THE

AMERICAN MECHANIC

AND

WORKING-MAN.

BY JAMES W. ALEXANDER.

IN TWO VOLUMES.

VOL. I.

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PREFACE.

It is now some years since these unpretending volumes were first published, under the somewhat whimsical name of Charles Quill. The truth is, this was no more than a signature adopted in writing for a newspaper, and the title had become familiar to the class of persons whose benefit was sought. Besides, the author doubted whether the name of a clergyman would add any currency to lucubrations on such a subject.

To the great surprise of the writer, the books met with a ready sale, and the earlier one, at least, passed through three editions. It is no more than justice to say, that they owed much of their favour with the public to the valuable journal in which they at first appeared, and to its editor, Mr. William B. Kinney. That they never became part of the current of literature, is not to be wonder-

ed at: it is believed that they were not lost upon those for whom they were intended.

In offering a revised edition, the author begs leave to say once more, that his purpose will be answered, if these little volumes shall be read with pleasure in the shop of the mechanic, during intervals of labour, or in the evening when work is over. As the title shows, this is an offering to the working-man. The apprentice, the journeyman, and the master-mechanic will here find recreation and perhaps improvement. But it aims not so much at systematic instruction, as to quicken, to cheer, and to amuse.

It is no part of the plan of the work to bring down every thing to the level of the meanest capacity. Were this attempted, it would be lost upon the stupid and ignorant; while to persons of sense and improvement, all that is said will be clear enough, without any such degradation of the style. Even children are offended with the extreme of forced simplicity; especially as some of them know that if they never hear a hard word, they will never get beyond the easy ones. All

our knowledge is gained by mingling things yet unknown with such as are known already. It is thus we learn both to talk and to read. To attempt nothing but what is known, is to shun the water till one has learned to swim. In this persuasion, the author has not scrupled to introduce some things for the special benefit of more advanced readers; as, for example, the short essays on the cultivation of memory. For the same reason, a pretty free use has been made of the stores of English poetry. The working-man, no less than others, has a right to these treasures of his mother tongue, and may enjoy them with the greater freedom, as they require no previous scientific training to make them intelligible.

If, unhappily, the book should fall into the hands of any exceedingly grave critics, of such 'vinegar aspect', as to be scandalized by its occasional playfulness, the author will endeavour to be more staid in his future labours; remembering Boswell's famous anecdote. It is related of the great Dr. Clarke, that when in one of his leisure hours he was

unbending himself with a few friends in the most playful and frolicsome manner, he observed Beau Nash approaching, upon which he suddenly stopped;—"My boys (said he) let us be grave; here comes a fool."

Every page has been written with a most serious intent, and with a wish to see American working-men elevated in their own esteem, as the surest method towards their elevation in the esteem of others. Men who have so large a share in the government of the country, and who, from their facilities of intercourse, act so much in masses, deserve special attention from the philosopher and the statesman. Let the reader of these pages consider himself as in every sentence addressed by a hearty friend; for they have been thrown before the public with warm wishes in behalf of those whom the author seeks as his readers. They are therefore DEDICATED TO THE MASTER-WORKMEN, JOURNEYMEN, AND APPRENTICES OF AMERICA, by their wellwisher,

J. W. A.

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THE

AMERICAN MECHANIC.

I.

THE MECHANIC'S PLEASURES.

Ours is not the country where one may sneer at the "mechanic." Demagogues know this; and the same agitators who would spurn the "unwashed artificer," if met in some old despotic realm, find it to be their true policy to flatter and cajole him here. This is no part of *my* business. I respect honest labour, though it be in the black man who saws my wood; and, so far as I can learn, my ancestors have been working men so long that "the memory of man runneth not to the contrary." Though the motto of William of Wickham is no longer good English, it is good sense still—MANNERS MAKETH MAN. Wherever the demeanour and life of a man are good, let me get as near to him as he will allow, that I may

take his hand, though it be as black and hardened as his anvil.

I am ready to maintain that the American mechanic has no reason to envy any man on earth. "Happy, happy men!" as an old poet says, "if they could appreciate their own felicity!"

Has the mechanic no *pleasures?* Let us see: and in order to see better, let me use some illustrations. There is a shop near my lodgings; and I never yet saw the shop in which there was not something to be learned. In this one there is evidence enough that working men may have cheap and abundant pleasures. Without going so far as to state, what I believe firmly, that to the industrious man *labour is pleasure*, I beg leave to introduce ARTHUR KIP. This young man is a plain cooper, and lives on the extremity of a street which I pass daily. He is in his shop as early as his earliest neighbour, yet I sometimes see him busy a good half hour before he is in his shop. What is Arthur about in the grey of the morning? I will tell you. He has been setting out rows of elms around the whole border of his little lot. For you must know that he is content to live in a very uncomfortable house, in order to forward his business and prepare his grounds, so as to "make a fair start," as he calls it. He has told me that he was induced to do

this by a maxim of an ancient king: "Prepare thy work *without*, and make it fit for thyself in the field, and *afterwards build thy house.*" It does one good to see Arthur among his trees; he sings cheerily over his spade and hatchet, long before the sun is up. "These saplings," says he, "will be noble branching trees over the heads of my children; and if little Tom should be a rich man thirty years hence, he will have a grove which all the money of the aristocrats in England could not cause to spring up." In this he agreed well with the laird of Dumbiedikes, who is known to have said on his death-bed to his son and heir: "Jock, when ye hae naething else to do, ye may be aye sticking in a tree; *it will be growing, Jock, when ye're sleeping.*"

Arthur has a garden also. His rule is, "first for *use;* next for *show.*" So he has most of his ground in substantial vegetables for the table; but a very goodly portion, I assure you, in choice flowers. Why should he not? God has given the poor man these gems of the earth with a bounteous profusion; and Ellen Kip and little Tom will love Arthur and one another all the better for dwelling among the lustre and fragrance of tulips and violets.

In these bright spring evenings, I take a walk about the time that this little household comes

together after work. No tavern has yet become Ellen's rival; her husband spends not only his nights, but his evenings, *at home*. Or, if he goes abroad, it is in the old-fashioned way: I mean he takes his wife and his boy along. At this hour I am always sure of witnessing another of the mechanic's pleasures. Arthur and Ellen are natives of a state where young folks are taught to sing: they have already begun to bring up little Tom in the same way. They carry a tune in several parts; for Arthur is no mean performer on the violin, and Ellen sings a soprano part to her husband's base. The neighbours are beginning to find their way out, since the spring weather has unclosed doors and windows, and there are some signs of a little musical association.

Some of the best musical talent in America is among our mechanics; and it is sad that they are so slow to discover the exquisite satisfaction which they might derive from this innocent recreation. It soothes the troubled mind; it breaks the thread of vexing thoughts; it prepares the affections for every good impression; it affords a healthful excitement; it knits families together by gentlest bands; and it makes a paradise of *home*.

What mechanic is there who may not command these pleasures? What pleasures of the

bar-room, the circus, the gaming-table, the theatre, are equal to these in purity and genuine content? I am sure I shall have the right answer—if not from mechanics, at least from their wives. But for fear of being prolix, I reserve some other pleasures for a future paper.

II.

WHAT WILL YOU HAVE?

After a day's work of calculation and copying, I was under the mortifying necessity of waiting an hour in the tap-room of a low tavern, to secure the services of a mail-guard, who was to carry a parcel for my employers. Amidst the smoke, the spitting, and the clatter of a crowd of inn-haunters, I could not but find some subjects for reflection.

The presiding genius of the