science of trade, and his maxims, as fast as they were acquired, were strengthened by practice.

In due time Mr. Budget was bound apprentice to an elder brother, with whom he remained at the expiration of his apprenticeship. His great desire now was to extend the business from a retail to a wholesale one. In aiming at this object he did not betray too much eagerness.

He was content that one advantage should pave the way to another, and relied for success upon habits of punctuality and attention, instead of puff and pretension. First he met his country customers at their own villages instead of troubling them to come to town; then he applied for orders to the higher class of shopkeepers, and gradually proceeded till he boldly solicited the largest retail firms. His great maxim was—a good article and ready money, and to a steady observance of this principle he mainly ascribed his success. Every year the establishment grew, till it became such as has been described. But how did he act when he became wealthy? Did he spend his riches upon himself? Far otherwise. His purse was always open to give help to the deserving; the temporal and spiritual necessities of his neighbours never appealed to him in vain; the ignorant and vicious were the objects of his unceasing efforts, and so largely did God bless his philanthropic exertions, that the district round his dwelling, from one of the most abandoned, became one of the most orderly, exciting the admiration of those who had known its depraved condition in former years. It is estimated that he gave nearly £2,000 a year away in such works of charity. But more than all, he was a man of prayer. He enjoyed communion with God, and habitually humbled himself beneath the footstool of Divine mercy. This was the spring of his benevolence; exercises like these kept his soul alive

amidst the benumbing influence of the world, enabling him to gain the victory over it.

We have a fine illustration of the career of a British merchant and manufacturer, as well as a splendid commentary on the free genius of our political constitution, in the first sir ROBERT PEEL, father of the late eminent and lamented statesman. Travelling on the turnpike road from Accrington to Blackburn, about half way between these towns, a small building is pointed out on the left-hand side of the road, as marking the site of Peel Fold, the ancestral home of the Peels, from whom the present family derives its origin. There the great grandfather of the present baronet was born, and spent the greater part of his life. The cotton manufacture was then in its infancy. Cotton, instead of being spun into thread in these great factories, which furnish for strangers the most striking feature of Lancashire scenery, then furnished employment to women at their own cottages, and to small farmers, who filled up with spinning the leisure hours of themselves and their family. It was so with the Peels. They blended the pursuits of agriculture and cotton spinning. Robert Peel, the father of the first baronet, was an ingenious man, and invented a machine for carding cotton wool, about the time that Arkwright invented the water frame. This was more than the ignorance of the district could bear. One night a mob from Blackburn attacked the premises, the obnoxious machinery was

destroyed, and the inventor himself eventually quitted Lancashire for the quieter precincts of Burton-upon-Trent.

The son of this Robert Peel, the first known to fame, was brought up in true Lancashire fashion; not without certain expectations, yet taught to give himself from the very first to hard work. It is said that part of his daily task was to carry milk over to Blackburn for sale; at the same time, however, he received such an education as was likely to prove most useful to him in his future career. The boy of the milk-pail was also one of the most promising scholars at the Blackburn Grammar School, and by and by a diligent student of the Latin, Greek, and German languages. His father's means increasing as he approached manhood, he was sent to travel on the continent, with a view to obtain such an insight into society as would fit him for the more successful prosecution of business. Nor was he without a spark of that ambition, a mixture of desire and resolve, which has often proved the precursor, if not the cause, of subsequent greatness. It is said, that at the age of fourteen he frequently avowed his determination to raise himself to rank and affluence, and entertained a strong presentiment that he should become the founder of a family. Whether we approve of such sentiments or not, they prove at least one thing—that the individual who afterwards was so successful, had at the outset of his career a clear notion of what he intended to do, and a

resolute purpose to aim at its accomplishment. He did not work in the dark. He did not deal his blows in hasty and embarrassed confusion, but with a cool aim, seconded by all his force of enthusiasm. Such a beginning, if well followed up, was at least adapted to work out the future which actually ensued.

In his twenty-third year Mr. Peel quitted his paternal home—the only one of seven sons who did so—and, with somewhat less than £4,000 in his pocket, removed to Chambers Hall, near Bury, where he entered into partnership with Mr. Yates and Mr. Howarth. In 1774, having erected suitable works on the site of an old corn mill, they commenced operations under the designation of “Howarth, Peel, and Yates.” At first they confined themselves to calico printing, but, embracing every opportunity of extending it, they at length wove their own cloth, spun their own yarn, and imported their own raw cotton, as well as exported on their own account the manufactured goods, thus uniting the merchant and manufacturer in the same person. The business of the firm gradually grew to such an extent, that it gave employment to nearly the whole population of Bury. Very soon, works for spinning, weaving, or printing, were erected at Hinds, Ratcliffe, Burs, and Gig, near Bury; at Makin Hill, near Heywood; at Bolton and Warrington; they also employed weavers at Manchester, Blackburn, Burnley, Padiham, Stockport, and Bradford. Cloth was woven also at Litchfield for some

works at Tamworth, which were built in the year 1789. The extensive works near Ramsbottom, now in the occupation of Messrs. Grant, were originated at the same time. Some idea of the scale on which the firm carried on operations may be drawn from the fact, that they paid no less than £60,000 a year in duties to government, of which £40,000 was for excise duties; and that they employed as many as fifteen thousand workmen. In 1788, Mr. Peel purchased Drayton Manor, near Tamworth, from the earl of Bath, and afterwards chiefly resided there. In 1817 he retired from business, possessing property to the amount of not less than two millions and a quarter sterling.

It may be interesting to add one or two proofs of the social triumphs which intelligence and industry had won for the comparatively humble youth of 1765. In 1790, he was returned to the House of Commons as one of the members for the town of Tamworth; in 1797, he contributed £10,000 towards the voluntary fund for defraying the expenses of the war, then unhappily raging with France; in 1800, he was created a baronet. During his life his numerous children were married to various members of the aristocracy; one of his sons to the sister of lord Mountcashel, another to a daughter of the marquis of Ailsa; and another to a sister of the duke of Richmond. The wealth bequeathed at his death was immense, his personalty was stated at "lesser value" or more than £900,000, and is, we believe, very

nearly, if not the only instance of that which has occurred since the scale of duties was extended to that sum. The probate stamp was £15,000, and the legacy duty £15,000 more. At whatever value we choose to rate wealth or social distinction, it will not be disputed that these facts are indubitable proofs of great worldly success, but it is of more importance to ask by what means this splendid fortune and those high connexions were acquired. Among the first we must place intelligence and mental discipline, obtained through the medium of an early and excellent education. It is impossible to over estimate the value of these advantages. An ignorant person may be clever at making bargains, but in the important subsidiary operations which are necessary in conducting business on the largest scale, a well-disciplined mind, and a large measure of intelligence to boot, are almost indispensable to success. When business is conducted on such a scale, new schemes have continually to be entertained, and in order to decide wisely respecting them, they must be seen as in a stream of sunlight, well defined in all their dependencies and connexions. There must be no undiscovered shore, no unweathered promontory, no unsearched recesses. But to take such a view of a subject, the mind must be free from those hallucinations which ignorance is so apt to spread before it. With less intelligence Mr. Peel might have continued to the end of his days a mere calico-printer; he would

not have so extended his operations as to take in the entire circumference of the cotton manufacture. But, as in infinitely more important concerns, knowledge without zeal would have profited little. Incessant activity, constant yet *strong*, not the fleeting, noisy, bustling hum of the dragon-fly, but the sober, ponderous motion of the steam-engine, turning unseen in its narrow dwelling the lathes and wheels of an extensive factory, with its huge arms—such, if we may use the metaphor, was his. Before the recent discoveries in bleaching which enable us to perform the process in a few hours, it used to occupy several weeks. The goods were spread out in the open air in a place called the “Bleach Croft,” usually situated on the side of a hill; and so precarious was the process, supposing the articles to escape the hands of human depredators, that a slight change of weather would be sufficient to spoil them. Mr. Peel was accustomed to leave his bed at all hours of the night, and proceed alone to the Bleach Croft, to see that all was going on right. Another cause of Mr. Peel’s success it is gratifying to mention—the generous manner in which he treated his superior servants. He invariably made them feel that their permanent interests were bound up with the welfare of the firm. A place in his warehouses, though only as a porter, was a step on the ladder of promotion. Many of the wealthiest manufacturing firms of Lancashire thus grew up under his fostering care. Halli-

well Lane, near Manchester, where more than one munificent patron of our evangelical institutions resides, takes its name from a person who entered Mr. Peel's service in the humblest capacity, then became traveller, afterwards a partner, and acquired at length a very considerable fortune.

We conclude these examples of self-elevation by calling the attention of the young to a few practical remarks on business habits, by one who has studied the subject closely.

"Habits of business," says Mr. Freedly, "include six qualities:—*Industry, arrangement, calculation, prudence, punctuality, and perseverance.* Are you industrious? Are you methodical? Are you calculating? Are you prudent? Are you punctual? Are you persevering? If so, you possess what is known by the familiar term, habits of business. It is not the possession of any one of these qualities in perfection, nor the occasional exercise of them by fits and starts, as it is called, that will constitute a man of business; but it is the possession of them all in an equal degree, and their continuous exercise as habits, that gives reputation and constitutes ability. The difference in men and their success may be attributed, in a measure, to a difference in their business habits; and many a man has made his fortune with no other capital than their superior cultivation. In fact, a large capital and excellent opportunities, without them, will only provoke greater disaster and a more wide-

spread ruin. Perfection in most things is unattainable ; yet men have attained to a greater degree of perfection in the cultivation of these qualities than in almost anything else ; and, at all events, it is certain that he who ' aimeth at the sun, though he may not hit his mark, will shoot higher than he that aimeth at a bush.'

"*Industry* is the energetic engagement of body or mind in some useful employment. It is the opposite of that Indian maxim, which says, ' It is better to walk than to run, and better to stand still than to walk, and better to sit than to stand, and better to lie down than to sit.' Industry is the secret of those grand results that fill the mind with wonder—the folios of the ancients, the pyramids of the Egyptians, those stupendous works of internal communication in our own country that bind the citizens of many different states in the bonds of harmony and interest. The tendency of matter is to rest, and it requires an exercise of force or of will to overcome the *vis inertiae*. When a thing should be done, it must be done *immediately*, without parleying or delay. A repeated exercise of the will, in this way, will soon form the habit of industry.

"*Arrangement* digests the matter that industry collects. It apportions time to duties, and keeps an exact register of its transactions ; it has a post for every man, a place for every tool, a pigeon-hole for every paper, and a time for every settlement. A perfectly methodical man leaves his books, accounts, etc., in so com-

plete a shape on going to bed, that, if he were to die during the night, everything could be perfectly understood. JEREMIAH EVARTS is represented to have been a model of industry and arrangement. A friend says: 'During years of close observation in the bosom of his family, I never saw a day pass without his accomplishing more than he expected; and so regular was he in all his habits, that I knew to a moment when I should find him with his pen, and when with his tooth-brush, in his hand; and so methodical and thorough that, though his papers filled many shelves when closely tied up, there was not a paper among all his letters, correspondence, editorial matter, and the like, which he could not lay his hands on in a moment. I never knew him search for a paper; it was always in its place.' Some manifest this habit at an earlier age than others, and apparently exercise it with less difficulty; but any one with attention may acquire it.

"*Calculation* is the mind of business. A readiness in calculation gives a man a great advantage over his less experienced neighbour; and many a man has brought his fish to a bad market from inability to calculate quickly and accurately. To attain the habit of quick calculation without the aid of a slate and pencil, Dr. Alcott recommends that the learner seize on 'every circumstance which occurs in his reading, where reckoning is required, and, if possible, stop at once and compute it. Or, if not, let the place be marked, and, at the first

leisure moment, let him turn to it and make the estimates.'

"*Prudence* is defined to be wisdom applied to practice. Under prudence are comprehended the discreet suiting and disposing as well of actions as of words in their due place, time, and manner. It is principally in reference to actions to be done, and due means, order, season, and method of doing or not doing. In a case where the probabilities on the one hand somewhat preponderate over the other, yet if there be no considerable hazard on that side which has the least probability, and a very great apparent danger in a mistake about the other, prudence will oblige a man to do that which may make most for his safety. It is always prudent, in matters of importance, to conceal intentions, or we may be anticipated by others. It is prudent to withhold confidence from an entire stranger, and in some cases to do nothing.

"*Punctuality* is the hinge of business. It is a virtue that all men reverence in theory, but all do not carry into practice. We like a punctual man, because he respects his word, and has a regard for our convenience: we dislike an unpunctual man, because he interferes with our plans, consumes our time, causes uneasy feelings, and implicitly tells us that we are not of sufficient importance, in his estimation, to make him prompt. Punctuality has reference to time engagements, money engagements, and engagements for work. It is a

quality that is usually found in connexion with other good qualities, as the want of it argues the absence of other essential habits. A want of system, defective calculation, and imprudence in making promises when the probabilities of fulfilling them are very uncertain, are frequent causes of want of punctuality. To be unpunctual is sometimes considered a mark of consequence by little great men ; but truly great men have always thought differently. Blackstone was punctual, and could never be made to think well of any one notoriously defective in this virtue. A modern peer, while a kingdom seemed to be resting on his shoulders — who presided in the House of Lords and the Court of Chancery, who gave audience daily to barristers, and found time to be at the head of at least *ten* associations— was so punctual, it is said, that, when the associations met, he was uniformly at his place in the chair when the hour of meeting had arrived.

“*Perseverance* is the last of the business habits that we have to notice. It means the steady pursuit of a plan, whether good or bad ; but it would be very unwise to persevere in a plan which conscience or practice had proved to be bad. In actual life, where there are so many different pursuits, and different ways of doing the same thing, it means steadiness in the execution of whatever plan is determined upon. Burgh makes mention of a merchant who, at first setting out, opened and shut his

shop every day, for several weeks together, without selling goods to the value of a penny, who, by the force of application for a course of years, rose, at last, to a handsome fortune. But I have known, he continues, many who had a variety of opportunities for settling themselves comfortably in the world ; yet, for want of steadiness to carry any scheme to perfection, they sank from one degree of wretchedness to another for many years together, without the least hopes of ever getting above distress and pinching want. There is hardly an employment in life so trifling, that it will not afford a subsistence if constantly and faithfully followed. Indeed, it is by indefatigable diligence alone that a fortune can be acquired in any business whatever.”

CHAPTER III.

SUCCESSFUL ENGINEERS AND INVENTORS.

Importance of inventions—Nature of inventive genius—James Brindley—George Stephenson—Sir Richard Arkwright—Samuel Crompton—Rennie—Telford.

AN inventive genius has often been the ladder by which men have raised themselves to distinction and wealth. To narrate the history of inventions we should have to commence with antediluvian times, since every improvement upon the processes which were first suggested to mankind may be termed an invention. The object of all inventions is in some way or other to enhance the value of labour, and since labour is the means by which all our wants are supplied, they are closely connected with the comforts and well-being of the human race. Science is the handmaid of invention; without her help, if it is not impossible to devise new processes, it is impossible to turn them to the highest account. Two centuries and a half ago, the principles of inquiry established by lord Bacon laid the foundation for a wider acquaintance with nature; since that period science has flourished beyond all

precedent, and inventions have been multiplied at a corresponding rate of fertility. Our temporal well-being has been advanced by them to an inconceivable extent. It may safely be affirmed that if two or three inventions were forgotten, the civilization of Europe would soon be in ruins.

Since inventions are of such importance, the utmost encouragement should be given to their multiplication, and no species of self-elevation is more legitimate than that which is built on an inventive basis. Ingenuity is, no doubt, to a great extent a peculiar gift; but like all other endowments, it may either be suffered to lie dormant, or be roused to activity. It seems to include two things—the habit of minute observation and comparison, and the power of fairly asking under any given circumstances, *What is to be done?* Perhaps there is in addition to this, a native force or fertility of mind in suggesting the thing precisely requisite, though the habit we have mentioned must be necessary to call it into exercise. These elements of an ingenious mind are found much less frequently than might be supposed. To be able, for example, to investigate a problem on its own merits; to take into account all the circumstances which affect its solution, and not one more, is a rare gift. The mind is too much like a tram-road; its thoughts travel, if not with railway speed, at least on railway lines. In new circumstances we still keep on the old track. Our great inventors, on the

contrary, seem to have had the power of throwing aside all previous notions, and grappling with difficulty as naively as a child would endeavour to repair the broken wheel of its nursery wagon. Sometimes from sheer ignorance they have had no previous notions to lay aside, and the methods they hit upon were such as occurred to the mind on steadily contemplating the objects to be attained.

JAMES BRINDLEY, the celebrated engineer, presents us with a striking illustration of these remarks, as well as a noble instance of self-elevation. We shall not pause to vindicate his claim to be regarded as an inventor; perhaps in its narrow and technical acceptation the word is inapplicable to him, but looking at the essential character of his genius no man has a greater right to it. Owing to the dissipated habits of his father, his boyhood passed away without instruction, and at seventeen years of age we find him, still unable to read, or even to write his name, engaged in common farm labour at his native village in the neighbourhood of Macclesfield. Who, at that time, would have predicted that Jem Brindley the ploughboy, famous then, if at all, for driving his plough with a steadier hand, or turning up the corners of a field more cleverly than his comrades, would be known hereafter as Mr. James Brindley, the associate of the great duke of Bridgewater, and earn for himself one of the loftiest niches in the temple of industrial fame? In Brindley's case, as in many others,

we find the moral faculty co-operating with his intellectual capacities in working out the great future which Providence had in store for him. Some men, with powers capable of greater things, having been born to the plough would have kept to it through life. Not so with him. At the age of seventeen he went to Macclesfield and bound himself apprentice to a Mr. Bennet, a millwright then residing there. Here the peculiar bent of his mind first showed itself, and it was not long before he had achieved a considerable reputation, very much to the advantage both of his master and himself.

One of the first incidents which gave to Brindley a knowledge of his own powers, and helped to construct that local celebrity from which his subsequent greatness grew, very strikingly exhibits the energy and perseverance which, no less than his inventive faculty, contributed to his remarkable success. His master was engaged in the erection of a paper mill. Mr. Bennet seems to have been one of that class of persons who aspire to nothing beyond accurately following the beaten track, not being at all times even equal to this. What he had been drilled to do in the course of a seven years' apprenticeship, *that* he could do; but little else. Accordingly, the paper mill soon brought him to a stand. True, he had taken the precaution to examine a paper mill in actual operation some considerable distance off, but he had brought away merely the *pattern*, in his eye, not the *principle* of its construction

in his mind. Brindley soon found that in implicitly following his employer's directions he was rendering himself a laughing-stock to those who knew better how the work should be done, and one Saturday evening when his working hours were over, he started to examine the model mill. This involved a journey of more than fifty miles, which he performed on foot, and yet was back again in time to recommence his labour on Monday morning. No remark is requisite to secure the reader's reprehension of this unnecessary breach of the Lord's day. By devoting it to secular pursuits he set an example which, if followed universally, would rob the working man of one of his most precious birthrights. It is to be feared that Brindley was a stranger to religion, or he would not have acted thus. Still it shows a degree of energy and decision which in itself is very praiseworthy. The knowledge he derived from this personal inspection enabled him not only to finish the undertaking to the satisfaction of all parties, but also to add several improvements of his own.

In 1752, having left Bennet's employment, he successfully accomplished an engineering task of great difficulty. He had to drain a coal mine at Clifton, Lancashire, in the very neighbourhood where he was afterwards to achieve his most signal engineering victories. To drain the mine was easy enough in itself, but the question was, how should water be obtained for turning the engine which was to pump the

water from the pit. At the present day this is done by means of steam-engines, but at that time the improvements of James Watt were unknown, and water was the chief motive power in mechanical operations. Brindley solved the difficulty by cutting a tunnel six hundred yards long in the solid rock, through which he conveyed the requisite supply. Three years after this performance he was engaged, in subordination to some engineer who then enjoyed a greater reputation than himself, in erecting and fitting up a silk-mill at Congleton, Cheshire. Here a new feature of his character was accidentally brought out, which no doubt contributed to his success. A strong sense of justice, at least in reference to themselves, is usually found in those who have risen to eminence by their own exertions; they have felt their merit and demanded its recognition. Unhappily, vanity too often comes in to mar this feeling, selfishness renders it still worse, till at length it is nothing but a rude and offensive egotism. Perhaps an undue measure of self-confidence is more dangerous than a proper measure of self-confidence is useful, since the pretensions of incapacity always inspire us with greater disgust than incapacity itself, while true merit, though never so unobtrusive and self-denying, is sure in the end to make way. In the erection of the silk-mill it soon appeared that the subordinate was much the better man, and through the ignorance of his employer the work was speedily involved in difficulties. In this di-

lemma the proprietors waited on Brindley, and requested him to give them the benefit of his superior skill, the management still continuing in the same hands. Brindley met this request by a positive denial; he refused to extricate his principal from difficulties into which he could not have fallen himself, unless they chose to invest him with entire control over the undertaking. As the proprietors had no alternative they acceded to his demand. The reader will no doubt pronounce that he had justice on his side, but it would have been much more amiable, and, in a worldly point of view, very little to his disadvantage, if he had generously placed his talents at the service of his less ingenious associate. He would thus have laid him under an obligation which might at some future time have been serviceable to himself; and the public, after this display of his superior abilities, would have given him the preference in any future undertaking of the same kind.

By this time Brindley's reputation had spread throughout England, and an opportunity soon offered itself for displaying the grandeur and comprehensiveness of his genius, in connexion with a nobleman whose enterprising career has been a source of vast profit to his own family and the public, and whose name will ever be associated with his own. Francis, the second duke of Bridgewater, from the time of his accession to the family estates at Worsley, in 1748, had entertained the project of cutting a canal from that place to Manchester. The

cotton trade was just commencing its wonderful development, and the duke foresaw the advantage which would result from the establishment of a cheap method of transit between his coal mines and the rising metropolis of Lancashire. Brindley's success in draining the coal mine and erecting the silk mill had reached the ears of the duke, and he was requested to report on the practicability of the projected canal. After a careful survey of the ground, he reported favourably, and at once received a commission to commence operations. The only thing of the kind at that time in existence in this country was the Sankey Brook canal, connecting the town of St. Helen's with the river Mersey. This was commenced only three years before an Act was obtained for the Worsley canal, so that Brindley was without any guide in the task he had undertaken, except that which was furnished by his own unaided genius. The difficulty of procuring water made it necessary that the work should be accomplished without locks, and therefore the canal had to be of the same level throughout. To effect this was no easy matter, since the principal coal mines opened on a plateau much more elevated than Manchester. In this dilemma, the engineer seized the daring idea of commencing his works in the very heart of the coal mountain. Here he constructed a large basin, and carried the canal three quarters of a mile under ground; on emerging into daylight, near Patricroft, it was carried, by means of embankments and

excavations, on the same level to Manchester. Before reaching this town, however, it was necessary to conduct it over the river Irwell, then, as now, navigable much higher than the point where it was proposed to cross. Here a new difficulty presented itself, since it was absolutely necessary to leave the navigation of the river undisturbed, and the only way to overcome it was to throw an aqueduct across, at a sufficient height to allow of masted vessels passing underneath. Before venturing to carry out this design, Brindley advised the duke to consult some other engineer. The person consulted happened to be more witty than wise, and on hearing the scheme explained, sarcastically declared that he "had often heard of castles in the air, but had never before been shown where any of them were to be erected." Undismayed by this hostile verdict, the duke empowered Brindley to proceed, and on the 17th of July, 1761, only ten months after it had been declared an impossibility, the aqueduct was finished and opened. Vast crowds assembled to witness the event, and beheld, with inexpressible astonishment, boats passing along the summit of the new erection, while vessels from Liverpool continued their course in full sail beneath. The Barton aqueduct has lost a little of its marvellousness in the eyes of the present generation, owing to the familiarity we have acquired with works of greater magnitude, through the introduction of railways; but it must ever be regarded with admiration

as the first undertaking of the kind in this country, and a noble monument of the ingenuity and enterprise of its self-taught architect.

Our engineer was now at the summit of his fame; his name was noised throughout the kingdom; it operated as a spur to industrial enterprise; difficulties in the way of traffic, which had hitherto been considered insurmountable, were steadily surveyed; canals were everywhere projected; it was clear that the Macclesfield ploughboy had commenced a new era for his country. A branch of the Worsley canal was soon after carried to Liverpool, thus bringing that town in direct and easy communication with Manchester, and reducing the cost of carriage between the two places two or three hundred per cent. In 1777, a canal was completed, connecting the rivers Mersey and Trent, thus joining the western and eastern coasts; but five years before the completion of this great undertaking, death had cut short the career of its projector. The Roman lyricist sings of one who, famous in life for his skill in the sublimest sciences, wanted in death the friendly shelter of a grave. While surveying the monuments of Brindley's genius, the thought is borne upon us with irresistible force—Was this man equally wise in placing his *spiritual* interests on a sure foundation? Did he, while living, learn his sinfulness, and base his eternal welfare on the Rock of ages? The proudest structures are built of dust; the pyramids

themselves will vanish like smoke, when the Lord of the whole earth shall come to judgment; but the soul is immortal; its deathless career will be still only beginning, when the names of Brindley and Bridgewater are forgotten, and every vestige of their works has been swept away by the desolating blast of time.

Very similar to Brindley's career is that of GEORGE STEPHENSON, who may be regarded as the Brindley of railways. He began life as a pit-engine boy, receiving for his wages twopence a day. From some cause or other, the engine he had to mind was out of repair, and, without seeking instruction from any one, he applied himself, with complete success, to put it in working order. The ingenuity he displayed on this occasion secured his early promotion to the post of engine man, and his wages were advanced to twelve shillings per week. So elated was he by this change of position that he declared to a companion that he was now "made a man for life." The use of "wagonways" for conveying coals from the place of excavation along the galleries to the shaft, familiarized him with the notion of railroads, and by affording opportunities for the exercise of his talents in repairing and improving them, gradually fitted him for the great undertakings in which he was thereafter to engage. The following extracts from a speech which he delivered many years afterwards, will give the clearest view of the difficulties with which he

had to contend in his earlier years, and the perseverance which enabled him to overcome them:—"At the coal pit I had to work early and late, often rising to my labour at one o'clock in the morning. Time rolled on, and I had the happiness to make some improvement in engine work. The first locomotive I made was at Killingworth colliery, and with lord Ravensworth's money. That engine was made thirty-two years ago, and we called it (after the owner of the colliery) 'my lord.' I then said to my friends there was no limit to the speed of such an engine, provided the works could be made to stand. I betook myself to mend my neighbours' clocks and watches at night, and thus obtained money for educating my son. He got an appointment as overlooker, and at night we worked together at our engineering. I got leave to go from Killingworth to lay down a railway at Helton, and next to Darlington, and after that I went to Liverpool to plan a line from that place to Manchester. I there pledged myself to attain a speed of ten miles an hour. I said I had no doubt it might be made to go much faster, but we had better be moderate at the beginning. The directors said I was quite right; for if, when they went to parliament, they talked of going at a greater rate than ten miles an hour, a cross would soon be put on the concern." When he gave his evidence before the parliamentary committee, some inquired whether he was a foreigner, others hinted that he was mad; but his intelli-

gence and energy carried him through the ordeal, and the still more severe trial which the actual undertaking presented. The difficulties he had to encounter in constructing the Manchester and Liverpool railroad are well known. "The most astounding achievement was the completion of a solid and enduring road over Chat Moss, a bog covering about twelve miles. The moss was of the softest and worst description, and in forming the embankment at the eastern boundary, an immense mass of earth was thrown in and totally disappeared before anything like a palpable foundation for the road could be obtained." This part of the undertaking was finished in eighteen months, and the road was opened the whole distance on the 15th of September, 1830, in the presence of not fewer than half a million of spectators. From this time to his death, in 1848, Mr. Stephenson's history is identical with that of railway extension in this country and on the continent; he became an extensive owner of collieries and iron works, and left behind him a large fortune, incomparably less valuable, however, than the inheritance of his example and his genius. In looking at such men after they have obtained celebrity, we are ready to imagine that something of the supernatural assisted them in obtaining it. The early life of Brindley and Stephenson is sufficient to dispel the illusion; the only witchcraft they employed was that of close application and untiring industry. Without any idea of attaining to

affluence, much less renown, they diligently improved the advantages of the present moment, always endeavoured to make the best use of their faculties, and in this way realized a measure of success beyond their most sanguine dreams. Here is a lesson for the enterprising: in gazing perpetually at the object of their desires, in pondering deep-laid schemes of aggrandizement, they must surely miss their mark. *Present duty*, a conscientious use of *present means*—this is the ladder which Providence places at our feet, and on which we may ascend to distinction.

Two years before the death of Brindley, another self-elevated genius, destined to hold a still higher place in the annals of industrial enterprise, was just commencing his career. In approaching the lake district from the south, it is usual to pass through Preston, celebrated for its picturesque situation on the Ribble. In 1768, an election for members of parliament took place in this town. The contest ran high; every vote was of consequence; scouts were out, doing their utmost to bring up the rear-guard of the opposing forces. At the last moment, a burgess was discovered whose suffrage might turn the balance of victory, but he was in such a ragged plight that even electioneering zeal could not for shame permit him to enter a Preston poll-booth till he had been provided with a new suit of apparel. This was one "Arkwright the barber," afterwards Sir RICHARD ARKWRIGHT, knight, high sheriff of

Derbyshire, and the owner of property worth more than half a million sterling.

The life of Arkwright may be said to comprehend the history of the cotton manufacture for a century past. Such a wide view of his history does not fall within the scope of our present design; we shall accordingly confine ourselves to those facts which are necessary to bring out its moral instructiveness. He was the youngest of a family of thirteen children. His parents were too poor to give him anything beyond the first rudiments of education. At the usual age, he was apprenticed to a barber, and in due time commenced business on his own account. In a few years, he turned collector of old hair; finding this more lucrative than his old employment, he abandoned the latter, and travelled through the country, in order to carry on his new traffic on a larger scale. In human life one step leads to another; in the biography of all who have risen from obscurity, we may trace a connexion between the smallest incidents of early life and their subsequent renown. Such instances as Cromwell and Napoleon I. at once supply a proof of this; their rise was not planned beforehand; it grew, just as Brindley's, Stephenson's, and Arkwright's also, out of a diligent improvement of opportunities. In the case before us, we find the first step in his setting up for himself, instead of continuing in a subordinate situation; this led to another, trafficking in hair; and this to another, travelling in order to conduct

his new business in the most remunerative manner. Travel brought him into contact with a wider range of persons and things, and led ultimately to the most important results.

In referring to Arkwright's inventions, we shall not enter into the merits of the controversy which has been waged respecting his claims; we shall simply state our impression of the facts. There resided at the village of Leigh, in Lancashire, a poor reed-maker, of the name of Thomas Highs. At that time, cotton weft was spun, not in huge factories by means of great machines, but in cottages, by the hand. Hence it often happened, as it does at present with the linen manufacturers in the north of Ireland, that the weaver had to wait for the spinner, who could not make thread fast enough for the loom; and sometimes the weaver, instead of folding his arms at home, would hie off over the country sides in search of weft. One afternoon Highs was in the house of a neighbour, whose son had just come in from an ineffectual search after weft; the circumstance arrested his attention, and led him to inquire whether some better method could not be devised for spinning thread; whether, in short, a machine could not be constructed for spinning it more rapidly than by the hand. Such was the origin of an invention which now enables us to send abroad nearly thirty millions' worth of cotton goods annually, and to furnish the means of support to three millions of the population of

these islands. Highs was acquainted with a watchmaker of the name of Kay, and thought it best to take him into his counsel. Accordingly he communicated to him his ideas on the subject, and availed himself of Kay's mechanical knowledge to carry them out. It is said they worked together in a garret in Highs' house, taking care, with the jealousy natural to inventors, to keep the door locked. Perhaps this precaution only stimulated the curiosity of their neighbours to a higher pitch, since it is said that the latter, resolved to know what the two *savans* were about, hoisted one another up at the garret window. These garret windows hold a rather prominent place in the history of this invention; for it is said that one night, by that avenue, out came the unfinished machine, flung away by its maker in a fit of despondency. At this point, Kay seems to have separated from Highs, and joined in the jeers of the neighbours; Highs, however, ventured at last to take the machine in hand once more, and having been successful, called it a spinning jenny, after his daughter Jenny, a clever spinster. As an inventive genius, a post of eminent distinction ought to be awarded to this poor man, who, though he never emerged from obscurity, acquired true elevation in the consciousness of usefully employing his faculties. We may add as an additional proof of his undoubted abilities, that he afterwards invented what was called a double jenny, for which a few Manchester

merchants presented him with two hundred guineas.

But it is time to return to Arkwright. On one of his travels in search of hair, he came to Warrington, and happened to meet with Kay. We can imagine how easily Kay would tell him the story of the spinning machine, and with how much eagerness Arkwright would listen to it. To a mind like his, a hint was enough; this was given, and he probably saw at a glance much more of its practical value than Highs had done. Kay and Arkwright accordingly went together to Preston, succeeded in interesting a person of some means, of the name of Smalley, who provided a room, where the machine was tried. Confident of its capabilities, Arkwright started with it to Nottingham, anticipating some opposition in Lancashire, from the popular prejudice against machines. Arrived at Nottingham, he waited on a banker there, and so far succeeded in persuading him of the probable utility of his invention, as to procure from him advances of capital. In a short time, however, these were withheld, probably through a want of confidence, which we can hardly consider unreasonable, and our adventurer had now to look elsewhere. In this emergency, he applied to Messrs. Need and Strutt, extensive stocking weavers of Nottingham. The latter of these persons at once saw the merit of the machine, and Arkwright was taken into partnership. Still his anxieties were by no means at an end, the

speculation did not begin to pay till after a lapse of five years, and an expenditure of more than £12,000. Perseverance at length overcame all obstacles, and eleven years after he had been admitted into the firm, there were no less than twenty water-frame factories his property, or the proprietors of which paid him largely for permission to use his machines. In 1786, eighteen years after his pilgrimage with his loom from Preston to Nottingham, he was chosen high sheriff of Derbyshire, and on presenting in his official capacity an address to the king, received from him the honour of knighthood. He died, August 30th, 1792, aged 62 years, having raised himself from poverty to affluence, acquired a reputation which will live as long as England is remembered, and founded a branch of industry which has rendered his native land, for wealth and commercial greatness, the admiration of surrounding nations, all after he had attained the age of forty. His career points us to several important maxims of success; we see in it an enterprising disposition, ever on the alert to do something; the entire concentration of the mental faculties on *one* object; a bold, unhesitating spirit, which some would, but need not, call audacity, carrying him through all those minor measures which were necessary to the success of his main design, and a perseverance which never flagged from the beginning to the end of life. None of these features of his character need be found separated from the highest principle, and so

far he may be held up as a model to all who are aspiring to a career of enterprise and usefulness.

An inventive capacity has often, as in the case of Arkwright, made a man wealthy, but its effect in elevating the general condition of an individual must not be estimated solely by this test. True elevation consists neither exclusively nor chiefly in being rich. Brindley was never a rich man, yet he stands on this account no lower in the eyes of posterity. Arkwright and Stephenson became wealthy, but they would have been regarded as equally great if they had died poor. The real greatness of the inventor is found in his mental endowments; the firmness and perseverance which are required to mature his inventions, or bring them into notice, and the benefit they confer on future generations. How many have acquired on these grounds a claim to the lasting gratitude of mankind, although their life was embittered by poverty and misfortune! Among such is SAMUEL CROMPTON, the inventor of the mule-jenny. This ingenious machine forms part of the ordinary spinning apparatus of our cotton factories, and to this, more than any other invention, may be ascribed the present greatness of the cotton manufacture. The water frame invented by Arkwright, was adapted only to the coarser kinds of cotton thread. The "mule," by moving backwards and forwards through a space of twelve or eighteen feet, so distends the cotton, and at the

same time twists it with such rapidity, as to produce thread of surpassing fineness. There were specimens of spun thread in the Great Exhibition which contained only four fibres of cotton, and nine hundred and sixty yards of which would weigh no more than a single grain. It is to this contrivance that we owe the muslins of Lyons and Glasgow, which for fineness and delicacy exceed everything which "the magical hand of the Hindoo" has wrought.

Samuel Crompton was the son of a small farmer near Bolton, who occupied the leisure time of himself and his family in spinning. He was thus employed, and used an improved spinning jenny then recently introduced by a person of the name of Hargreaves. Dissatisfied with the quantity of work done by this machine, he gave himself to its improvement. This was no momentary impulse; no fancy excited by some bright summer's day; for five long years did he labour at it through all sorts of discouragement. At length he laid the results of his labours before a number of gentlemen, who gave him jointly £50 for an inspection of the improved machine. The money he immediately employed in the construction of a larger and more perfect one; it would seem, however, that he neglected to secure a patent, and thus lost the pecuniary profits of his invention. Such an omission may give us a higher view of his disinterestedness, but cannot be held up to imitation. Patent rights are founded on obvious propriety, and it is not right or prudent in business to

leave that to benevolence which we can make legally secure. In 1802, a few friends subscribed £500 on his behalf, with which he commenced a weaving establishment in Bolton. His income was small, but economy rendered his circumstances easy. His fondness for music led him to construct an organ, on which he sought relaxation from the fatigues of the factory. In 1812, an application was made to parliament on his behalf, and one of the last acts of Mr. Percival was to introduce a bill for a grant of £5,000, which was paid him in full, without fees or charges. At that time, the number of spindles in operation on his system throughout the United Kingdom was between four and five millions. Crompton spent this grant in enabling his sons to commence business, but here also misfortune followed him. The times were unfavourable, his sons inexperienced, he became involved in a lawsuit with his landlord, and in a short time his establishment was broken up, his sons scattered, and himself, with an only daughter, reduced to poverty. In 1824, a second subscription was entered into, and an annuity of £53 purchased for him. He enjoyed this only two years. His death occurred on the 26th of January, 1827, leaving his daughter, who had acted the part of an affectionate housekeeper for thirty years, totally unprovided for.

Between Arkwright and Crompton we find, in more than one point of view, a striking contrast. Both were inventors; of the two, perhaps,

the palm of originality is due to the latter; yet Crompton was unfortunate through life, never possessed a competence long together, and left his family to struggle with actual want, while his more successful predecessor seemed, after a certain point, to float on the tide of a never-ebbing prosperity, and died in possession of a princely fortune. To what shall we ascribe this difference? Are we justified in laying this exclusively at the door of Providence? Too many have done so in similar circumstances, when the true cause, if impartially sifted, could have been found nearer home. Divine Providence does not undertake to save us from the results of our own imprudence. We sometimes hear it said of a person, "He is too easy and good-natured to get on in the world." This is probably intended for an excuse, but in reality it is a censure. Such "easiness and good nature" are a positive vice; they have nothing in common with that spirit which the apostle enjoins when he bids us be "careful for nothing."

Crompton's misfortunes may be traced in a great measure to his want of common prudence, and this is the very quality which shone so conspicuously in the character of Arkwright. Perhaps if the dispositions of both men were blended, we should have a much more complete adaptation to success in the highest sense, than either furnishes by himself. Crompton's disinterestedness would have softened that impetuous resolve to make his fortune, which has

tinged the character of Arkwright with the reproach of selfishness and cunning; while Arkwright's shrewdness and tact, his alertness on all questions of profit and loss, would have saved Crompton's sterling qualities from the humiliation of poverty, and placed them in a more advantageous light before the world.*

Brindley and Stephenson are not the only illustrious engineers who have risen from the lowest grade in social life. JOHN RENNIE and THOMAS TELFORD, though occupying perhaps a higher professional position, commenced life in very humble circumstances. Rennie, who was born in the year 1761, was the son of a small farmer in Ayrshire. He had the misfortune

* Before closing this chapter, it may not be useless or inappropriate to mention an important change which has recently been made in the law of patents with respect to inventions. Perhaps it was the excessive cost of procuring a patent which prevented Crompton from securing one for his mule-jenny, and thus occasioned his undeserved poverty; if so, we may rejoice that this obstacle to self-elevation is removed. By the old law, a patent in England cost £72. 17s. 0d., in Scotland £70, and in Ireland £120, protection being secured by it for fourteen years. These regulations were inconvenient in many respects. When a person has discovered a new process, he is naturally reluctant to spend a large sum upon it till he has had an opportunity of testing its probable utility; at the same time he would willingly pay a small sum to secure it to himself for a certain period, with the option of paying a larger sum at the end of that period, and renewing his security for a longer one. He would thus be effectually secured from piracy at the outset, and need only proceed to the larger outlay if assured by experiment that the invention would pay. This is the principle adopted in the recent change. By paying five pounds, a patent can be registered provisionally for six months, and the registration possesses for that period all the security of a patent. At the end of six months, £25 will purchase a patent extending to the whole of the United Kingdom, and valid for three years; for £50 it may be extended to seven years, and for £100 to fourteen years.

to lose his father when no more than six years of age, though the kindness of surviving relatives in some measure made up for that loss. His education embraced nothing beyond reading, writing, and arithmetic, but he had an active, ingenious mind, which knew how to make the most of its acquired knowledge. Happily for him, Andrew Meikle, the inventor of the threshing machine, had a workshop close to his father's farm, and here he spent much of his leisure time. From this circumstance, his taste took a mechanical turn, and before he had reached the age of ten years, he had made admirable models of the steam engine, and the pile-driving machine. When about twenty-two years of age he went to England, and procured employment at the celebrated manufactory of Messrs. Boulton and Watt, Soho, at a guinea a-week. Here his abilities shone conspicuous on several occasions, particularly in erecting the Albion Mill in Blackfriars, and Mr. Whitbread's brewery. Having set up on his own account, he procured extensive employment. For more than thirty years many of the principal engineering undertakings which were carried on within the United Kingdom were entrusted to his care. He erected bridges at Kelso, Leeds, Musselburgh, Boston, and New Galloway; but his chief performance in this line was Waterloo Bridge, London. The celebrated mole or breakwater at Plymouth was also erected under his direction. He died in 1821, and was interred

in St. Paul's cathedral. His chief characteristics were *order, regularity, and real business*; so incessant was his industry that on going abroad in 1816, he declared it was the first relaxation he had permitted himself for nearly thirty years. Telford has left behind him monuments of ability equally remarkable. The Caledonian Canal, the admirable roads which run through the Scotch highlands, and the chain bridge over the Menai Straits, are all the fruit of his skill and energy. His remains lie in Westminster Abbey, beneath the same roof as those of so many illustrious men; yet at the age of twenty-one he was only a working mason. But he had improved his talents; the time which other boys would have given to unnecessary amusement or sheer idleness, he spent in gathering knowledge for future use. We see the secret of his success in the picture of himself which occurs in the following verse, part of a poetical epistle addressed by him to Robert Burns:—

“Nor pass the curious tentie lad,
Who o'er the ingle hangs his head,
And begs of neighbours books to read;
For hence arise
Thy country's sons, who far are spread,
Both bold and wise.

CHAPTER IV.

SUCCESSFUL ARTISTS, PAINTERS AND SCULPTORS.

Nature of art—Genius—Sir Thomas Lawrence—Benjamin West—Bartolini—Canova—Bacon.

IF a person but partially informed respecting the discoveries of recent times, were accidentally led to examine a steam-engine or spinning jenny, probably his first inquiry would be, What is its use? and if some object were not distinctly pointed out which these machines are respectively able to accomplish, he would feel no admiration for them beyond that mere surprise occasioned by their intricacy. But if the same person were placed before one of the masterpieces of Reynolds or Gibson, he would propose no such inquiry; he would instantly feel that the use of the picture or statue, if *use* it can be called, is explained by the sentiment of pleasure which the contemplation of it awakes in the bosom of the spectator.

This different result brings before us two very opposite ideas—those of utility and beauty, the former of which is the object of invention, and the latter of art, and which lie

at the foundation of very different pursuits. Probably Brindley and Arkwright would never have become great as painters or sculptors; it is said that the former was quite void of the artistic faculty. His friend on one occasion took him to some exhibition in the metropolis, expecting that he would be highly pleased with it; on the contrary he saw nothing to interest him; his mind all the time was under the Barton aqueduct or engaged in the Harecastle tunnel, and on leaving he resolved never to visit such a place again. Yet Brindley undoubtedly possessed that vague faculty to which we give the name of genius. His imagination must have been of the most daring kind; the single want which would have disqualified him for becoming an artist seems to have been that of a taste for the beautiful. In the painter, sculptor, and poet we find this endowment very conspicuous. This alone is not sufficient to the attainment of excellence; by itself it dwindles to mere *prettiness*; it demands for its full development all those faculties which are common to genius under every form of manifestation—a teeming fancy, strong imagination, capacious intellect, that force of mind without which no difficulties can be overcome, no distinction gained; when these materials are furnished, a sense of the beautiful enables their possessor to mould them into artistic shapes, capable of delighting the beholder.

The superior qualities required for its highest cultivation have led some to look upon art as

peculiarly royal ground, on which no one must adventure who has not first been invested at birth with the artist's mantle. To some extent it no doubt is so, but not in any special degree. Every pursuit, whether manufacturing, mercantile, scientific, literary, legal, or military, requires special adaptation in the person entering upon it, and in no matter is more discretion required than in choosing those professions in which peculiar talents fit an individual to excel. But allowing this, there yet remains in all, the widest margin for industry and perseverance. The greatest talents will be useless if not sedulously improved; the most brilliant genius must go hand-in-hand with prudence and perseverance if it is to win any victories. We shall see that those persons who have reached the highest distinction in the cultivation of art present us with an insoluble riddle; we cannot tell to which they are most indebted for the eminence they have attained, whether steadfast application or their natural endowments. This difficulty may furnish a piece of encouragement to the young artist, of which he sometimes stands in need; he often distresses himself with the idea that he is *no genius*, and that with all his exertions he will never soar above mediocrity. Let him at once give over frightening himself with such thoughts. The only way in which the great masters achieved their triumphs, was by aiming steadily at excellence, giving themselves no credit for peculiar abilities, but working as much as if it

were entirely a question of industry; and in this path it is possible for others to rival their successes.

If any painter ever possessed a natural genius for painting it was the late sir THOMAS LAWRENCE. It is said that he began to take portraits at four or five years of age, and such was the excellence of these infantine productions that a likeness of lady Kenyon, executed in his fifth year, was at once recognised by a friend of her ladyship when shown to her twenty-five years after. The fame of this young artist drew crowds to his studio, and, at thirteen, his copy of the "Transfiguration" of Raphael obtained from the Royal Academy, to whose inspection it was submitted, the presentation of a silver palette, and five guineas in money. His father, intoxicated with these proofs of genius, determined to make a prodigy of his son. Acting on this design, he resolutely opposed every plan for securing to him the advantages of a master, or of sending him to Italy for improvement; but removing from the neighbourhood of Bath to London, took apartments in Leicester-square, close to the residence of sir Joshua Reynolds, with the vain intention of his becoming a rival of that great artist. Such conduct was highly reprehensible on the grounds both of morality and mere prudence, and might have exerted the most baneful influence on his son's career. Nothing is more dangerous to true merit than inordinate praise. Whoever would excel must learn to close his ear against it. Flattery pro-

duces vanity, carelessness, supercilious disregard of the excellence displayed by others; and when we reflect how slight the imperfections are which rob a work of art of the highest traits of excellence; how delicate are those finishing strokes of beauty about which Angelo was so solicitous; how easily a *good* artist may fail, for want of due culture, of being a *great* one—we see something of its extreme danger. Lawrence gives us a beautiful example of self-distrusting greatness—that distrust which is frequently found associated with the highest success. While his father was exulting in the idea that he had placed his son in an attitude of rivalry to the prince of living painters, his son, with one of his pictures in his hand, sought the studio of Reynolds, and begged him to do him the favour of pointing out its defects. In five years after this interview he was admitted a member of the Royal Academy, and on the death of sir Joshua Reynolds succeeded him as painter to his majesty, George III. After producing portraits of nearly all the most eminent men at the various courts of Europe, he was chosen in 1820 to the distinguished post of president of the Royal Academy, in which he remained till his death in 1830.

The predecessor of sir Thomas Lawrence in the chair of the Royal Academy, presents us with one of the most remarkable instances of success, arising from a happy union of steady application and natural powers. Perhaps no man ever accomplished anything really great

without a dash of enthusiasm. It is this alone which can carry the young aspirant through those obstacles which seldom fail to surround his earlier course. Fancy may not behold all her hopes realized; the brilliant lights she kindles to the mind's eye may be quenched in the darkness of misfortune or premature death; but still she must be permitted, bearing high her golden lamp, to go before all who are bent upon achieving greatness.

A noble instance of wisely directed enthusiasm is furnished in the career of BENJAMIN WEST. Like Lawrence, he appears to have inherited from his birth those peculiar talents which fitted him to excel as a painter, but his life is much more instructive on account of the energy, enterprise, and perseverance which it displays. His first attempt was made at six years of age. His sister's child lay asleep in the cradle, and Benjamin was left in charge of it; the infant smiled, and conveyed to his mind such an irresistible impression of beauty, that he could not forbear taking up writing materials which lay on the table, and sketching in black and red ink a picture of the child. "I declare he has made a likeness of little Sally," exclaimed his mother, on catching a sight of the paper, and the assurance which this recognition gave him, made him more ardent in the cultivation of the art into which he had been thus surprised. One day a party of Indians came to his father's house. He had then drawn several pictures, chiefly of garden

flowers, and with no other colouring than ink supplied. The Indians were shown these rude performances, and almost fancied they were looking on some of their own, so closely did they resemble the delineations with which they were accustomed to amuse themselves in their native forests. Perhaps in accuracy of sketching, their pupil was in advance of themselves, but they gave him a useful lesson in colouring, and presented him with a quantity of red and yellow ochre, to which his mother added a piece of indigo. All that he now wanted to take a new step in his profession was a brush,—how should this be obtained? He had heard that pencils were made of camel's hair; this gave him a clue to the choice of a substitute. Among the domestics was a large black cat, whose back and tail were straightway rifled of their finest hairs, and his object was gained. Little did the subject of this rather painful process dream how valuable a contribution she thus made to the interests of the fine arts, and the future celebrity of her young master.

The helping hand of Providence,—how few have risen to eminence without its aid! What a mysterious part it bears in working out the life of individuals! Talent does much, application more, but there is a third element which is not of man at all, but which comes to us from a higher Power—the arranging of external events so as to fit in with the peculiar mental condition of the individual. God so arranges the affairs of the present life that

circumstances seem naturally to help those who are earnestly desirous of self-improvement. In this way, thousands have attained to distinctions which at first setting out appeared hopelessly beyond their reach. They looked perhaps with admiring wonder at the dazzling mountain summit over head; clouds rolled beneath it, and no pathway could be discerned by which mortal foot might reach it; but they took the *first step*; having done so, they found themselves able to take another, and then another, till at length they reached the top, far above their boyish hopes; and on looking back, great as their own exertions had been, they could truly say as the Israelite on the banks of the Jordan, that One above had led them by a "way which they knew not."

This truth was well illustrated in West's career. When he was about eight years old, a Philadelphian merchant paid a visit to his father, and was so pleased with the boy's performances that on his return he sent him as a present an assortment of colours, oils, and pencils, together with several pieces of canvass prepared for being painted upon, and a number of engravings. These treasures kindled all his enthusiasm, he could scarcely believe himself their possessor; he carried them up to bed with him, awoke in the night to grasp the precious boon, and at break of day bore them away to a garret which served for a studio, and instantly commenced operations. With such intensity did he pursue his labours that his

meals were carried up to him, and he even did what for any other purpose would have been utterly inexcusable—played truant from school. This step was too perilous to be undiscovered, inquiries were made, his mother proceeded to the garret, armed no doubt with deserved reproaches; but a sight of the picture on which he was employed so astonished and delighted her, that she took him in her arms and kissed him with passionate tenderness. He had only half finished the picture, but such was her satisfaction with it that she would not let him add another stroke, and in that condition it was seen by his biographer sixty-seven years after. Soon after, the Philadelphian merchant again visited Springfield. Delighted with the progress his protégé had made, he took him back with him to Philadelphia. Here he was introduced to an artist of the name of Williams, whose paintings were the first he had ever seen, and so great was their effect on his own sensibility that they moved him to tears. From this person also he obtained several works which gave him some instruction in the literature of his art. On his return home he devoted himself with more enthusiasm than ever to painting. So contagious was his zeal that it infected the whole school, ordinary amusements were given up, and after the tasks were over, a crowd of juvenile amateurs might be seen, armed with chalk and ochre, decorating with rude frescoes the walls of their playground.

For some time after he left school, West employed himself in taking portraits, and gained by this means an extensive local celebrity; the time had arrived, however, when he was to exercise his talents in a wider and more profitable field. One obstacle only prevented him from giving himself wholly to the profession of a painter; his family belonged to the society of Friends, and some suspicion existed among the members of that community as to the lawfulness of such a pursuit. Accordingly, a serious consultation was held to decide upon the question, which was at length, all things considered, settled in the affirmative, at least with reference to him, and full approval and consent were given to the exercise of the extraordinary talent with which Providence had endowed him. On receiving this sanction he went to Philadelphia, and commenced business in that city as a portrait painter. By this time his views had become considerably enlarged; the books he had read had given him new ideas of excellence, and of the way in which it was to be acquired; he was filled with a desire, not merely to be a successful painter, but to become a *great* one, and for this purpose determined on the first opportunity to visit Italy. To furnish himself with the means of carrying out this design he practised the most rigid economy, working hard, laying by every farthing he could spare, and at the same time securing a portion of every day for continuing

his studies in the higher departments of art. From Philadelphia he proceeded to New York; his reputation had gone before him, and the number of persons who came to sit for portraits encouraged him to raise his prices from five to ten guineas. About this time he heard that a vessel was going to sail from Philadelphia direct to Leghorn, and the thought at once struck him that there was a favourable opportunity of visiting Italy. Dr. Smith, provost of the college in Philadelphia, who had already befriended him on several occasions, wrote to him, very earnestly entreating him to take the step. His own feelings were so much in favour of it, that he did not require very powerful arguments to bring him to a decision. The only thing which made him hesitate was the slenderness of his resources, but here again the hand of Providence assisted him. He was engaged at the time on a portrait for a Mr. Kelly, a merchant of New York. Having finished the portrait, West informed him of his intention of sailing for Leghorn. The merchant, on giving him his ten guineas for the picture, presented him also with a letter to his agent at Philadelphia, who might render him some service in preparing for his voyage. On presenting this letter, West had the gratification of being informed that it contained an order for fifty guineas to assist him in his outfit.

We have now to follow him across the Atlantic, and witness the result of his visit to the capital of the arts. On landing at Leg-

horn he set out immediately for Rome, and reached that city July the 10th, 1760. An unusual sight it must have been to see a young member of the society of Friends entering as a painter, this famous seat of the papal hierarchy. It was certainly no love for the spirit and doctrines of Romanism which led him there; for what sympathy could exist between the genius which had been nursed to ripeness by the free institutions of his native land, or still more, the simple faith in which he had been brought up, and the intolerant dogmas of popery? But Rome is celebrated for its school of painting, for its sculptures, its magnificent structures, and its matchless collection of antiquities; on this account only is it a centre of attraction to the artist. We have heard it argued that Romanism is eminently favourable to the growth of the fine arts. Admitting for a moment the truth of this assumption, it would prove no more for popery than it would for political despotism; and precisely the same assertion has been made of despotic as compared with free states. Absolute governments have more money at their command, and being more inclined to magnificence, give greater encouragement to those arts which contribute to grandeur. Owing to these causes, the reigns of Augustus and Louis XIV. were both remarkable for the encouragement given to the fine arts, and for the brilliant success attained in them at these epochs. A similar explanation may be given of the exist-

ence of those public buildings which are a monument at once of the genius of the men who raised them, and of the rapacity which found the money. What a tale of villany and superstition, of infidelity and scandalous morals in the boasted capital of Christendom, and of disgusting hypocrisy and extortion abroad, rings in Protestant ears through the dome of St. Peter's! Leo x. and Tetzels!—here are shades dark enough to eclipse all the glories of art.

But *is* Romanism in itself favourable to the development of the fine arts? Quite the reverse. The undue prominence which it gives to the imagination, though sometimes adduced as a proof that its influence must be favourable, has just an opposite effect; if it tends to create in the multitude a passion for artistic display, it also tends to lower the quality of art. Whenever the public taste of Rome has not been sustained by the influence of great living artists, it has degenerated more rapidly than in other countries; and nearly all its great artists, however dutifully they behaved themselves towards the pope, were anything but Romanists at heart. Those who, under the fostering care of the Medici, were the means of resuscitating ancient art at Rome, a fair type of whom we have in Lorenzo de' Medici himself, were unhappily infidels, or heathens rather than Christians, and glowed with far greater admiration for the heroes of the Pantheon, than for the sublime facts of Bethlehem and Calvary.

From this protest against the unfounded

assumption that Romanism is peculiarly favourable to the fine arts, we turn to West, who found himself, almost the first night after his arrival at Rome, in the presence of a cardinal. The report had already spread that a young American had come over for the purpose of studying the works of the great masters, and so unusual an event had created a strong sensation. Mr. Robinson, afterwards lord Grantham, was then in Rome, and was a fellow-subject, if not a fellow-countryman, of the young stranger; bound, therefore, to pay him some attention, as well as prompted by his own kind feelings, he lost no time in making his acquaintance, and introducing him to the chief persons of distinction residing in Rome. The cardinal, who was quite blind, on being told he was an American, inquired whether he was white or black, having no notions of Americans except the native savages; but on passing his hand over his forehead he soon satisfied himself that, whether white or black, he was not deficient of intellectual power. So anxious were the notables of Rome to witness the effect which the first sight of the great works of art would produce on the mind of an uncultured genius, that he was accompanied on his first visit by no fewer than thirty equipages belonging to the chief families of the city. He had not yet acquired the art of speaking like a connoisseur, and the observations which fell from him would have been better appreciated at Springfield than at Rome. "How like a young Mohawk!"

he exclaimed when he saw the Apollo Belvidere ; a remark which amused his fashionable audience.

Perhaps real kindness would have dictated rather less attention, lest, by exciting vanity, it should have hindered his success. Happily, however, this was not the result. The kindness West had received made him feel the necessity of *doing something* to justify it. He requested Mr. Robinson to favour him by sitting for his portrait, to which that gentleman kindly consented. It happened that Mr. Robinson was at that time sitting for his portrait to Mengs, the most eminent artist then resident in Rome. As soon as West's picture was finished, Mr. Robinson sent it to the house of a friend, Mr. Crespigné, without mentioning the name of the artist, in order to obtain the unprejudiced opinion of a number of gentlemen who were to assemble there in the evening. West was present at this exhibition of his performance, agitated, as may well be supposed, with anxiety for the result. Most of the company, aware that Mr. Robinson was sitting to Mengs for his portrait, pronounced the picture the work of that artist. An English gentleman present alone dissented from this opinion, affirming that the colouring was richer, but the drawing less accurate, than would have been the case in a production of Mengs' pencil. When at length Mr. Crespigné informed the company that it was the work of the young American, the utmost astonishment was ex-

pressed, while all were loud in their praises and their congratulations. Mengs came in shortly after, and the circumstances being explained to him, he expressed, in the most glowing and generous manner, his appreciation of the merits of the picture. His advice was at once frankly tendered, namely, that West should, after inspecting everything worthy of attention at Rome, proceed to Florence, Bologna, and Venice, and having made himself acquainted with the principal works preserved at those places, return to Rome, paint a historical picture, and, from the opinion which the public might express respecting that performance, determine what branch of the profession he should pursue.

West might now regard his position as won, but he had yet to experience another instance of the dependence of success on a higher Power. The excitement of the last month was more than he could bear, and a dangerous illness was the result. At the advice of his medical attendant he went back to Leghorn, and soon after proceeded to Florence, to consult an eminent surgeon there. For eleven months excessive weakness often confined him to his bed, yet could not diminish the ardour of his studies. The materials for painting were brought to his bedside, and from his pillow he plied his pencil. On his restoration his stock of money was reduced to ten pounds; immediate want began to look him in the face, while the prospect of visiting Bologna and Venice lay as a fair vision

in the future, without any apparent possibility of being realized. By this time the news of his success had reached America. Mr. Allen and governor Hamilton, his old patrons, were one day dining together, when a letter arrived from Leghorn, in which, after the usual commercial advices, the writer informed them of the brilliant result of West's visit to Rome. Mr. Allen exclaimed that the young man was an honour to his country, and that he would send him whatever money he might require for the prosecution of his studies. Governor Hamilton demanded permission to share with him this generous design, and the result was, that when West applied with rather sad feelings for his last ten pounds, the banker, opening a letter, informed him that he had received instructions to give him unlimited credit. Enabled by this kind aid to carry out his original plans, he proceeded to Bologna, and passed from thence to Venice. Returning to Rome, he executed two historical paintings, which met with an enthusiastic reception. The academies of Parma, Florence, and Bologna elected him a member, and after receiving every mark of distinction which Italian culture could confer on self-taught genius, he left for England, where he arrived on the 20th of August, 1763. Here he was introduced to sir Joshua Reynolds, and other celebrities of British art, and soon after took apartments in Bedford-street, Covent-garden, where he commenced the practice of his profession. The

following year he exhibited a picture which at once brought him into notice. Dr. Drummond, the archbishop of York, procured him an introduction to the king, whose favour, which he soon won, placed his fortune upon a secure basis.

We need not follow our artist any further in his career, suffice it to say that for thirty years he was employed in painting for his royal patron, and chiefly in decorating St. George's Hall and the Royal Chapel, Windsor. After the king's illness, in 1809, he was thrown more completely on public patronage, but this increased, rather than lessened, the profits of his profession. The estimation in which his pictures were held may be inferred from the fact, that one was sold to the British Institution for £3,000. On the death of sir Joshua Reynolds he was appointed president of the Royal Academy, an office he held for nearly thirty years. He died on the 11th of March, 1820, in the eighty-second year of his age.

The life we have briefly narrated conveys its own lessons. It was by natural ability doubtless, but also by devotedness to his chosen pursuit, unremitting diligence, prompt improvement of every opportunity of advancement which was offered; by the admirable union of qualities too often found apart, by enthusiasm combined with prudence, and enterprise secured by industry. But for his childish attempt he would not have excited that interest in his Indian friends which led them to give him the

first lesson he ever received in the use of colours, and thus laid the foundation of that excellence in colouring which characterize his works. If this advantage had not been sedulously improved, his performances would probably have failed to excite the notice of the Philadelphian merchant to whose kindness he was indebted for his first outfit as a painter, and, instrumentally, for his first literary knowledge of his profession. If, yielding to narrow views and considerations of immediate emolument, he had neglected the opportunity of visiting Italy, he might have been known as an excellent portrait-painter in New York, but would have missed the European celebrity to which that step conducted him. If at Rome he had suffered himself to be carried away by the interest excited on his first appearance, and had not acted on the conviction that his success depended upon his attempting some great achievement, he would not have gained the reputation which stirred the kindness of his friends at home, and enabled him to visit the chief cities of Italy, nor would he have won those academic honours which gave him on his arrival in this country the advantages which flow from a fixed status. We cannot imagine such a man to have been wanting in a proper measure of self-respect, but he must also have been endowed with those amiable qualities which invite and fix esteem, or else his great talents would have been insufficient to command the permanent patronage which he

enjoyed at the hands of so many distinguished persons, and which contributed so largely to his success. In all these respects West offers a praiseworthy example to all young men who, whether as artists or in other pursuits, are desirous of reaching a higher social position. In every walk of life the same qualities will ordinarily, with the Divine blessing, lead to similar results.

Perhaps the most valuable precept which could be given to a student desirous of rising to eminence in the fine arts, is to enter upon them *con amore*, without too great eagerness for "pecuniary results." Disinterested abandonment to art is absolutely requisite to make a great artist. BARTOLINI, the late celebrated sculptor, who died in 1850, was an illustration of this maxim, as well as of meritorious self-elevation. Of an humble origin, the son of a charcoal-dealer, and in his youth the servant of a French gentleman, by dint of unwearied fidelity to his chosen pursuit he became one of the most distinguished artists of his age. He owed his elevation instrumentally to the kindness of his master, who perceived his taste for sculpture, and sent him to the academy of the fine arts in Paris. How long his master's liberality sustained him there does not appear, but soon after we find him working for cardinal Fesch, uncle of Napoleon I., for thirty sous a day. From Paris he went to Carara; his performances had commended him to the kindness of the grand duchess Elisa, and by her liberality he

was enabled to continue his studies. Finally, fixing upon Florence as his residence, he remained there till death in the enjoyment of a European reputation. Who would have recognised in the humble valet, destined apparently to live and die in obscurity, the great sculptor whose name and presence would be welcomed in the highest circles of refinement and rank? Much was, no doubt, due to himself; but next to his own exertions, it is a pleasing duty to assign to his master's kindness the distinction he subsequently enjoyed. Next to the honours of successful genius are those enjoyed by the individual whose influence and pecuniary aid smoothed the rugged path which led it into open day.

The devotedness to art for its own sake which shone in Bartolini, was still more strikingly exhibited by a much greater artist—ANTONIO CANOVA, whose life forms a new era in the history of modern art. We have mentioned the tendency to degenerate in the fine arts at Rome; for an exemplification of this we refer to the state of sculpture previous to Canova. The free and poetic use of the chisel had been exchanged for mere manipulation according to rule. The hand of genius, which had produced the master-pieces of Italian sculpture had been paralysed, and an age of servile imitation had followed the revival of the art in the fifteenth and sixteenth centuries. Canova commenced by a rigid adherence to received maxims, but ere long he laid them aside, and took his model

from nature only. To mould the human form more accurately, he applied himself to anatomical studies. In walking through the street he was ever on the watch to observe some new attitude, some fresh embodiment of power and beauty, soon to attain a life-like permanence beneath his chisel. For the same purpose he devoted a large portion of time to the study of literature, that he might bring himself face to face with the famous events and illustrious characters of bygone days, and thus catch creative inspiration from history. There are many who, finding themselves possessed of great talent, would have pushed themselves into the world, and contented themselves with a premature mediocrity. Instead of this, Canova had the magnanimity to "hide his time." Shut up from the busy world, almost buried in his workshop—a small apartment a few yards square—he lived chiefly, yet one would still hope, *not solely*, for his art, and acquired a degree of excellence which had only to be displayed to place him without a rival in the admiration of the world.

Canova was strictly a self-elevated man. His father was a common stonemason; so also was his grandfather, with whom from his third year he was brought up. This person, Pasino by name, and his wife Catharina, seem to have taken the most tender and loving care of their little relative. While yet a child he had acquired a knowledge of the elements of drawing, in which his grandfather was sufficiently

versed to give him some instruction, and had begun to model small clay figures in imitation of various simple objects. Pasino began to employ him at nine years of age as a workman, and often took him to assist in repairing the residences of the neighbouring nobility. One of these, whose name was Giovanni Falieri, was so much interested in the boy, as to take him under his own roof, without any intention, however, beyond that of giving him such educational advantages as would fit him for succeeding in his grandfather's trade. At twelve years of age his kind friend sent him to the workshop of Guiseppe Bernardi, an eminent artist, then residing in the neighbourhood, to obtain instruction in the mechanical elements of sculpture. One day, during his master's absence, he seized the opportunity of modelling two angels, and so well was this task accomplished, that Bernardi could hardly believe they were the work of his pupil, who had never been intended for the higher branches of the art. After three years' residence with Bernardi, he returned to his native village, till signor Falieri, who not improbably received some intimation from the master respecting the talents of his pupil, invited him to Venice. He now applied himself diligently to his studies as an artist. His patron kindly assigned him a residence in his palace, but to avoid entire dependence, he engaged his services every afternoon to a sculptor, for which he was to receive a small remuneration. "I laboured,"

he says, "for a mere pittance, but it was sufficient, it was the fruit of my own exertions, and, as I then flattered myself, the precursor of more honourable rewards—for I never thought of wealth." In a short time he took the humble workshop to which we have referred, and set up for himself, remaining there in comparative obscurity, diligently employed in perfecting those talents which were soon to raise him to the pinnacle of eminence.

In the singleness of mind with which Canova devoted himself to the attainment of excellence, he presents an instructive example to the aspirant in every pursuit. Happy would it be if the same heroic devotion were more frequently displayed in endeavouring to attain the highest form of beauty—the beauty of holiness! Here, it is true, something more than human genius is required. The loftiest talents cannot change the heart, nor sanctify our unrenewed nature, nor yet render those changes less necessary. Of the most accomplished artist, as much as of the most ignorant savage, the Saviour says, "Marvel not that I said unto thee, Ye must be *born again*." This new birth is the making of us "all glorious within," taking from us the predominance of sense and the love of sin, shedding abroad in us the love of God, opening our eyes to the realities of eternity and the glories of heaven, and enabling us to walk by faith, as "seeing Him who is invisible." It is the Holy Spirit alone that can work in us this change, but God

bestows this gracious gift upon all who sincerely seek for it. As surely as by Divine arrangement, so long as the earth continues, "seed time and harvest, and cold and heat, and summer and winter, and day and night shall not cease," so surely will God bestow his Holy Spirit upon those who earnestly ask him for it, in the name of Jesus Christ.

We have mentioned an enthusiastic devotion to art on its own account, as one of the things requisite to form a successful artist. It must be confessed, however, that this feeling may be carried beyond its proper limits, and suffered to supplant those religious sentiments which constitute the chief blessings of the soul. Admiration for merely natural beauty may be so exclusively cherished, as to render the mind of the artist insensible to the attractions of true piety; and a desire, otherwise laudable, to excel in his professional pursuits, may turn his attention altogether aside from the concerns of eternity. It matters not how comparatively excellent those pursuits may be which prevent us from giving the heart to Christ; to the worldly artist as well as to the worldly merchant, those solemn words may be addressed, "What shall it profit a man, if he shall gain the whole world, and lose his own soul?"

Some of our youthful readers may be tempted to inquire, whether it is possible to be at once an eminently successful artist, and a sincere Christian. It is pleasing to be able to answer such a question, by pointing to an

individual whose talents in this department of effort were the means of raising him from obscurity to distinction, who produced not a few of those works of art which attract the attention of the visitor in St. Paul's Cathedral and Westminster Abbey, and who nevertheless was not ashamed to acknowledge himself to be a disciple of Christ. We refer to the late JOHN BACON, R.A., from whose memoirs by the rev. Richard Cecil, we glean a few particulars, illustrative of his professional excellence and his sincere piety. He was the son of a clothworker, residing in Southwark; where he was born in the year 1740. From an early age he manifested a reflective turn of mind, which was the means of discovering to him, even then, the insufficiency of worldly pleasure to make the soul really happy. "I have heard him mention," says his son, "that when a boy under the age of ten years, and playing at marbles or other games, his thoughts have been chiefly employed in the enquiry, 'whence arose the satisfaction he felt?' and perceiving the weakness of its principle, his former pleasure has been turned into contempt towards himself and his companions, as the easy dupes of fancy." At that time, however, though dissatisfied with the world, he was unacquainted with the only true sufficient source of happiness which is found in Christ.

"In the year 1755, at the age of fourteen years, Mr. Bacon was bound apprentice to Mr. Crispe, of Bow Churchyard, where he was

employed, among other things, in painting on porcelain; Mr. Crispe had a manufactory of China at Lambeth, to which Mr. Bacon occasionally went, and where he assisted. His then occupation, indeed, was but a feeble step towards his future acquirements, as he was chiefly employed in forming shepherds and shepherdesses, and such small ornamental pieces; yet for a self-taught artist to perform even works like these with taste, and in less than two years form, as he did, all the models for the manufactory, was to give an indication of no ordinary powers." His capacity, however, for greater things in art than he had yet attempted, discovered itself by the following circumstance. It happened that the models of different sculptors were sent to the manufactory belonging to his master, at Lambeth, for the purpose of being burned. The sight of these models gave him the first idea of his future profession, and from this time he resolved to be a sculptor. "He applied himself to this attainment with the most unremitting diligence; his progress in it was as rapid as his turn for it was sudden, and uninterrupted." From the books of the Society of Arts it appears, that between the years 1763 and 1766 inclusive, the first premiums in the classes for which he contended were no less than nine times adjudged to him.

It will be seen from these facts that Mr. Bacon was in a great measure a self-taught artist. The position he ultimately attained

among his contemporaries will be best understood by referring to a few of his chief performances. In 1778 he commenced a marble statue of Mars for Mr. Pelham, afterwards lord Yarborough. Two years later he executed the two groups for the top of Somerset House, and the statue of lord Halifax, which stands in the north aisle of Westminster Abbey. In 1781 he began a statue of judge Blackstone for All Souls College, Oxford; and the next year one of Henry VI. for the ante-chapel Eton. But the most important work in which he had yet engaged was the monument of the earl of Chatham, afterwards erected in Westminster Abbey. "This was begun in the year 1778, and finished in 1783. It may perhaps be adduced as an instance, not only that true genius is the growth of the British isle, but that it may be fully ripened in it, unassisted by foreign aid. In addition to these, the statues of Howard and Samuel Johnson, in St. Paul's Cathedral, are productions of his chisel; and at the time of his death he had in hand an equestrian bronze of William III., for St. James's Square; and a colossal statue of the marquis Cornwallis, for India. But excellent as these performances are universally pronounced, his noblest work was the profession of Christian piety which he consistently maintained during his life, and which he bequeathed to posterity, along with the imperishable productions of his genius. He was an humble follower of Christ, prizing the Bible, reverencing the Sabbath, and resting for

his salvation, as a guilty, helpless creature, exclusively upon the atoning death of the Saviour. The epitaph, ordered by his will to be placed over his grave, is beautifully expressive of this feeling:—"WHAT I WAS AS AN ARTIST SEEMED TO ME OF SOME IMPORTANCE WHILE I LIVED: BUT WHAT I REALLY WAS, AS A BELIEVER IN JESUS CHRIST, IS THE ONLY THING OF IMPORTANCE TO ME NOW."

CHAPTER V.

SUCCESSFUL POETS, SCHOLARS, AND MEN OF SCIENCE.

Poetry—Necessary cautions—Bernard Barton—Kirke White—Bloomfield—Dr. Alexander Murray—Dr. Samuel Lee—James Ferguson—Dr. John Dalton.

THE poet, the scholar, and the man of science, —it is to these we dedicate this chapter. The ladders by which they ascend to a higher state of personal well-being or worldly renown, rest within the same inclosure; and though their self-elevation is not won by precisely the same means, yet they are neighbours in greatness. To speak usefully of poets and poetry, even in the incidental manner alone consistent with the design and limits of this volume, requires discrimination and caution. It cannot be doubted that the poetic faculty is one of the noblest gifts of the Creator, conferring great responsibilities on its possessor; nor yet can it be denied that its exercise may be the means, not only of affording refined and delightful pleasure, but of promoting greatly the practical influence of morality and religion. An hour with one of our best poets, such as Spencer, Milton, or Cowper, is a rich treat to a mind possessed of an ordinary amount of

imagination and taste. Religion is allied, perhaps, more closely with poetry, in its most enlarged sense, than with any other form of composition. No uninspired poetry can equal that which is to be found in the Bible. Moses, Job, David, Isaiah, and Ezekiel, have employed it as the vehicle for expressing their own devotional sentiments, of conveying the solemn warnings and admonitions with which they were charged to the Jewish nation, and of portraying the future glories of the kingdom of Christ. How delightfully do the compositions of the sweet singer of Israel fall in with the holiest feelings of the people of God! Thousands of years have passed away since his harp was hushed in silence, yet still its soft sounds steal upon our ears; its echoes, borne miraculously on the winds of time, still awaken a response in every heart which has been visited by the Divine Spirit. In the Christian church, poetry holds a high place as a means of instruction as well as for purposes of worship. How beautifully does the apostle describe its use: "Speaking to yourselves in psalms and hymns and spiritual songs, singing and making melody in your heart to the Lord." Our Christian psalmody is one of the most valuable helps to devotion. Luther, Watts, Cowper, Wesley, Doddridge, Newton, Montgomery—how vast is the influence they are now wielding, in their Master's name and for his glory, in Christian households throughout the world! Next to the word of God, it is, perhaps, to

uninspired poetry that the church of Christ is most indebted for its enjoyment and edification.

But while poetry has been of such service to the cause of religion, how often has its weight been cast into the opposite scale! How often has it been made the instrument of throwing fascination around vice, and alluring the youthful mind to ruin! Among the fearful examples of abused power, of blighted genius, of misspent opportunities, of accumulated crimes, which the world presents, how large a proportion is found in the persons of poets, as Byron, Shelley, and Burns—a trio selected, too, from our most modern poets. Acknowledging the genius, admiring the intellectual power which is displayed in their performances, what are these worth when the pen scruples not to hold up the most solemn truths of religion to ridicule, and makes sport of those relationships which are the foundation of society? But those we have named, though some of the most conspicuous, are not the only offenders. Our modern poets abound in the expression of sentiments which they would have been reluctant to utter in prose. It is contrary to the genius of Protestantism to frame an *Index Expurgatorius*; but let the youthful reader remember, in his excursions into the pleasant realms of poetry, that he walks through eastern fields, where poison distils from beauty, and serpents lurk among the flowers.

It is necessary to touch upon a lighter, but yet important topic, in reference to poetry.

In speaking of it as an instrument of self-elevation—and this it has truly been in numerous instances—we would by no means incur the responsibility of tempting the young to become poets. Apart from our immediate object, a word on this point may be useful. It would, perhaps, be a very sound piece of advice to say, Never become a poet if *you can help it*; at least to follow such a maxim could occasion but little mischief, whereas it would assuredly prevent a great deal; probably it would not rob the world of a single line of genuine poetry, while it would discourage those amateur attempts which please no one but the author, and are often very pernicious in their influence on his career. Very few persons pass through life without the misfortune, at one period or other, of fancying themselves poetic. This would not have to be regretted if it did not interfere with important pursuits; the truth is, however, that it tends to weaken the practical powers, to make business irksome, and to unfit a person for success in it. A youth who is subject to this delusion is apt to get over his duties in a slovenly manner; in course of time he contracts an aversion for the sober pursuits of the counting-house; he was made, he believes, for something more sublime than casting up figures or striking bargains; he must climb Parnassus, and become a daily frequenter of the mythical regions, where human wants and cares are unknown, and youth and beauty wander perpetually among sunshine

and flowers. In time, the delusion becomes inveterate, and instead of being an energetic worker, he becomes the victim of day-dreams. Such conduct is less reprehensible before a profession is chosen, and where a person is consequently at liberty to fix upon one which harmonizes with his existing tastes ; but when this step has once been taken, and the pursuit selected is one which demands concentrated thought, energy, watchfulness, tact—(and what business does not require these qualities in order to success ?) let the reader resolve to give the composition of poetry to the winds, or reserve it for the purpose of amusement on some annual holiday. Hundreds would have made good tradesmen, if they had not first been indifferent poets.

Yet poetry is a delightful instrument of self-elevation. When circumstances allow of its being cultivated without prejudice to those pursuits on which subsistence depends, then, though it may not work the slightest change in the outward condition of the poet, though he may be as poor, as unknown as ever, yet it has wrought a change within him ; it has refined his feelings, brought his sentiments into richer and more harmonious action, made him the inhabitant of a world of beauty, and thus raised him higher in the scale of spiritual being. A lovely instance of this species of self-elevation is furnished in the late BERNARD BARTON, the quaker poet. Though for nearly forty years he was engaged in a banking esta-

blishment, it would be difficult to imagine a more poetic life than his. Married at an early age, he was soon left a widower with an infant daughter, his sole domestic heritage. Such a trial, acting on his sensitive nature, must have exercised a powerful influence on his intellectual career, opening the springs of poetry, and flooding his thoughts with a mystic tenderness, in which they lie like objects at the bottom of a pellucid stream. He was the poet of home; its joyous and its anxious scenes he loved to portray; the more beautiful objects of nature, the rural landscape, the clear blue sky, the softening glance and verdant steps of spring, were the themes on which he delighted to employ his pen. The elevation he owed to poetry was social and spiritual. It gave him consideration in the world. A true poet in the walks of commerce might well be regarded as a rare bird, and many were the friends who gathered round him. He was eminently beloved throughout the wide circle of his acquaintance. Nor were his literary performances deemed unworthy of a more public recognition, a pension of £100 having been presented to him, as an acknowledgment of his merits, under the administration of the late sir Robert Peel. But poetry conferred upon him a far higher boon in the means of pure enjoyment which it placed at his command, and the pleasant atmosphere with which it surrounded it. This it was, he tells us, which made him value it:—

“Thou hast not won me lofty fame,
Thou hast not gained me wealth or ease,
Yet grateful thanks thou well might'st claim,
For favours such as these.

“To thee, and to the lonely hours
By thee beguiled, by thee employed,
Life's thorny path owes frequent flowers,
Though transiently enjoyed.”

His end was peace, animated by hopes which neither fancy nor reason of themselves can inspire, but which are the sole offspring of faith in a crucified Redeemer. The suddenness of his departure reminds us of the necessity of being prepared for the Bridegroom's coming. On the day of his death he appeared as well as usual ; only a few moments of warning were given him of his approaching eternity.

Since a large amount of mental cultivation is necessary to form a great poet, we may naturally expect that those persons who have risen to eminence by following the guidance of a poetic taste, should also afford instructive examples of intellectual improvement. None have exerted themselves more praiseworthily in this respect than some self-educated poets, and their true elevation consists, not so much in the peculiar faculty with which their reputation is associated, as in the unwearied application through which they obtained the knowledge essential to its exercise. Perhaps no finer instance could be adduced of the determination of a poetical genius of a high order to obtain, at all hazards, the advantages of knowledge, than that which occurs in the history, so often pondered with tears, of HENRY KIRKE WHITE ; and

it would, at the same time, be quite impossible to point out a more affecting warning against the excesses of that self-consuming ardour in which the youthful aspirant is so prone to indulge. His father was a butcher, and he was intended himself to follow the same trade ; but the love of literature had already taken possession of his mind, and inspired him with an invincible dislike to that occupation. For a year or two after leaving school he was compelled, however, to employ his leisure hours in carrying out meat to his father's customers ; and the boy whose abilities were, five or six years after, to secure the highest university honours, might then have been seen passing with a butcher's basket through the streets of Nottingham. Was this any disgrace to him ? Far otherwise. It would have been much rather to his discredit, if, out of foolish pride, he had refused to render his father this aid. All honest industry is, in an important sense, equally honourable, and in passing from his butcher's basket to Plato and Euripides, he only exchanged one species of industry for another. An earnest desire to improve our condition is quite compatible with a conscientious discharge of all the duties belonging to our present station. True greatness loves to bow to the arrangements of Providence, and those privations which sometimes task our patience are often sent as a kind of preparatory discipline for the success which is to follow.

At Henry's earnest entreaties he was per-

mitted at length to exchange the butcher's shop for the stocking loom; this was in his estimation a step nearer to the object he had in view, inasmuch as it afforded him more time for tranquil thought, and better opportunities for self-improvement. He had gained, however, only an instalment of his wishes; he longed for an employment still more congenial. Happily his mother was capable of entering with intelligent sympathy into his feelings, and through her exertions he was shortly afterwards placed in an attorney's office, his employers having kindly consented to take him as an articled clerk without premium, on condition of his serving two years before being bound. Here his mental powers found a scope they had long wanted; still his views were not strictly in harmony with the legal profession, and though he applied himself with remarkable assiduity to the studies proper to his new position, he gave all the time he could spare from them to the more congenial pursuits of literature. Applying himself to the Greek and Latin languages, he made such progress in the latter as to be able to read Horace with some facility. He also gained some knowledge during this period in Italian, Spanish, and Portuguese. In addition to these studies, he occasionally turned his attention to chemistry, astronomy, drawing, and music, as well as the art of public speaking, in which he made such proficiency as to stand at the head of a debating society of which he had become a member.

Soon after his admission to the attorney's office, he had sent a translation from Horace to a periodical work called "The Monthly Preceptor," and obtained a silver medal which the proprietors offered for the most meritorious of such productions. This incident carried his love of literature to a higher pitch than ever. He became a correspondent to a magazine entitled "The Monthly Mirror," and his essays were of such merit as to attract the attention of Mr. Capel Loft, a kind patron of rising talent. At the suggestion of this gentleman, he resolved on publishing a volume of poetry, which appeared at the beginning of 1804, dedicated, by permission, to the duchess of Devonshire. This work, on which all his hopes were embarked, met with an ungenerous reception in some quarters, but must be regarded as quite successful in the immediate object it had in view, since it attracted the attention of several influential persons, through whose exertions he was enabled ere long to gratify his ardent wishes by entering a student of St. John's College, Cambridge. He was now in the sphere he had long sighed for; a sphere only too congenial with his cherished desire. As might have been expected, he abandoned himself to his studies with almost reckless devotion, succeeded at two college examinations, gaining the first place, and saw the way to the highest distinction open before him. But Providence had a lesson to teach us in him: the fairest blossoms may wither before they

have developed half their beauty, and the only hopes secure from disappointment are those which are treasured up in heaven. His health began to give way, and in a few months he was in his grave. While the success which attended his exertions, and the honourable position assigned him in English literature, may stimulate the energies of those who are aiming at distinction in the same path, they also admonish them in solemn tones to avoid the dangers which beset it. Health is not to be ruthlessly squandered, even in the pursuit of objects avowedly excellent. With such talent as had been given him, ultimate triumph was certain; and we cannot commend to imitation that impetuous eagerness, which in its haste to snatch a laurel for his brow, planted a cypress by his grave.

Henry Kirke White was an instance of those more lofty and ambitious minds, who place before them an extensive plan of literary conquest, and then aim diligently at its realization. ROBERT BLOOMFIELD had no such high aspirations, yet his career furnishes us with a useful example of self-elevation. We can easily imagine ourselves in the birthplace of his muse—a small garret in one of the poorest districts of London. Here are two turn-up bedsteads; and five shoemakers, all busily employed, are also crowded into this narrow space. One of these is a boy of fourteen, who has laid aside his last to read aloud to the rest—a diminutive fellow in hob-nailed

shoes, stumbling over every second word, and giving to those he happens to be acquainted with such a mysterious pronunciation as requires no little sagacity on the part of his audience to divine their meaning: one would say he was much more fit to spring a rattle in a wheat field than thread his way through the columns of a newspaper. One o'clock arrives, and he is despatched to the cook-shop for dinners, laden with a dozen commissions for the workmen, whom he thus serves at once as reader, footman, and purveyor. Who would then have predicted that this poor boy would produce a poem, which should not only awaken a deep interest in his own country, but be deemed worthy a translation into other European languages! Yet so it was. Let us ask how the chasm was bridged over. A four-penny copy of Dr. Johnson's Dictionary enabled him to get through the newspaper by degrees more smoothly; by the habit of attending public worship, in addition to the main benefit of religious instruction, he caught almost unconsciously the proper method of pronunciation; several works, such as the History of England, the British Traveller, and a Geography, purchased in weekly numbers by the literary coterie in the garret, and which he was employed to read, extended his ideas; and at length a magazine, which contained "a Poet's Corner," awoke in him the desire to be a poet. One day he surprised his brother by singing a few verses of his own composition;

at his suggestion they were sent to the editor of the magazine just mentioned, and in due time, much to their surprise and gratification, made their appearance in the "Corner." He was now fairly launched as an occasional poet; but still his poetic ambition was quite subordinate to his love of knowledge. Having mastered the elements of literature, he found it comparatively easy to make progress. Two books especially which came in his way—Milton's *Paradise Lost* and Thomson's *Seasons*, assisted greatly in purifying his taste, and giving him a more comprehensive view of the poetic art. For fifteen years he continued diligently practising every means of self-improvement within his reach, till at length he produced the poem to which we have referred, and on which his reputation rests. Previous to his adopting the trade of a shoemaker, he had spent several years on his uncle's farm, with the view of becoming a farm-labourer, a scheme which was set aside through his infirm health. In after years his mind naturally reverted to those boyish days; seen through the glass of memory, they assumed a poetic form, and furnished him with materials for his "Farmer's Boy." This poem was composed while actually at work at his trade, and more than one-half, comprehending five or six hundred lines, was finished before a word was written on paper. Its publication at once brought him into notice, and an appointment in the Seal Office, which he obtained through the

influence of the duke of Grafton, enabled him to give up his old employment for one which would allow him more leisure for intellectual pursuits. But Bloomfield, like White, had to experience the uncertainty of human prospects. His health, which was always feeble, at length gave way; he was obliged to relinquish his appointment, and the remainder of his life was passed in circumstances which nothing could cheer but the hopes which unveil to us a blessed immortality.

Bloomfield's example suggests much which is calculated to encourage in the work of self-improvement. We see in the result of his efforts what may be done by the diligent use of present opportunities, even in the humblest walks of life, and where the fewest educational advantages have been enjoyed. It has been remarked, that the jutting out of a piece of rock may be the sole reason why a river at its source chooses one direction rather than its opposite, and thus may influence the physical condition of a vast continent. A very similar remark might be made of the incidents which determine the condition of human life. Had Bloomfield thrown aside the newspaper when he found it difficult to read it, he would probably never have risen above the ignorant level of his boyhood; his name would never have been known beyond the limits of a narrow circle, of which he might have been by no means the most distinguished member; and above all, he would have been a stranger to

those noble enjoyments which he found in the acquisition of knowledge, and the exercise of his poetic talents.

The literature of this country furnishes us with the names of many eminent men who have raised themselves from obscurity by persevering devotion to learning and science. Among the most conspicuous of these is Dr. ALEXANDER MURRAY, who, by his own exertions alone, became a skilful linguist, acquired a knowledge of almost every important language which is or has been spoken in any part of the world, and was chosen to fill the chair of oriental languages in the university of Edinburgh. An instance remarkably like this in every way, bringing to view a struggle with outward difficulties equally daring, and crowned by still more brilliant success, is suggested by the mention of the late Dr. SAMUEL LEE, regius professor of Hebrew in the university of Cambridge, and canon of Bristol. Mr. Lee began life with scarcely any educational advantages; all the instruction for which he was indebted to others, was obtained at a charity school at Longnor, in the county of Salop, where he was born in 1783. He remained at this school till he reached his twelfth year. Some years previous to this he had lost his father, and the duty of providing for the wants of a young family devolved solely upon his mother. Their circumstances were very indigent, and he had at once to address himself to the earning of his own livelihood. Through the kindness of Richard

Corbett, esq., a gentleman residing in the neighbourhood of Longnor, who felt considerable interest in the family, he was bound apprentice to a carpenter and joiner. This employment was not quite congenial to his taste, but he recollected his mother's poverty, and with a manliness of spirit which deserves the highest praise, entered upon his business, determined if possible to succeed in it. This filial acquiescence met with its reward, for it was in the prosecution of this trade that he met with the first inducements to study. The circumstance which led him to apply to the study of languages, and the way in which he proceeded, are so highly instructive, that we give this part of the narrative in his own words:—"About the age of seventeen, I formed a determination to learn the Latin language, to which I had been instigated by the following circumstances. I had been in the habit of reading such books as I found in the house where I lodged, but meeting with Latin quotations, I found myself unable to comprehend their signification. Being employed about this time in the building of a Roman Catholic chapel for sir Edward Smythe, of Acton Burnell, where I saw many Latin words, and frequently heard that language read, my resolution was confirmed. Immediately I bought Ruddiman's Latin Grammar at a book stall, and learned it by heart throughout. I next purchased Corderius's Colloquies by Laggan, which I found a very great assistance to me, and afterwards obtained Entick's

Latin Dictionary also ; soon after, Beza's Latin Testament, and Clarke's Exercises. There is one circumstance which, as it had some effect upon my progress, I shall mention in this place. I one day asked one of the priests, who frequently came to us, to give me some information of which I was then in want ; his reply was, that 'charity began at home.' This was very mortifying, but it only served as a stimulus to my endeavours, for from that time I was resolved, if possible, to excel even him. There was one circumstance, however, more powerful in opposing me, and that was poverty. I had at that time but six shillings a week to subsist on, and pay the expenses of washing and lodging ; out of this, however, I spared something to gratify my desire for knowledge, which I did, though not without curtailing myself of proper support. My wages were, however, soon afterwards raised one shilling a week, and the next year a shilling more, during which time I read the Latin Bible, Florus, some of Cicero's Orations, Cæsar's Commentaries, Justin, Sallust, Virgil, Horace's Odes, and Ovid's Epistles. It may be asked how I obtained these books ? I never had all at once, but generally read one through and sold it, the price of which, with a little added to it, enabled me to buy another, and this being read, was sold to procure the next. I was now out of my apprenticeship, and determined to learn the Greek ; I therefore bought a Westminster Greek Grammar, and soon after procured a Testament, which I found

not very difficult, with the assistance of Schrevelius's Lexicon. I bought next Huntingford's Greek Exercises, which I wrote throughout, and then, pursuant to the advice laid down in the Exercises, read Xenophon's Cyropædia, and soon after Plato's Dialogues, with some of the Iliad and Odyssey of Homer, Pythagoras's Golden Verses, with the Commentary of Hierocles, Lucian's Dialogues of the Dead, and some of the Poetæ Minores, with the Antigone of Sophocles. I now thought I might attempt the Hebrew, and accordingly procured Bythner's Hebrew Grammar, with his *Lyra Prophetica*, and soon after obtained a psalter, which I read by the help of his *Lyra*. I next purchased Buxtorf's Grammar and Lexicon, with the Hebrew Bible.

“I now seemed fast drawing towards the summit of my wishes, but was far from being uninterrupted in these pursuits. A frequent inflammation in my eyes, with every possible discouragement from those around me, were certainly powerful opponents; but habit, and fixed determination to proceed, had now made study my greatest happiness, and I every day returned to it rather as a source of rest from manual labour. Though I felt many privations in consequence, yet it amply repaid me in that solitary satisfaction which none but a mind actuated as mine was could feel. Chance had thrown in my way the Targum of Onkelos, and I had a Chaldaic Grammar in Bythner's *Lyra*, with the aid of which, and Schindler's

Lexicon, I read it. I next proceeded to the Syriac, and read some of Gutbir's Testament, by the aid of Otho's Synopsis and Schindler's Lexicon. I had also looked over occasionally the Samaritan Pentateuch, which differs little from the Hebrew except in a change of letters. I found no difficulty in reading it in quotations wherever I met with it, and with quotations I was obliged to be content, as books in that language were entirely out of my reach. By this time I had reached my twenty-fifth year, and had got a good stock of tools, worth I suppose about £25. I was now sent into Worcestershire to superintend on behalf of my master the repairing of a large house belonging to the rev. Mr. Cookes. I began now to think it high time to relinquish the study of languages, as I perceived that however excellent the study might appear to me, it was in my situation utterly useless. I sold my books and made new resolutions. In fact, I married, and considered my calling as my only support. I was awakened, however, from these views by a circumstance which gave a new and distressing appearance to my affairs. A fire broke out in the house we were repairing, in which my tools, and with them all my hopes, were consumed. I was now cast upon the world without a friend, or shilling, or even the means of subsistence."

How inscrutable, and yet how wise, are the ways of Providence! This accident, which seemed to the poor man nothing less than ruin,

was the appointed means of bringing his attainments into requisition, and conducting him to the honourable position which the self-denying labours of eight or ten years had fitted him to occupy. The history of his self-elevation is already complete; that which remains, although it includes his transfer from the carpenter's bench to a professor's chair and a cathedral stall, relates merely to the outward recognition of what he then was. In his distress he thought of keeping a school as his last resource, a vocation for which he was possessed of no ordinary qualifications. The news of his disaster had reached the ears of a kind clergyman of his native village, the rev. archdeacon Corbett, and at the same time some information respecting his wonderful acquirements. Mr. Corbett sent for him, and soon obtained from him proof of an erudition which filled him with surprise. Through the influence of this gentleman, he at once entered upon the mastership of Bowdler's Foundation School at Shrewsbury, and, in addition to the duties of this appointment, attended two schools as a teacher of arithmetic, besides giving instruction in Persian and Hindostanee to the sons of gentlemen who expected appointments in the civil service of the East India Company. In 1813, Mr. Lee left Shrewsbury, and obtained an engagement with the Church Missionary Society, and in the same year entered himself of Queen's College, Cambridge. In 1817, he took his degree of B.A. with great *éclat*. It is

related as an evidence of his power of application, that, in preparing for this degree, though previously unacquainted with mathematics, he qualified himself in a single fortnight for attending a class which had gone through several books of Euclid. In 1819 he was elected, by a majority of nine to four, professor of Arabic in the university of Cambridge, having been put in nomination by the vice-chancellor. Not having been at college the length of time requisite for obtaining the degree required by his chair, a *mandamus* empowering the senate to confer it was solicited from the crown, and graciously granted. Passing over other preferments, we reach the highest, when, in 1831, he was elected regius professor of Hebrew in the same university, and canon of Bristol, these honours being usually bestowed upon the same person. He continued for more than twenty years diligently to discharge the duties belonging to this high position, and by his numerous and learned writings has conferred lasting obligations on the world.

The example we have just considered is a beautiful illustration of what may be accomplished by unwearied industry, guided by a simple love of knowledge. It is worthy of remark, that Dr. Lee did not prosecute his studies with the remotest design of making them contribute to his worldly advancement. So far was this from being the case, that at the age of five-and-twenty, when he had already acquired an amount of knowledge which would

have sustained a claim to a professorship in any seat of learning within the British empire, impressed with the duty of providing for his family, he sold his books, and gave himself up to the diligent prosecution of his humble calling. He devoted himself to the acquisition of knowledge from a simple passion for it. No artist could have had less interested motives in the pursuit of his profession than he in conning his Corderius. This was no doubt one secret of his power. He went thoroughly into everything. A person who studies a language with a particular object in view, will be likely to omit those parts which do not bear directly upon it—to rest satisfied with such a partial knowledge of some of its principles as he thinks will answer his purpose; but when love for it is the sole motive which prompts him, he will probably leave no corner unsearched. Another feature of his studies which it may be useful to remark, is the exhaustive character of his reading. He went right through a book before he laid it aside, and usually got his grammars off by heart. His practice was no doubt dictated at first by necessity; the want of money rendered it impossible for him to procure many books at a time, but it was a practice which might have been justified on the soundest principles. The habit, too common with learners, of hurrying over the rudiments of a science in order that they may the sooner pluck its fruits, is very detrimental to success. Those principles on which the

entire fabric rests, cannot be too well established in the mind ; an additional month or two spent in this preliminary work is not lost ; on the contrary, it probably occasions subsequently a great saving of time. There are other points with which money had nothing to do, in which his conduct was equally admirable. His close and steady perseverance day after day, uncheered by kindred sympathy, in the midst of the most unpropitious circumstances ; the self-denial he cheerfully endured in order to supply himself with those books which were indispensable—sparing, from his scanty wages of seven shillings a-week, a sum sufficient to buy lexicons and grammars, and no mean selection of classical authors ; the conscientious industry which led him at the same time to obtain a high degree of excellence in his own trade, as evidenced by his valuable set of tools, and the trust reposed in his abilities by his master ; in these respects his example is one of the most striking on record, and well deserving the imitation of all who are placed by Providence in similar circumstances.

It has been remarked by some writers, that invention is very different from science ; the former is often the product of a lucky thought, the latter is built upon a series of systematic observations. Hence, while the majority of inventors have sprung from the humbler classes, the majority of scientific inquirers have been produced by the middle ranks, whose position gave them the education necessary to

success in their adopted pursuits. There have been distinguished instances to the contrary, but they are rare. JAMES FERGUSON, the Scotch shepherd, is an example of the attainment of very distinguished honours in the scientific world, by a person who had been absolutely his own preceptor in everything he knew; but even he could scarcely claim the status of a man of science. The individual we are about to introduce to the reader presents us with no such prodigy as Ferguson; but on that account he is all the more adapted to our purpose, which is to exhibit the practically useful—that which can be imitated; not the extraordinary, which will serve no other end perhaps than wonder. Persons who have visited Manchester have noticed, perhaps, on passing along the crowded and narrow thoroughfare of Deansgate—the Cheapside of that city—a statue placed, with commercial rather than artistic taste, in a niche over a tea-dealer's shop, at the corner of one of the streets which cross the one just named at right angles. That which at once strikes the eye of a stranger is the contrast between the philosophic brow, and calm, penetrating features represented by the statue, and the motley crowds ever rushing like the surging of a stream below. Factory smoke has already dimmed the native whiteness of the marble, but a close inspection of the pedestal will enable the reader to decipher the name of *Dalton*. Among those who have raised themselves from an humble position to extensive

reputation by means of an enthusiastic devotion to science, JOHN DALTON will always hold a distinguished place. His name is suggestive of several important discoveries for which the science of chemistry is indebted to his researches, and in particular for that view of the constitution of bodies which has been called "the atomic theory," — "an improvement which," in the language of Dr. Thompson, "has given a degree of accuracy to chemical experimenting almost equal to mathematical precision, has simplified our views prodigiously respecting chemical combinations, and is destined one day to produce still more important effects, and to render chemistry not only the most delightful, but the most useful and indispensable of all the sciences."

This eminent man was born near Cocker-mouth, in Cumberland, in the year 1766. His parents, Jonathan and Deborah, were members of the society of Friends, and though of respectable descent and the heirs of a small reversionary estate, were for the present in very humble circumstances. Happily they were impressed with a sense of the value of education, and gave their children all the advantages in their power. John attended a school which was kept by a person of the religious persuasion to which his father belonged, and remained there till he had reached the age of twelve years. By this time his unwearied assiduity had rendered him an adept in the elementary parts of learning, so much so as to

qualify him for keeping a school in his native village even at that early age, which he carried on for two winters, filling up his vacant time with farm labour. His natural inquisitiveness showed itself when he was yet a child. Happening one day to be in the hay-field, a dispute arose among the mowers as to whether sixty square yards or sixty yards square were identical. He felt great interest in the problem, applied himself successfully to its solution, and acquired, probably, from this circumstance a taste for mathematical inquiries, which exerted a powerful influence on his subsequent life. A gentleman named Robinson resided in the neighbourhood, who felt, together with his lady—a person of rare intelligence and accomplishments—a strong desire to assist the inquiring lad in his pursuit of knowledge. Mr. Robinson had a young man in his service of the name of Alderson, who showed some aptitude for learning; Dalton was invited to join him; and they worked together at their books under the superintendence of their kind friends. Sometimes difficult questions in mathematics were proposed, before which his older associate quailed; on such occasions his own sturdy spirit would show itself by spurring the other on, exclaiming, perhaps, in his Cumberland dialect, “Yan might do it, yan might do it!” The gratuitous instruction thus kindly furnished, completed his obligations to foreign help; all he gained besides was, humanly speaking, the fruit of his own unaided exertions.

He was now in his fifteenth year, and an opportunity offered itself for enabling him to continue in scholastic pursuits. He had a cousin at Kendal, who kept a boarding school; his brother had been an assistant there, and on his retirement from the office, Dalton succeeded him. He now had leisure for indulging in mathematical reading and philosophical speculations, in both of which he was much assisted by the free access he enjoyed to the library of a gentleman named Gough. This person deserves a word, in passing, for himself, since he might justly be deemed a prodigy in scientific attainments, considering the disadvantages under which he laboured. When only two years old he was utterly deprived of sight by the smallpox. This great affliction, however, seemed to rouse his mental powers to more energetic action, and being favoured by his father's liberality with a good classical and mathematical education, he applied himself to the study of the physical and mechanical sciences. There were few branches of science in which he did not excel, or of which he had not a competent knowledge, and more especially in astronomy, optics, pneumatics, chemistry, natural history in general, and botany in particular. Mr. Gough was as much gratified in imparting his stores of knowledge as Dalton was in receiving them, and the eight years during which their friendship lasted were not without important results. In 1784, Dalton ventured for the first time to appear in print.

A miscellany, called the "Gentlemen's and Ladies' Diary," was then publishing monthly; and probably, as a stimulus to its circulation, inquiries of a mathematical and general character sometimes appeared in its pages, for the correct solution of which prizes were offered by the editor. We have already seen the aid offered by similar publications to Bloomfield and Kirke White; and it is no small proof of the utility of periodical literature, that it has whispered the first encouragement to such minds, and anticipated by its once humble honours the more imposing verdict of the world. Dalton replied to some of these inquiries, and was successful in obtaining two of the prizes. Such were the lowly beginnings of "Mr. John Dalton, teacher of the mathematics, Kendal," who was hereafter to be acknowledged one of the brightest luminaries of the scientific world, and to be honoured with the applause of the most distinguished personages of his age. In 1788, he began a series of meteorological observations, which he continued daily for more than half a century; and the facts which were brought before him by this habit of watching the operations of nature, were the means of suggesting to him his subsequent discoveries. A few years later he accepted an academical appointment at Manchester, a step which introduced him to a wide circle of congenial minds, as well as to a neighbourhood where his chemical inquiries would at once obtain a practical value. Manchester was ever afterwards

his home. His laboratory was situated in the densest part of the business district ; and interesting was it to contrast the quiet avocations of the philosopher, occupied from morning till night in endeavouring to ascertain the laws of the air, with the eager throng beneath, some of whom would now and then cast a stealthy and half-revering glance at the dusty windows, which effectually concealed his apparatus from view.

In 1803, the atomic theory first presented itself to his mind. That theory supposes that the ultimate particles of all simple bodies are atoms, incapable of further division. It supposes further, that these atoms are all spheres, and are each possessed of a particular weight, which may be expressed by numbers. For the greater clearness, he represented the atoms of the simple bodies by symbols, to each of which a number was attached expressing the relative weight of the substances they represented ; so that in treating of compound bodies, the number, character, and weight of their constituent parts could be made apparent to the eye. In 1807, he developed these views at length before the universities of Edinburgh and Glasgow. The honour of the discovery was at first contested by professor Higgins, of Dublin, and the claims he asserted were so speciously maintained as to mislead several men of eminence. In this controversy Dalton refused to interfere ; the angry elements of discord were utterly repugnant to his mind ; he contented himself

with simply stating the facts of the case, leaving the decision with the public, who ere long unanimously pronounced in his favour. The position which this discovery gave him among scientific men, soon brought honours thick about him on all sides. On sir John Ross's first expedition to the Polar regions, Dalton received an urgent request from the Royal Society to accompany it ; but his age, and the importance of the inquiries in which he was already engaged, led him to decline the offer. He was successively chosen a member of the Royal Society of Edinburgh, the Royal Academies of Science of Berlin and Munich, and of the Natural History Society of Moscow, as well as other learned and scientific bodies. In 1822 he visited France, and was welcomed at the table of La Place by the leading philosophers of that country. Soon after his return he received the gold medal of the Royal Society ; and in 1833, the most gratifying token of esteem was given by his fellow-townsmen in a subscription of £2,000 towards a full-length statue, which was soon afterwards executed by sir Francis Chantrey. This is not the statue to which we have already referred, but occupies, instead of a niche in one of the stormiest thoroughfares, a classic home in the entrance hall of the Manchester Royal Institution. On going to London, for the purpose of having his bust taken, he was induced to pay his respects to royalty at one of the public levées. A curious sight it must have been to see the

simple-minded Dalton, "arrayed in the pompous vestments of an Oxford doctor, with the scarlet gown and black cap, the silk stockings, the buckles, and whole paraphernalia of a learned courtier, mingling in the crowd of soldiers, sailors, statesmen, and divines, who thronged the splendid apartments of St. James's." The doctor's degree, implied in this description, was given him at a convocation specially summoned, and at the time when a similar honour was conferred on Mr. Faraday and sir David Brewster. In 1833, a pension was awarded to him by government, on consideration of the eminent services he had rendered to the cause of science; and in the following year he was presented with the freedom of the city of Edinburgh. But we approach the inevitable termination of earthly honours: one who spares not "the wise and reverend head," trod close upon the footsteps of fame, and summoned him away. His faculties remained unclouded to the last, and his dying hours were sustained and cheered by the hopes of the gospel. A lively sense of his worth survives; and with a view to acknowledge more fully the lasting obligations under which he has laid posterity, subscriptions are, at the time we write, in progress to raise another public monument to his memory. Very shortly three additional statues will grace the metropolis of manufactures; one—and the enumeration is in many respects significant—to the memory of sir Robert Peel, another to that of the duke of Wellington, and

the third to the peaceful but illustrious achievements of John Dalton.

A review of Dalton's life is a most grateful task. In the language of professor Sedgwick, "His natural talents, great as they were, would have been of comparatively little value to himself and to society, had there not been super-added to them a beautiful moral simplicity and singleness of heart, which made him go steadily on in the way he saw before him, without turning to the right hand or to the left, and taught him to do homage to no authority but that of truth." Here, as in the case of Dr. Lee, and of almost every one who has risen to artistic, literary, or scientific eminence, we see one powerful cause of success—the love of science for its own sake. To this was added freedom from vanity and the desire of self-aggrandizement in any form. We might also refer to his undaunted resolution in facing difficulties; his unflinching perseverance; his untiring industry, which made him, for six days in every week, and for many years together, the occupant of his laboratory from nine in the morning till the same hour at night. It was to these qualities that he ascribed his own success. "If," said he, in reply to a complimentary resolution, "I have succeeded better than many others, it has been chiefly, nay, I may say solely, from unwearied assiduity. It is not so much from any superior genius which one man possesses over another, but more from attention to study, and perseverance

in the objects before them, that some men rise to greater eminence than others. This it is which in my opinion makes one man succeed better than another." Whether this opinion be strictly true or not, it undoubtedly contains a lesson, which all who are desirous of excellence cannot study too closely, but one also which the career of other men may teach with perhaps equal force. That which his life furnishes of peculiar worth to those who are aiming to elevate their condition, is a demonstration of the close connexion which exists between a high moral character and the successful prosecution of science. It would involve us in discussions of little interest to the general reader, to illustrate this by an analysis of our mental constitution; but it is exemplified in the case of the most illustrious discoverers. It may be unhesitatingly affirmed, that a man whose heart is under the practical influence of religion will, other things being equal, be more likely than another to arrive at sound conclusions in any department of philosophical inquiry. Our Saviour tells us that child-like simplicity is most favourable to progress in revealed truth; and as all truth may in a limited sense be said to be Divine, it is not surprising to find that same disposition universally requisite for its attainment.

The examples which have been brought before us in this chapter are useful as affording illustrations of a wise direction of mental effort. The persons whose intellectual career

has been briefly passed in review, in common with all who have elevated themselves by similar means, confined themselves to one line of study, and one class of books. Instead of sallying forth at random into the fields of literature, and roaming hither and thither as chance or fancy led, they fixed on one comparatively small spot ; this they fenced and drained, manured and tilled, till it brought forth a harvest proportioned to the labour they had expended on it. If, instead of making a stern and judicious selection, they had read just such books as happened to be thrown in their way, they might have acquired a large amount of multifarious knowledge, which would have given them a respectable standing in any private circle, but would never have reached that eminence which gave them the respect and admiration of their contemporaries, and has secured for them the lasting homage of posterity. Instead of this, they acted as the masters of literature, not its victims, and they selected just that course of study, and steadily pursued it, which seemed most likely to accomplish their designs. Scarcely pausing to cull the flowers of knowledge, they eagerly grasped the implements with which the soil is tilled ; armed themselves with grammars, lexicons, books of exercises, paradigms, diagrams, scientific treatises ; and vigorously set to work for future results. This is the lesson which is most needed at the present day, when the prodigious number of publications which issue

from the press exposes the young especially to the danger of mental dissipation. They who turn to literature for no higher purpose than the useful amusement of a leisure hour, can afford to allow themselves the widest indulgence compatible with the dictates of religion; but it is otherwise with the student—otherwise with all who wish to make knowledge the stepping stone to advancement in life. With them the pursuits of knowledge must become an art, to be cultivated with judicious care and resolute toil. Less than this may suffice to make a person an agreeable companion, or render him a half-hour's oracle on the ordinary topics of conversation; but less than this never yet sufficed to construct, from the unsubstantial materials of literature, a pathway to usefulness and renown.

CHAPTER VI.

SUCCESSFUL PUBLIC MEN.

Advantages of a free constitution—Best commentary on it furnished by self-elevated men in this department—Edward Baines — Sir John Barrow — Henry Bickersteth, lord Langdale.

ONE of the chief advantages of a free constitution is the opportunity which it affords to every citizen of rising, by means of intelligence and good conduct alone, to the highest posts of trust and honour. This is an advantage which our happy form of government secures to us, both in its imperial and municipal departments, more effectually, perhaps, than that of any other nation. It is certainly possible to find in some countries which are ruled on different principles, a considerable number of persons who have risen, by their exertions in the service of the state, from the lowest to the highest positions in society. The pages of Gibbon inform us, that at the worst period of Rome's decay, when arbitrary power sported with the rights, and even the lives of its victims, the senate and court were filled with *parvenús*, many of whom had risen from the rank of slaves ; and in some modern states, where the

social condition of the people seems to require, in the estimation of some persons, a less liberal system of government than more enlightened communities, very remarkable instances of self-elevation have taken place. Such examples of success differ, however, altogether from those which are constantly occurring in a country like this. If we could always ascertain the circumstances which produce the former, we should find them to be, for the most part, personal address and talent, unaccompanied by signal virtues; and, in some cases, positive crimes. Among us, on the contrary, an upright character, a reputation for honesty, integrity, and public worth, are almost essential to the attainment of the highest posts of honour.

It would be quite foreign to our purpose to enter into any discussion on political principles; we must, however, nevertheless be permitted to rejoice in the spectacle of self-government which this country presents, and in the opportunity which is thus afforded for making the patriotism and intelligence of all classes contribute to the public good. If we look over the fifty-two counties of Great Britain, we see hundreds of numerous and wealthy communities crowded within our sea-girt isle; within each, in a high degree, order is maintained, the laws are righteously administered, whatever is of moment to the public weal is promptly executed; the word of the sovereign, conveyed through legal channels, is everywhere

respected; and yet these communities are all self-managed; they hold their own parliaments, choose their own officers, legislate on all local questions, as freely as if there were no higher authority in the land; while all constitute together, a federation of states, a united commonwealth, cheerfully recognising the supremacy of the same legislature, and maintaining the throne of the same beloved monarch. In these respects, no country in the world can compete with ours; and while it is superior to all in the elements of political stability, it is second to none in the facilities of self-elevation which it offers to men of ability and virtue.

Perhaps the best commentary that could be written on the excellence of our institutions would be a comprehensive biography, the materials of which should be drawn from our municipal records. Such a work would bring to light a striking array of instances, in which a high position has been won by industry, enterprise, and public spirit. We should find that thousands of individuals, who began life without any external advantage, or even a guinea in their pockets, by dint of patient toil, have acquired wealth, risen in the estimation of their fellow-citizens, obtained wide influence in the management of local affairs, filled the highest seats of magisterial power, and died at last amidst the most poignant regret, leaving a memory which is still cherished among the costliest treasures of the town and neighbourhood. The majority of these honoured indi-

viduals have never been known beyond the limits of the district where they lived, their names seldom find their way into history, and the record of their worth is confined to the monumental stone which marks their grave; yet are they among the noblest instances of self-elevation—nobler far than those furnished by the Richelieus and Mazarins, whose names have been placed among the landmarks of time.

Among the self-elevated men of the last half-century, a very honourable position is due to the late Mr. EDWARD BAINES, of Leeds. The most interesting passage in his history is that which places him before us as a poor journeyman printer, not having yet finished his apprenticeship, entering with weary steps the town we have just named, in the hope of meeting with employment, yet uncertain of finding any. This was a rather humble commencement; but with industry and intelligence, who could tell to what it might lead? Rather more than thirty years after, a dense multitude was assembled at Woodhouse Moor. One of the most able and accomplished writers of the age, Mr. Macaulay, had just retired from the representation of Leeds, in order to accept an important appointment in India, and the burgesses had now assembled to elect a successor. The overwhelming cheers which greet one of the parties on the hustings, easily prove which is the popular candidate, and that no one else can have a chance of victory. Who is this

favoured person, whose appearance is hailed with such plaudits, and around whom so large a portion of the wealth and influence of the town is ranged? None other than the poor journeyman printer of thirty years before, who is now to become the successor of Macaulay in the House of Commons, and is raised to this honourable post by the free suffrages of nearly two thousand of his fellow-townsmen. It is possible, however, to conceive of circumstances which would make such an elevation no honour. When the arts of the demagogue have been played off upon an excited populace, when party spirit has been recklessly fomented, when bribes have been lavished in the purchase of votes, or the low tricks which disgrace so many contested elections are resorted to, not even the high position of an elected member of the British senate can rescue from disgrace a person who has obtained it by such means. Such influences had no part in the event referred to. Mr. Baines was indebted for the distinction thus conferred upon him, to the high admiration for his character, and the strong persuasion of his ability and integrity with which all who knew him were inspired. The *political* position accorded to him was but the recognition of the high *moral* position which he had won for himself: let us see by what means this was acquired.

We have already described his first entrance into Leeds; but in order to obtain a clear view of the circumstances under which he began

life, we may go back a few years. Through some uncertainty as to the choice of a trade, he had reached his sixteenth year before he decided to become a printer. He was then articled to Mr. Walker, of Preston, and the intellectual tastes which led him to prefer that calling, promised a measure of energy and skill in its pursuit which are always the prelude to success. As soon as a bond of apprenticeship gave a fixed character to his employment and prospects, he applied himself with the utmost diligence to obtain a thorough knowledge of his profession, neglecting at the same time no opportunity for improving his mind by reading and study. After serving three years of his apprenticeship, his master, who seems to have been himself an enterprising man, started a periodical, called the "Preston Review." The principles of this work were so unpopular, that on one occasion the mob planted a cannon opposite Walker's shop; fortunately they had the moderation to point it in a different direction, yet the violence of the report broke the windows. Intimidated by the threat involved in such an occurrence, Mr. Walker abandoned his "Review," and as most of his business went along with it, his apprentice soon became desirous of finding another situation. The incident of the "Review" is now of little importance in itself, but it furnishes us with another instance of the beneficial influence which trivial circumstances often exert on individuals. By its twelve months' existence it

familiarized him with newspaper work such as it was in those days; while its extinction at the end of that time led to his removal elsewhere, to a sphere also where the very talents thus acquired would find ample exercise. At this time his father, in one of his journeys into Yorkshire, happened to hear that an opportunity was offered in one of the newspaper offices of Leeds for a young man who had only partially served his apprenticeship. This seemed quite an opening; accordingly, the plan was laid before Mr. Walker, who kindly consented to give up his indentures, and the "young printer," having the consent of his parents, left his native town and went out to seek his fortunes. There was at that time no public conveyance from Preston to Leeds, and the journey by Manchester on a stage coach would have occupied two days. "The young apprentice, stout of heart and limb, performed the journey on foot with a bundle on his arm. A friend accompanied him to Clitheroe, but he crossed the hills into Yorkshire with no companion but his staff, and all his worldly wealth in his pocket. Wayworn, he entered the town of Leeds, and finding the shop of Messrs. Binns and Brown, he inquired if they had room for an apprentice to finish his time. The stranger was at once referred to the foreman, and as he entered the Mercury office, he inwardly resolved that if he should obtain admittance there he would never leave it. In a few years

the office and newspaper became his own, and so continued till his death."

He had now entered upon a path which by diligence might lead to a situation of comfort for life, and he was determined if possible to succeed. In the two years and a half which remained of his apprenticeship, by his indefatigable assiduity he conciliated the good opinion of his employers, while his obliging disposition secured him the partiality of all. He severely economized his weekly wages, spending nothing on mere personal display, and living most frugally. At the same time he continued his habits of self-improvement; he became a member of a society established to facilitate the acquisition of the art of public speaking, in which he soon made great proficiency. At length his apprenticeship expired, and the very next day he set up in business on his own account, in partnership with Mr. John Fenwick. His partner, however, unfortunately turned out to be of unsteady habits, and in a few months the connexion was dissolved. Mr. Baines' enterprising spirit soon showed itself. At that time in all England there were probably not more than twenty-eight newspapers, excepting those published in the metropolis; and as many as thirty-two counties in England and Wales, including the county of Lancaster, could not boast of a single newspaper. Provincial publications of this class were then mere epitomes of local views, with a few political extracts from the metropolitan

journals. The "Leeds Mercury" was probably a fair sample of the newspaper literature of that period; yet the orthography, not to speak of higher qualities, which distinguished its earlier numbers, would now amuse the reader. We are told that one of its more able editors made a fortune by it, and then turned alchemist, spending his money in the vain endeavour to find out the philosopher's stone, and at last dying in indigence. Mr. Baines had been in business three years, when the propriety of establishing another paper was discussed by a number of the more influential inhabitants of Leeds; his talents and business-like habits pointed him out as its future editor, and, to assist him in carrying out the project, their pecuniary aid was liberally offered. At this juncture the proprietors of the existing paper being unable to make it pay, and anticipating certain ruin from the introduction of a rival, proposed that Mr. Baines should buy it. A natural feeling weighed on the side of this proposal; he had assisted at that paper with his own hands, and the office in which it was published had been his first asylum. Accordingly, after consulting with his friends, the bargain was struck and the agreement signed; the copyright of the newspaper, the goodwill of the printing business, and the printing materials belonging to the establishment, became his for the sum of £1,552, of which £700 was to be paid down, £500 the next year, and the rest the year following. Eleven gentlemen

joined in lending him £1,000 on his own bond, which in a few years he redeemed, paying off both principal and interest.

Obligation to others has very often contributed to the success of those who have, nevertheless, the strongest claims to be regarded as self-elevated men. Nearly all the individuals whose names are mentioned in this volume might be cited in illustration of this remark; very few of them, so far as we can judge, would have realized the prosperity which at length crowned their exertions, if some friendly hand had not been extended to assist in removing the difficulties which beset their earlier path. Is this to be regarded as any detraction from their merits? By no means; on the contrary, it is perhaps one of its best proofs. Help is generally given only to those persons who show themselves deserving of it. Few, indeed, are willing to aid the idle, the incapable, or the vicious; but the great majority are quite ready to give all the help in their power to an industrious and honest man, who is desirous of improving his circumstances, and is endowed with abilities equal to his determination. In such cases the aid which others afford is not to be regarded as a chance thing, and the person who receives it is not to be considered simply as "lucky." Such an explanation is neither true in itself, nor honourable to the parties concerned. The help which other people are always ready to afford an industrious and clever man, is one of the

natural consequences of a good character—one of the rewards which Providence has attached to it in the present life; and self-elevation consists very much in the attainment of a position which is likely to engage such friendly sympathy on our behalf. The propriety of entering into obligations of the specific nature referred to in the present instance, depends entirely on circumstances. Borrowed capital is a dangerous thing; the safest plan is to dispense with it, if possible, and trust to self-exertion alone. But such a rule, like most others of a prudential character, has many exceptions, and it is the office of good sense to discern the time when it may be safely laid aside. Brilliant success can never be won without bold measures; prudence is not exactly the same thing as timid caution. By seizing some happy moment, when winds and seas are favourable, the mariner may venture upon a world-wide voyage; whereas if he had yielded to petty fears, his bark might never have lost sight of shore, and possibly have foundered at last among the breakers.

The public life of Mr. Baines presents us with an admirable specimen of an ever-active citizen taking a lively interest in all that concerns the welfare of the community, and that from a sense of duty, without any eye to emoluments and honours. “In his attendance on parochial business he was as regular and punctual as in his attendance on his own business, and the same may be observed of all

his public duties. Whatever he understood he followed up with heart; he gave his whole mind to the carrying of it out, and his duty was his pleasure. Yet it was never felt that he was impatiently driving, still less that what he did was prompted by a love of power or influence. No one did more with less display. He neither courted prominence nor shrank from it. To induce him to work, it was never necessary that he should be first horse in the team. Nor were his virtues ever pushed to extremes. He was firm without sternness, candid without rudeness, conciliating without obsequiousness or finesse, methodical without rigour, deliberate without undue slowness or indecision." Wherever a ready hand and benevolent heart were wanted, there his presence was to be found. Most of the existing institutions of the town of Leeds are indebted to his exertions for their origin; its savings' bank, gas works, public baths, philosophical and literary society, mechanics' institute and infant schools, counted him among their earliest friends. We find him at one moment engaged, on behalf of the parish board, in visiting the manufacturing establishments at New Lanark, with the view of devising some scheme for the better employment of the poor; and at another we find him standing single-handed before a vast assemblage of working men, fearlessly refuting the sophisms by which incendiary orators strove to incite them at once to infidelity and treason. In times of depression,

when multitudes were out of work, or when the operatives were discontented through the attempts made to reduce their wages—whenever, in short, conciliation was necessary, then his voice was sure to be heard, and rarely did he speak in vain. Besides these active duties, time was secured for the tranquil pursuits of literature. A “History of the War” with Napoleon, a “History, Directory, and Gazetteer of the County of York,” and a “History of the County Palatine of Lancaster,”—this last consisting of four thick royal quarto volumes—remain as useful monuments of his unwearied industry. Agricultural employments also came in for their share of attention, and through his efforts twelve hundred acres of Chat Moss, the scene of one of Stephenson’s engineering triumphs, already referred to, were taken into cultivation. At length a seat in the House of Commons, continued to him through six sessions, introduced him into a new sphere, in which it is not too much to say that his modest but independent conduct, combined with the moderation and intelligence of his views, secured for him the esteem of all parties. Setting his political principles aside, he manifested on all occasions that true patriotism which fits the humblest senator for usefulness, and is the soul of the highest political greatness. On voluntarily resigning this post in 1841, his fellow townsmen testified their sense of the ability and disinterestedness of his services by a magnificent testimonial of silver plate; and in 1845

the corporation of Leeds elected him to the office of alderman, with the view of raising him to the mayoralty in the following year ; but this honour he was compelled to decline by advancing infirmities.

Mr. Baines was now drawing near to the end of life—that solemn hour when worldly reputation can be of no avail, and human greatness only imparts a deeper melancholy to those sad scenes which are uncheered by a well-founded hope of a happy future. The youthful reader will perhaps be anxious to know with what feelings a man of such sympathy with present things, anticipated his departure from them. A clue to these feelings will be obtained by a remark which fell from his pen while yet engaged in the bustle of parliamentary life. Expressing his desire to make all worldly concerns subservient to spiritual duties, he says : “I feel how unsatisfactory are all worldly honours and engagements, and can sincerely join in the exclamation of the wisest of men, ‘Vanity of vanities ; all is vanity !’” His estimate of a life which the world would regard as most blameless and exemplary, is thus given :— “When I consider my own imperfections, it seems impossible that the Almighty should ever look upon me with favour. I have done so much that I ought not to have done, and have left undone so much that I ought to have performed ; I see so much of my own unworthiness and sinfulness, that I have no confidence whatever in myself.” Such expressions dis-

close the pleasing fact, that he had been led to look for satisfaction above the pursuits of this frail and fleeting life; that the Holy Spirit had made him aware of his state as a sinner before God, and that his hopes were based exclusively upon the atoning merits of Christ. The depth and reality of these views are beautifully displayed in the last words he addressed to his eldest son, who was at that time M.P. for Hull, and a member of her Majesty's Privy Council:—"I trust God will make you useful in whatever station you may hereafter fill. In particular, my wishes relate to your religious impressions; my heart's desire is, that your faith may be fixed on the Rock of ages; I hope He may be cleft for you!" Just before his death, a friend repeated to him that verse of Dr. Watts's, commencing, "A guilty, weak, and helpless worm;" he replied, "Most beautiful!" and these were the last words he uttered. After such a death-bed scene, we cannot refer to the manifestations of public regret which accompanied and followed the funeral solemnities. The splendour of the costliest pageant grows dim, when beheld beneath the heavenly radiance which surrounds the departure of a Christian.

Turning to a different department of public life, we find an illustrious example of self-elevation in the late sir JOHN BARROW. His name will ever occupy an honourable place in the list of those highly gifted individuals who, by their original genius and energetic minds,

have in their several walks of life rendered eminent services to their country. He was born near Ulverstone, in Lancashire, not far from the birthplaces of Dalton and Baines, to whose parentage his own bore a very great resemblance, being at once respectable, and of slender means. The cottage in which he first saw the light had been in the occupation of his family on his mother's side for two centuries. The only scholastic advantages he ever enjoyed were received at the grammar school of his native town, which he attended for five years, having entered it when eight years of age, and left it at thirteen. This furnished but a slender foundation for future usefulness and distinction, but it was extended by his own abilities, seconded by untiring diligence. He soon beat his companions in the classics, and when he left school had gone deep into Xenophon, Livy, Horace, and Virgil. An old itinerating tutor taught him algebra, fluxions, conic sections, etc. Euclid was soon mastered without any teacher, and in a short time he was able to apply its principles to mensuration, and other matters of practical life.

We have said that at thirteen he left school, and though still in his boyhood, circumstances obliged him at once to aim at maintaining himself. His skill in mathematics procured him an engagement by colonel Braddyl to survey his estates in Yorkshire. In executing this commission, he obtained so good a knowledge of the theodolite as to be able to compose a small

treatise on its use. This first essay in literature brought him twenty pounds from a London publisher, the whole of which he sent off to his mother as the first-fruits of his exertions. After remaining some time in the metropolis, where no suitable situation offered itself, he accepted the post of clerk to an iron foundry at Liverpool. The duties of this situation were not allowed to engross all his time, and every leisure moment was sedulously devoted to the acquisition of scientific information, at the same time watching for an opportunity of turning it to practical account. A situation was at length offered him on board a whale ship, bound to the Polar seas. The proposal fell in with his love of adventure, and he at once accepted it. The talents which this engagement helped to develop were hereafter of the greatest use; but on its completion he entered upon the quiet vocation of a teacher of mathematics in an academy at Greenwich. This position was one of great respectability, and brought him into contact with individuals whose patronage was afterwards of service to him. Among his pupils were a son of lord Anson, and lord Leveson Gower. In 1792, lord Macartney was despatched by the British government on an important embassy to China. A report of the abilities of Mr. Barrow had reached the ear of sir George Staunton, and at his recommendation he was engaged in his lordship's suite, to offer whatever assistance he might be able to render in carrying out the

objects of the embassy. This was just the sphere for him ; his business talents now found ample scope ; in ready adaptation to every circumstance that happened to arise, in the fertility of his resources in cases of difficulty, in the consummate tact with which he conducted his share in the important negotiations which were carried on with the Chinese government, he proved himself a most valuable ally, and contributed in no slight degree to the success of the embassy. Soon after his return, lord Macartney was despatched on a similar mission to the Cape of Good Hope, in order to enter into some permanent arrangement with the Kaffirs and other tribes living contiguous to our territory. His lordship's late experience of the abilities of his humble colleague led to an urgent request that he would accompany him, to which Barrow readily consented. In the difficult negotiations which followed, his exertions were indefatigable. For six months he traversed the country in all directions, his journeys extending over more than three thousand miles, travelling in a wagon by day, and sleeping in it at night. The services he rendered on these two occasions recommended him to government as an able and indefatigable *employé*, whom it was desirable to engage permanently in some department of public business. Accordingly, in 1807 he was chosen second secretary to the Admiralty, a post which he retained, under every change of administration, for thirty-eight years. In 1835,

he was raised to the dignity of a baronet, in order to mark the estimation in which his able and disinterested services were held by those who had the best opportunity of observing them. In 1845, the infirmities of advancing age compelled him to relinquish his situation, and the rest of his days was spent in retirement. He died in 1849, leaving behind him a number of useful works, chiefly connected with maritime enterprise in the Polar regions, as well as a variety of instructive articles in the "Quarterly Review," which testify to his intelligence and industry.

Within the last few years two distinguished men of the same name have been withdrawn from public life, both of whom presented, though in very different pursuits, a pleasing proof of what may be accomplished by fair abilities, seconded by high principle and a steadfast persevering spirit. The name of Edward Bickersteth is dear to all good men; his spiritual and earnest piety; his sympathetic and ardent zeal for the cause of Christ; his enlightened and practical views of the sphere of Christian activity, rendered him truly great, and made his career an eminent blessing. We are, however, about to speak of HENRY BICKERSTETH, more recently known as lord Langdale, who held, till his death in 1851, the office of Master of the Rolls in the Court of Chancery. The history of his early efforts and ultimate success presents us with one who was "unstained by the arts by which some

men have become dishonourably great." In tracing it, we have to turn once more towards the Lake district. It was there, at Kirby Lonsdale, in the county of Westmoreland, that he was born, on the 18th of June, 1783. His father was a medical practitioner of considerable local repute, and the author of a work entitled "Medical Hints for Clergymen;" resembling the parents of Baines and Barrow in that combination of respectability with slender resources, which seems most favourable to the future greatness of the family, who are generally taught, under these circumstances, to cherish high aims, and to depend upon their own exertions for their realization. Mrs. Bickersteth was a model of the home virtues, gentle in her manners, and of very strong religious feeling. Such a woman was adapted to exert a powerful influence on the mind of her sons, and the appreciation in which they held her may be inferred from one of lord Langdale's sayings, "If all the world were put into one scale, and my mother into the other, the world would kick the beam."

Henry Bickersteth was educated at the grammar school of his native town. While there, he was extremely popular among the boys, taking, perhaps, more than a fair share in the amusements which were going on. He was especially an expert swimmer; and it is said that, during their aquatic adventures in the river Lune, more than one boy was indebted to him for his life. At the age of fourteen he was

bound apprentice to his father, with the intention of following the medical profession, and in little more than twelve months proceeded to London, for the purpose of walking the hospitals. While in the metropolis he took up his residence with his maternal uncle, Dr. Batty, a physician of considerable eminence. He now applied himself with great diligence to his studies. "I had much rather," he exclaimed, in a letter to his father, "have a shabby coat than abridge myself of anything which may conduce to my instruction." This sentiment reveals something of the worth of his character, and contains a promise of future elevation such as is seldom broken.

Though Mr. Bickersteth devoted himself conscientiously to those studies which were essential to eminence in his profession, he had no love for the practice of medicine. He liked the scientific part very well, but could look forward with no pleasure to the ordinary duties of the practitioner. In the summer of 1801, he was sent by the advice of his uncle to finish his studies at Edinburgh. Here he attended most of the lectures of the different professors, and was elected a member of the "Royal Medical Society," a debating club which met every Friday evening during the winter session, and at which he soon became a very distinguished speaker. Among the books he studied at Edinburgh were the *Novum Organum* and the *De Augmentis Scientiarum* of Bacon. These he perused with great admira-

tion, and the influence they exerted on his mental habits was no doubt considerable. Among his college acquaintances was Dr. Alexander Henderson. With this gentleman he projected a correspondence on important scientific subjects, to be investigated according to the method prescribed by Bacon, and several elaborate papers passed between them. He would probably have taken his degree at Edinburgh; but before the end of the session he was called home; his parents wished to visit London, and he had to take care of his father's practice during the interval. Some young men would have refused, or have submitted with a bad grace. Not so Henry Bickersteth. He willingly complied, expressing to his mother his gratification at being able to promote their desire to spend a few months in the metropolis. For this filial conduct he met with his reward. Probably his abrupt departure from Edinburgh was one reason why he resolved, during the course of 1802, to finish his studies at Cambridge, and to this resolution may be ascribed instrumentally the change which his prospects soon afterwards underwent. He matriculated at Caius College, on the twenty-second of June, 1802, with the intention of taking his degree in the faculty of medicine. During the following winter he worked hard, sedulously cultivating an acquaintance with the best writers of the English language, as well as the Greek and Latin authors. About this period he was offered his father's practice

at Kirby Lonsdale; but though this would have given him a certain competence, he declined it, being determined to fit himself for a wider sphere than could possibly be furnished by a small town in the distant county of Westmoreland. Severe application to his studies soon injured his health, and in the following spring it became painfully apparent that a change was immediately requisite. Fortunately at this very time his relative Dr. Batty was requested by the earl of Oxford to recommend him a physician to travel with his family in Italy. Dr. Batty at once recommended his nephew, and at the same time earnestly urged him to accept the appointment, both on account of his health, and the advantages which might be hereafter derived from having so kind a patron. Accordingly the offer was made and accepted, and for the next two years Mr. Bickersteth resided in the family of the earl, chiefly abroad. In 1805, he returned to the university, intending still to take his medical degree, but some difficulties being thrown in the way of this design, he resolved to devote himself for the present to general studies. A fellowship was the object of his ambition; for this he was much behind in mathematics: but what might not resolution accomplish? For two years he continued the race with unflinching diligence, and at length, in January, 1808, had the happiness to find that he had distanced his rivals, by being made senior wrangler, and first Smith's prize man.

The present bishop of London was third, and professor Sedgwick fifth wrangler in the same year. Soon after this success he was chosen fellow of Caius College.

It was in 1808, when he had reached his twenty-fifth year, that Mr. Bickersteth first turned his thoughts to the legal profession. In April of that year he entered himself as student of the Inner Temple; soon after he began his preparatory studies, and in 1811 he was called to the bar. Here, however, he found only the starting-post, not the goal; for three or four years his circumstances were very discouraging; he had few connexions to help him forward, and the views he was known to entertain on the subject of law reform were exceedingly unpopular with the solicitors, upon whom the young barrister is very much dependent. Poverty obliged him even to sell his books, and his father most generously gave him all the money he had saved; yet business did not come. The sacrifices which his family were making on his behalf increased the bitterness of his condition, and in 1814 he offered to abandon the law and go to Cambridge, where he would be sure to obtain support, if they insisted upon such a step. Fortunately they did not insist upon it, and in future years Mr. Bickersteth had the satisfaction of more than repaying all they had lent. During this season of trial he was sustained by the thought, that many men who afterwards reached the highest eminence were acquainted at first with

neglect and poverty. There was lord Camden, who starved for several years, yet afterwards rose to the head of his profession. Sir Samuel Romilly, also then making more than £10,000 a-year, and obliged to shut his doors on his clients for weeks together, yet ten years before had been little thought of, and for years after his call to the bar had suffered great difficulties. To these might have been added lord Eldon, at that time seated on the woolsack as the lord chancellor of England, who in his early days, as he himself informs us, often ran down from his chambers after a hard day's work, to buy a few sprats for supper in the neighbouring market. Cheered by such precedents, Bickersteth patiently worked and waited, till at length his turn came. In 1814, his prospects began to brighten; in 1815, he says, "Business perhaps advances, and certainly does not go back." His character rose daily in public estimation, and his thorough manliness and honesty gained for him a more valuable reputation than could have been won by the most splendid talents. At length the great question of law reform was forced upon the attention of government, and the opinion he was known to entertain led to his being repeatedly examined before a parliamentary committee, which was appointed for the purpose of discovering some method of doing away with present abuses. The intelligence and disinterested candour which he displayed on this occasion marked him out for future promotion. At

length, when sir John Copley was raised to the woolsack by the title of lord Lyndhurst, Mr. Bickersteth was chosen king's counsel. His period of probation had, however, long since been over, and the remaining portion of his career, however interesting, throws no additional light on the causes of his elevation. We need say no more than that, in 1835, he was made master of the rolls, with a peerage, and took his seat in the House of Lords, with a title from his native county. On the death of lord Cottenham, in 1850, the great seal was offered to him by lord John Russell. The dignity of lord high chancellor of England would have been a graceful termination to such a life, but his failing strength would not permit him conscientiously to accept it, and it was therefore declined. In the March of 1851, he was compelled by the same cause to resign the mastership of the rolls. Within a month after taking this step, his useful career was arrested by the hand of death. His name will justly be enrolled among those of individuals raised to eminence by persevering and well-directed industry. Many, however, will prefer the quieter career of his brother Edward, who, undistinguished by earthly honours, has yet left a memory endeared to all who can appreciate the nobleness of a soul entirely devoted to God.

The persons whom we have in this chapter introduced to the reader's notice speak best for themselves. To ponder their example well is the best way of mastering the secret of their

success. Like every other secret which affects our welfare, it is an "open" one—there is in it no magic, no witchcraft, no transcendental art. A vast array of learning is not wanted, neither are splendid talents, much less the loftier powers of genius. No! If these endowments are possessed, so much the better, and best perhaps if the possessor is ignorant of their existence. But what is indispensable is an honest, conscientious, truth-loving, and labour-loving mind; a disposition to make the best of the present, turning everything to account, and yet, while working now with both hands, looking forward, ready to grasp the possible opportunities which the future may present. Above everything must self-seeking be eschewed, and that on the ground that it is impolitic, if for nothing else. But a sense of its impolicy had better far be lost in a nobler feeling—that of perfect disinterestedness. To such a person some success is certain; even in a worldly sense he cannot fail utterly. He may expect at least a competence made all the sweeter by the esteem of his fellow-citizens; and possibly, as in the instances we have just considered, such principles will lead him to heights which he never dreamed of ascending, and, after a life of usefulness, will enrol his name with those of the most illustrious of his country and mankind.

CHAPTER VII.

SUCCESSFUL WARRIORS AND PHILANTHROPISTS.

Importance of the social faculties — Christian obligation connected with their exercise—Napoleon and Howard—Joachim Murat and Mehemet Ali—John Williams and David Nasmith.

THE instances of self-elevation which we have hitherto considered, although dependent on the moral qualities of the individual, are chiefly due to the exercise of intellectual talents; we will now contemplate a few in which it has been attained by an energetic manifestation of those qualities which constitute us social beings. These qualities, no doubt, enter deeply into our moral nature, and correspond to the duty we owe to our neighbours, which occupies so prominent a place in the obligations of Christian morality. This is most important ground, whether it be cultivated or suffered to lie barren; whether it be sown with useful grain, or permitted to bring forth weeds. Nowhere else has the wickedness of the human heart produced such sad results; by stimulating our self-love it has too often paralysed our more generous and noble qualities, given birth to vanity,

inordinate love of fame, despotic cruelty, and unscrupulous ambition; while, on the other hand, under the influence of the Holy Spirit, our social relations have been the fruitful soil of immortal deeds of Christian heroism. If the world has beheld its conquerors, who have not scrupled to sacrifice the lives of millions at the shrine of power, ruthlessly crushing beneath their chariot wheels the well-being of nations, as well as the most sacred rights and tenderest affections of mankind, it has also seen its patriots, devoting their powerful energies to the enlightenment and moral improvement of the country of their birth;—its philanthropists, who, with more comprehensiveness, have surveyed the miseries of distant lands, and gone forth to heal them, diffusing the blessings of civilization through barbarous climes, opening the prison doors, and breaking the oppressor's chain;—it has seen also its Christian missionaries, from the noble Saul of Tarsus, who counted himself “a debtor to all men,” sacrificing worldly honours, and even life itself, that he might make known to his fellow-men the unsearchable riches of Christ, —down to the Schwartzes, the Martyns, the Careys, and the Williamses, of our own times: men who, with true apostolic zeal, counted not their lives dear to them, so that they might be the means of leading the world to a knowledge of that godliness which has a promise of the life which now is, as well as of that which is to come. The world has also witnessed on

this field of moral sacrifice a more impressive sight—the Son of God himself, arrayed in the tenderness of Divine compassion, descending to seek and to save that which was lost.

In the exercise of our social faculties, it is possible to rise higher or sink lower than in any other sphere of action whatever. Here it is that our elevation or our degradation may be most complete. It is unquestionably a great sin to neglect the cultivation of those intellectual talents with which the Creator has endowed us; to suffer noble faculties to lie waste, which ought to be diligently employed in attaining the high ends for which they were given. But how much severer should the censure be when these talents, instead of being merely neglected, are cultivated in order the more readily to sow the seeds of error and vice among mankind; to rob them of their rights, to cover them with ignorance, or to plunge them in bloodshed! So, on the other hand, self-culture is praiseworthy; the acquisition of knowledge, or the pursuit of artistic studies, can scarcely fail of being useful in its tendency; and they who have risen by such means to opulence and distinction are worthy of being commended to the admiration and imitation of others. But how incomparably nobler is the spectacle of lofty talents, together with all the advantages of wealth and position, brought as an offering to the footstool of God, drawn away from every other pursuit, that they may be devoted, singly and entirely, to the welfare of

mankind! The sublimest of all the sciences is that of doing good.

In contemplating those who, in modern times, have raised themselves, by the exercise of their social faculties, from comparative obscurity, and left an abiding impress upon the condition of the world, the pre-eminence must be assigned to two very different persons—**NAPOLEON BONAPARTE** and **HOWARD** the philanthropist. The history of these distinguished men is so well known, that we may assume a knowledge of the facts which are requisite for instituting a brief comparison between them. Both, at the outset of their career, were hardly known beyond the circle of their personal acquaintance; yet, before their death, both had attained to world-wide fame, and engraved their names ineffaceably on the tablets of history. Both were indebted for their elevation chiefly to themselves; few circumstances favoured their enterprises, and few persons aided them therein; as far as such an assertion can be made of mere man, it may be said most truly that the triumph they obtained was their own. Both, moreover, realized success by an energetic display of personal determination; the **WILL** was the faculty by which they conquered. Difficulties without end met them, but only to vanish like chaff before the wind. "Impossible!" exclaimed Napoleon; "I know no such a word;" and his wonderful campaign in Italy, his passage of the Alps, his victories of Marengo and Austerlitz, and even his fatal

march to Russia, demonstrate the practical truth of his assertion.

Difficulties equally formidable beset the steps of Howard, and with equal facility did he vanquish them. Without hesitation he entered the infectious cell, descended the low, damp dungeon, boldly ventured into the innermost recesses of despotic power, where few indeed had entered except to die, or drag out in hopeless captivity a miserable existence; braving the ill-will of those who were interested in the continuance of the abuses he tried to correct, daring to speak unpleasant truth in those places which usually echoed only to the voice of flattery, and setting at defiance the spies and police of hostile courts whenever they stood in the way of his benevolent designs. Thus, in all the outward characteristics of moral greatness, Napoleon and Howard stand side by side; but when we look within, how suddenly do they start asunder! How different are the motives which actuated them! Their greatness is equally gigantic in its physical proportions; but how dissimilar the soul which animated its movements! In the one case, it is a soul of fiery ambition; desires, wholly sinful, to acquire undue control over the actions and condition of mankind. This passion when once kindled is unquenchable, and demands for fuel the rights and liberties, the happiness and well-being of the world. In the other case, the indwelling soul was one of love; a steady, calm, ever-radiant compassion; a sleepless benevolence, which could find no happiness except in seeking to afford relief to

human woe. How different were the feelings with which the world regarded their progress! When Napoleon set out at the head of his legions, all eyes followed him with terror—every heart was in suspense; what course would he take? upon what unhappy land would he alight first? Uncertainty awoke universal fear, and thousands of prayers were silently offered that God would turn aside the dreaded steps of the conqueror. The news of Howard's departure on one of his campaigns of mercy struck, on the contrary, a note of gladness everywhere. Cold was the heart which it did not arise for a moment to a higher temperature. The joy was almost as unselfish as the conduct which enkindled it. Not one in a thousand of those who heard of it had any expectation of reaping the benefit themselves; but they knew that its object was the good of humanity at large, and that through his labours the aggregate amount of human misery would be lessened. Could all the fervent prayers and good wishes which followed Howard have been clothed for a moment with some visible form, his path would have appeared as if over-canopied with triumphal arches; charity, happiness, and virtue would have been seen scattering before him the flowers of earth and the fragrant incense of heaven. The different feelings with which the world watched the progress of Napoleon and Howard, corresponded, in the case of the former, but too truly with the effects which followed. The course of the conqueror might be noted from afar by the excesses that

accompanied it, and the desolation which was left behind. The battle-field, with its thousands of dying and dead, gave but a faint idea of the miseries which were endured in secrecy in countless homes, through the poverty occasioned by systematic pillage, and the terrific license of marauding hordes, stimulated by brutal passion and drunk with victory. The course of Howard was as noiseless, as beneficent, and as beautiful as a beam of morning light; gladness sprang up at his presence, and the seeds of gladness were thrown into the fallow of future years. He saw the report of his triumphs in the hope-lit eye of the poor prisoner, drawn up from his noisome dungeon, freed from his galling fetters—if as an outcast, at least as an outcast brother of the human family. Within thirty years of each other the great conqueror and the great philanthropist reached the close of their earthly career. The ashes of the one now slumber beneath the dome of the Hôtel des Invalides, among the companions of his victories; those of the other have found a lonely resting-place in the distant wilds of Russia. The dynasty of Napoleon is now again reseated on the throne which he founded by the sword; but the dynasty of Howard has never been dethroned, his successors have suffered no exile, they are welcome in every land. His labours commenced an era of philanthropy, destined, we should hope, to close only with the extinction of every wrong. His mantle has fallen upon many

shoulders. Wilberforce, Buxton, and that princess of Christian benevolence, Mrs. Fry, are conspicuous among those who have striven not in vain to mitigate the severity of our penal code, as well as to direct attention to the moral recovery of the prisoner. But philanthropy is boundless in its grasp; the pity which leads a benevolent mind to attempt the removal of one evil, leads it equally to seek the removal of everything which oppresses mankind. The sentiments which Howard's example has instilled into the national mind are the true source of those social ameliorations which have signalized the past half century. To the same cause also we may ascribe the emancipation of the slaves in our own colonies, and the growing efforts to effect the extinction of slavery throughout the world.

Within the present century, the Mediterranean has beheld two of its royalties bestowed on men whose extraordinary talents, combined with fortunate circumstances, raised them in a few years from a very obscure position in life. JOACHIM MURAT, king of Naples, was originally the son of a publican. When about twenty years of age he left home, and plunged into the vortex of the revolution, which then, in 1792, began by its violence to astonish Europe. His energy and valour soon rendered him conspicuous, and in three years he was made a lieutenant-colonel in the French army. When Bonaparte went into Italy, Murat accompanied him in the capacity of aide-de-camp, and took

a distinguished part in the series of conflicts which expelled the Austrians from Italy, and led to the treaty of Campo Formio. His career consists of a repetition of actions which history is now ceasing to call brilliant, because they are the fruit neither of religion nor patriotism, and were expended in the work of conquest. When we have said that he displayed the most adventurous valour on all those blood-stained fields to which he followed the warlike Corsican, we have summed up the causes of his success. For this he was made the brother-in-law of Napoleon, and raised in 1808 to the throne of the Two Sicilies. But he had chosen a perilous ladder to a throne; it was based on no secure foundation of principle; and almost before he reached the top, it threw him down. A few years after he had assumed the title of king of Naples, we see him an outcast on the shores of the country of which he still claimed to be considered the ruler, dragged to prison, hurried thence before a military commission, and shot.

A more striking, and at the same time a more favourable instance of self-elevation by military and administrative talent, is found in the late ruler of Egypt, the celebrated MEHEMET ALI, unquestionably one of the most energetic men of his age. A brief outline of his career will show what activity and address may accomplish in every line of life. Though many of his actions can be spoken of only with the severest reprobation; yet the energy, courage, and

magnanimity which marked his conduct, suggest to us a useful lesson. He began life as a tobacconist in the small town of Cavalla, in Roumelia, the ancient Macedonia. His disposition led him, however, to prefer a more active occupation, and he enlisted in the sultan's army. The efficient aid he rendered in putting down a band of robbers, commended him to the good offices of the governor of the town; on his death he became his successor, and eventually married his widow. When Napoleon invaded Egypt, Mehemet Ali commanded a contingent of three hundred men, distinguishing himself for his zeal and valour, and gaining by his lofty spirit a strong ascendancy over the minds of his soldiers. In 1806, the sultan installed him in the pashalic of Egypt, the jurisdiction of which was then very limited in its extent, the Mamelukes holding possession of Upper Egypt, where the authority of the sultan was barely recognised. The darkest spot in the life of Mehemet Ali is the way in which he rid himself of these neighbouring rivals. Their crime was, that they stood in the way of his ambition; active, clever, and enterprising as himself, they checked him in all his designs. Openly to oppose them would have been dangerous; he resolved, therefore, to overcome them by treachery. To carry out this most wicked determination, he invited them in a very friendly manner to visit him at the citadel of Cairo. His son was about to proceed to Syria, where the sultan had ordered

him to put down a dangerous tribe of fanatics. Mehemet Ali accordingly invested him with the supreme command, and the ceremony of investiture gave just the occasion which was wanted to beguile the Mamelukes within the citadel. The ceremony was performed, and their part being over, they prepared to retire; but on mounting their horses in the court-yard, the gates were shut, and the guns of the fortress pointed at them. Only one man escaped; four hundred and seventy were slain on this occasion; and in obedience to orders previously issued, a similar blow was struck at the same instant throughout the provinces.

Mehemet was now undisputed master of Egypt, but he began to cherish higher thoughts. The sultan's weakness offered too many temptations to an unscrupulous and powerful vassal. Syria lay almost at the mercy of the latter, and an excuse was not long wanting to commence hostilities. In the meantime, he re-organized his army, had it arranged according to European principles, and drilled by Italian and French officers. About this period, six thousand Egyptians emigrated to Syria, and Mehemet, not liking to lose so many of his subjects, demanded the restitution of them from Abdallah Pasha, then governor of Acre. Abdallah refused, stating that the people in question were the subjects of the sultan, and were as much under his authority in Syria as in Egypt. To this the viceroy sent word, that "he would come himself, and take his six thousand sub-

jects, and *one man more.*" For the next ten years Mehemet Ali was in arms, ostensibly against the provincial authorities, but in reality against the sultan, who was quite unable to check the progress of his powerful vassal. At length, in 1840, the great powers interfered ; Acre was stormed by the English, and he was obliged to content himself with the hereditary pashalic of Egypt. He continued to enjoy his new dignity till his death, in 1849, when it descended to his grandson Abbas, the present pasha. In his latter years he became very humane ; his activity was incessant. He slept little in the night, and invariably rose before sunrise. He received daily the reports of his ministers, and frequently visited any changes or improvements which were going on in the public works. Although he did not learn to read till his forty-fifth year, he became at last a diligent student of history, especially of the lives of Alexander and Napoleon, and kept up a constant acquaintance with the leading journals of Europe.

In the examples last recorded, we have seen success in life attained, but at a lamentable sacrifice of principle ; let us, therefore, turn from energy and heroism, as displayed on the battle-field, to the same qualities when directed by the hallowing influence of Christian love. All the elements of a true *hero* were found in JOHN WILLIAMS, the "Martyr of Erromanga." For resoluteness of will and fearless intrepidity, he might compare with Murat, Mehemet

Ali, and even Napoleon himself. Like them, he rose by his own exertions from obscurity to a position of true fame, and traced his life in deep characters in the history of the world : but how unlike to theirs the weapons he wielded ! He raised himself to renown by raising others to happiness and religion. His life derives its greatness from the permanent influence it exerted in bringing whole tribes within the pale of civilization, and leading them from the worship of idols to that of the true God. In 1810, we find him serving as an apprentice in an ironmonger's shop. The youth begins a life of usefulness by filling his first situation with credit. He is industrious and ingenious ; besides serving in the shop and learning the *business*, he acquires a knowledge of the manufacture, and, by dint of self-tuition, could at length construct a lock, or hang a bell, as well as a regularly trained workman. But he was not only diligent in business ; to this he added fervency of spirit, and that fear of God which lies at the foundation of a really useful life. In short, while yet a youth, he acknowledged the infinite value of religion, and resolved to give himself up to its promotion. In 1816, when about twenty years of age, we find him accepted as a missionary to the South Sea Islands, whither we will follow him. These islands are situated in the Southern Pacific Ocean, within a few days' sail of California. They were unknown to Europe till 1767, when captain Willis discovered Tahiti, and after him captain Cook

discovered other groups, numbering several hundreds in all. Forty years ago idolatry was universal throughout the islands; the population was thinned by bloody wars, and the people were abandoned to the most licentious practices.

Just before Williams's arrival, the inhabitants of Tahiti had given up the worship of idols, and thus prepared the way for the diffusion of Christianity. He ultimately fixed his residence at Raiatea, one of the largest islands of the Tahitian group, which had often witnessed the immolation of human victims before the idol's shrine. Here he built himself a house, and, intending it to become a model to the natives, he exerted all his skill to render it as complete as possible. It was a handsome edifice, some sixty feet by thirty, with French sashes and Venetian blinds, surrounded with a garden laid out in grass plots and flower beds. The sight of this at once set the natives at work; their one-room dwellings were abandoned, and large commodious houses, on Williams's model, rose on all sides. Among such a number of small islands commercial intercourse was *absolutely* dependent on navigation. Vessels were therefore necessary to civilization and commerce. Hitherto the natives possessed nothing beyond the frail canoe, which was unfit for traffic. Williams had already constructed a ship for the king of Tahiti; he now offered a prize of *nails* to the first native of Raiatea who should build a boat. This was another impulse in the right direction. Sawing and

carpentry went on all over the island ; and they who used to spend their time in slumbering under the shade of their luxuriant trees ; in fishing, sporting, racing, wrestling, or preparing their weapons for the battle-field, were now engaged on useful employments. While houses and ships were thus in progress, the more important interests of religion were not neglected. A place of worship was built, a printing-press set up, the Scriptures translated and published, spelling-books put into the hands of old and young, and in three years three hundred children were able to read the Bible—children who, on the old system, would in all probability have been killed by their own parents. Raiatea soon became the centre of civilization to the neighbouring isles. A chief of Rurutu, with thirty of his people, was driven by a pestilence to seek an asylum at Raiatea ; he heard the missionary, and on his return home collected all his idols, and sent them to the latter as a proof of the sincerity of his conversion. Aitutaki, Mangia, Atiu, Mitiare, and Mauke, were gradually brought under the influence of missionary labour. Everywhere the same process was repeated ; the people destroyed their idols, gave up their licentious practices, exchanged their rude huts for commodious dwellings, with boarded floors, carpets, sofas, etc., and turned their attention to industrial pursuits. It might be said of every island visited by the missionaries, that the “desert rejoiced and blossomed as the rose.” At length

Rarotonga was discovered, one of the largest of the Hervey group of islands. Its population were then sunk to the lowest depths of savage profligacy; but in a few years they had renounced idolatry, polygamy was abolished, a code of laws established, trial by jury instituted, and all this after a full discussion had taken place in an assembly of the natives. In addition to those public improvements, the females were taught to sew, both sexes were decently clothed, and congregations of from two thousand to five thousand were assembled every sabbath.

At length, after an absence of eighteen years, Williams revisited his native land, but only to carry on, under different circumstances, the great cause to which he had devoted his life. The enterprise and activity he had displayed in missionary work abroad were now transferred to its advocacy at home. Tahiti soon became a household word, and thousands of young hearts throughout Britain were taught to beat with emotion on behalf of the natives of the South Sea Isles. By means of the press, the cause of missions was brought under the notice of the highest personages in the state, and a warmer response elicited in its favour than had ever before proceeded from the same quarter. The aldermen and common council of the city of London heard him at Guildhall, on the beneficial influence of the missions in the South Seas upon the progress of commerce and civilization in that part of the world; and so well did he plead his cause, that £500 was

voted to him towards the purchase of a missionary ship. In the ship thus purchased—the Camden—he returned to his beloved sphere of labour, and soon planned still wider schemes of evangelization; but his mortal career was soon to be terminated, though in a way that has thrown around him the halo of martyrdom. He fell in attempting to land teachers on the island of Erromanga, beneath the fatal weapons of the very people whose welfare filled his heart.

In the truest sense of the word, John Williams was a self-elevated man. He began life behind an ironmonger's counter; he ended it in the position of a civilizer and an apostle, attracting the sympathies of the whole church of Christ, and sustained by the prayers and contributions of every Christian land. His name will be remembered with gratitude by the remotest posterity, as one who laid, at the sacrifice of his life, the foundations of government, law, commerce, social well-being, and Christian piety among the countless isles of the Pacific. In future years those islands may become the seat of powerful states; the providential events which seem now, both from the east and west, to converge the rays of civilization towards that part of the world, promise apparently that at no distant time California, Australia, New Zealand, the various Polynesian groups, will occupy an important place in the family of nations. If so, what distinguished honours will crown the memory of Williams and the

other devoted men who first scattered there the seeds of Divine truth, and thus prepared the harvest of future greatness. Williams was a star of the first magnitude; his labours were performed on an eminence which commanded the observation of the whole Christian church; but there have been those who, in a narrower sphere, have risen to an equal elevation in the sublime determination to do good.

Of one honoured individual belonging to this class, we have the noblest monument remaining in those admirable institutions whose object is to evangelize the dense masses of our population. The last twenty years have been pre-eminently distinguished by the interest which has been excited among every section of professing Christians in this country on behalf of the lower classes. The fact of their practical estrangement from Christianity has at length been recognised; the question has been fairly mooted and canvassed, How are these domestic heathens to be brought into the flock of Christ? Various practical answers have been given to this question, but none which have proved of greater efficacy than the establishment of town missions. The extensive influence they are capable of exerting may be inferred from the fact, that during the past year the London City Mission employed in the metropolis and its neighbourhood 270 missionaries, who paid during the same period 1,176,055 visits among the poor, and distributed 15,718 copies of the word of God, and 1,729,478 religious tracts. A very important

and efficient agency of the same character is in existence at Manchester, and very few of the large cities and towns of the empire are altogether unsupplied with this description of Christian labour. In connexion with City Missions, we may mention the "Young Men's Associations," which are doing so much good in our larger centres of business; "Christian Instruction Societies," also, and the employment of "Scripture Readers," have a similar object, and may be referred to the same origin.

The joint results of these agencies, as bearing upon the evangelization of our beloved country, must be of incalculable value, and are sufficient to crown with the highest honours the individual who first brought them into existence. Such honour is due to the humble name of DAVID NASMITH, one of the most warm-hearted and successful philanthropists of the present century. He was born at Glasgow, in the year 1799. His friends intended sending him to the university, but his natural inaptitude for languages led them to change their design, and put him to business. Early brought to a knowledge of the truth, he early gave indications of the earnestness and fervour of his piety. When only fourteen years of age, he assisted in the formation of a Youths' Bible Association. As he drew towards manhood, he had a strong desire to enter the Christian ministry, but from this he was dissuaded by his friends. His anxiety to do good, however, could not be restrained within the limits of a business life, and

in 1821 he accepted the post of secretary to a union of various benevolent societies in Glasgow. While in this situation, he established the Glasgow City Mission, and in 1828 set out with the design of establishing similar institutions elsewhere. From that time till his death, which took place in 1839, his labours were incessant. Depending upon the kindness of friends for support, he went from place to place throughout this kingdom and the United States, and some districts of France, endeavouring everywhere to stir up the energies of the Christian church to active conflict with the mass of wickedness around. In this holy work he moved far above the region of sectarian strife. Of a truly catholic spirit, loving all who loved Christ, it was with difficulty that his own peculiar views could be discovered, and when he died, the whole Christian church mourned for him as a common loss. But the death of such a man is no tragedy; it is not a sun set in darkness and blood; we experience, on beholding it, no such feelings as those which start into the bosom when we hear the discharge of musketry which terminates the adventurous career of a Murat, or stand by the death-bed of the once powerful ruler of Egypt; softer emotions rule us; the voice which John heard pronouncing, "Blessed are the dead which die in the Lord," seems to speak to us in the language of our sacred poet:—

"Weep no more,
For Lycidas, your sorrow, is not dead,
Sunk though he be beneath the wat'ry floor :

So sinks the day-star in the ocean bed,
 And yet anon repairs his drooping head,
 And tricks his beams, and with new spangled ore,
 Flames in the forehead of the morning sky.

* * * * *
 There entertain him all the saints above,
 In solemn troops and sweet societies,
 That sing, and singing in their glory move,
 And wipe the tears for ever from their eyes."

In contemplating the career of individuals who have been pre-eminent for their philanthropy, we become aware of the existence of moral qualities which do not belong peculiarly to any particular species of elevation, not even to philanthropy, but are capable of imparting the purest lustre alike to all the pursuits of life. In Williams's character we see one resplendent attribute—love, love to God and man—love subduing every contrary sentiment, and combining all the energies of the soul in prosecuting the career marked out for it by its pure and benevolent sympathies. This high impulse is more comprehensive than mere philanthropy; it includes a devout and child-like affection for God, and pursues its ends, not merely because they harmonize with the dictates of human kindness, but because they are agreeable to his revealed will. The love which shines pre-eminently in Christian philanthropy is rooted in principle, and flows from that change of heart which must be experienced by all who would enter into the kingdom of heaven; and hence it ought to be found in every man, whatever his station or pursuits. All too are invited to obtain it, for God has promised to grant his Holy Spirit to them that

ask for it. It is not every one, perhaps, who can become a successful merchant, or engineer, or inventor, or artist, or poet ; but every one, by the grace which God has promised to give to those who rightly seek it, may become what is better still—a Christian, and the Christian is the highest style of man, being formed on the model of Christ, the Lord from heaven. In Christ, philanthropy becomes sublime. He was rich, yet for our sakes he became poor, that we through his poverty might be made rich. Sin had made us the victims of guilty fear, and rendered it impossible for us to love God or perfectly to love each other. By his atoning death, Christ made satisfaction for sin, while by his Holy Spirit he applies that atonement to the believing penitent. Thus he breaks the fetters of slavish fear, and brings us to see and feel the love of God towards us ; winning our hearts to him, and enabling them to glow with reflected ardour towards mankind. His atonement lies at the basis of our moral elevation, and moral elevation after all is that which alone is worthy of the name.

CHAPTER VIII.

HABITS OF READING AND OBSERVATION, AS THE MEANS
OF SOCIAL ELEVATION.

THE following suggestions, partly taken from a work upon "Success in Life," published in America, are introduced here as being calculated to impress upon young men, especially on those engaged in mechanical pursuits, the important aid which may be rendered to them in their attempts at self-advancement, by habits of reading and careful observation:—

"It has been said, that a 'self-taught man is more likely to produce useful and original ideas, than one who gathers his knowledge from books.' This may be the case where the memory is crammed from infancy with the ideas of others; the mind thus becomes like a field sown with foreign seed, having no room for plants which are indigenous. But the man of genius needs, of all others, to know what has been said and done. A mechanic, for example, may spend years in endeavouring to invent or bring to perfection some machine which has been already invented and in a great degree nearly perfected.

"Every young mechanic in our country can

find time for reading and study. Books, too, he may have with little trouble. The difficulty now is, that books abound, and from being too easily obtained, are not sufficiently valued, nor carefully and judiciously selected. Judiciously selected! Ay—that is it. The young mechanic who reads for mere amusement, who chooses only bad books—better far were it for him had he never learned to read. The poison which he thus takes into his system will destroy every germ in his character, which might otherwise render him a good and useful man. Many useful societies in our cities and towns furnish other means for mental improvement. Lectures from men of science, and literature, and experiments in natural philosophy are often exhibited, of great practical value to the young mechanic. Classes are frequently connected with these societies, in which familiarity with language and habits of reasoning are acquired. In short, every young man in our country who earnestly wishes to become a well-informed reading man, can do so. He might almost pick up learning in the streets, so busy is the printing-press in sending out means.

“But no man, young or old, ought to be reading when duty demands occupation of another kind. Books, however, furnish food for thought; while the hands are occupied, reflection upon what has been read or heard will fix knowledge permanently and render it available.

“Read, however, *for a purpose*, if you would make reading available. Read all the books

which will give a better knowledge of your trade. Learn everything with regard to the materials for mechanical operations, and the best modes of using them. Like Franklin, be careful of small sums of money, that you may be collecting a useful library of books of reference.

“A love of reading, when it does not become a dissipation, is one of the surest safeguards from vice, perhaps the surest, with the exception of religious principles. It is a resource amidst the trials and strife of middle life, and a sweet solace for old age.”

Mechanics in their workshops have often made valuable discoveries, by simply observing what was going on under their eyes. To this we undoubtedly owe the first suggestion respecting the telescope. Small spheres of crystal or glass had been used by the ancient engravers of gems, to aid their sight; and the transition from these to convex lenses was made by Salvini Armati, at Florence, in 1285. Subsequently, it is reported, a person casually looking through two of these lenses, in the shop of a spectacle maker, found the building to which he directed his eye brought within a short distance of the spot where he stood.—Iodine was discovered in this incidental way, not, however, without keen and judicious observation and reflection. A soap-boiler observed that the residuum of the ley from which was extracted the alkali used in the manufacture of soap, produced a corrosion of

his copper boiler—a circumstance for which he could not account. He put it into the hands of a scientific chemist, who analysed it, and by this means discovered the beautiful element to which we have referred. This being made the subject of further observation and experiment, many interesting facts and principles were discovered, which have exerted a great influence upon chemical science; in fact, given a new impulse and direction to its investigation. It was recollected that the ley for making soap was derived principally from the ashes of sea-plants, and here, consequently, the origin of iodine was discovered. It was also found in salt water, salt mines, and springs, sponges, and other substances of a marine origin.—Galileo discovered the isochronism of the pendulum (a simple affair, but one of great importance in dynamical science,) by observing the regular swinging of a large lamp in an old cathedral church.—The polarization of light first revealed itself to Malus, in the absence of a figure in the painted window of the palace of the Luxembourg, as he casually looked at it one evening through a doubly refracting prism, while the rays of the setting sun were streaming through the panes.

Many persons imagine that they can make no progress in scientific observation, without extensive attainments in mathematics, and the use of philosophical instruments and chemical apparatus. These, doubtless, are important helps to observation; they widen its range and

test its accuracy. Yet much can be done without them. Indeed, there is no situation in which the capacity for observation cannot be gratified with the most satisfactory results. Nature, indeed, has often to be forced by means of experiment, like the subtle and changeable Proteus, to declare her secrets ; yet her great features are open to all, and invite their study. The barren heath, with its mosses, lichens, and insects, its stunted shrubs and pale flowers, becomes a paradise under the eye of observation. To the genuine thinker, the sandy beach and the arid wild are full of wonders, indicating the presence and power of the all-pervading Deity. The bare cliff, which has borne the storms of innumerable winters, glows with living interest under his fixed and ardent gaze. Shut him up in a dungeon, and he will find pleasure and profit in making the acquaintance of spiders and flies, and in studying their habits and history. Confine him to the house, and the light streaming in at the windows, the fresh dew gathering upon the cold tumbler, the steam pouring from the teapurn, the rays shooting like the innumerable radii from the burning lamp, supply ample materials for philosophical examination.

The valuable results flowing from these habits of reading and observation are most happily illustrated in the life of the inventor of the modern steam-engine :—"A young man," (says a writer,) "wanting to sell spectacles in London, petitions the corporation to allow

him to open a little shop, without paying the fees of freedom, and he is refused. He goes to Glasgow, and the corporation refuse him there. He makes acquaintance with some members of the university, who find him very intelligent, and permit him to open his shop within their walls. He does not sell spectacles and magic lanterns enough to occupy all his time; he occupies himself at intervals in taking asunder and remaking all the machines he can come at. He finds that there are books on mechanics written in foreign languages; he borrows a dictionary, and learns those languages to read those books. The university people wonder at him, and are fond of dropping into his little room in the evenings, to tell him what they are doing, and to look at the queer instruments he constructs. A machine in the university collection wants repairing, and he is employed. He makes it a new machine. The steam-engine is constructed; and the giant mind of Watt stands out before the world—the author of the industrial supremacy of this country, the herald of a new force in civilization. But was Watt educated? Where was he educated? At his own workshop, and in the best manner. *Watt learned Latin when he wanted it for his business. He learned French and German; but these things were tools, not ends. He used them to promote his engineering plans, as he used lathes and levers.*"

CONCLUSION.

It is unnecessary in closing this small volume to trouble the reader with any lengthened reflections. We trust the various instances of success which have passed in review will have attained the threefold object which we purposed in setting out, namely, to show by example the means by which success is to be gained; to stimulate the energies of the reader to become, if possible, successful himself; and to show the comparative value of those pursuits in which it is usually sought. If this object has been gained, our end is answered. In every pursuit, the quality of first importance is *energy*, the second is discretion; the first is the motive power, the second is the engineer, controlling its wild impulses and giving it a right direction. But these qualities are both dependent on moral principle. That energy is mightiest which springs from a lofty sense of duty, and that discretion is the wisest which is supplied by the holy fear and love of God. This is the highest spring of action, and wherever that is found, all will work well. Whatever an individual's business may be, it will be permeated in every part

by heavenly piety; a desire to succeed will never degenerate into selfishness, and the enjoyment of earthly honours will never eclipse that incorruptible inheritance which is reserved in heaven; while in some minds, specially prepared by the Divine Spirit, Christian philanthropy will assume an absolute control—become, as in Howard, itself the grand business of life, and pour, as if from heaven, new streams of glory on the world. Let not the reader put aside these examples and remarks without turning them to advantage. One important lesson they teach which is embodied in the word—Work!—"Whatsoever thy hands findeth to do, do it with thy MIGHT." But let this be the rule of thy working: Seek first of all the kingdom of God and his righteousness remembering that all things needful for happiness shall be added to those who do so, and that He who gains a crown of glory which never fades away, and who is admitted to the participation of pleasures which eye hath not seen and ear hath not heard, is after all the truly successful man.

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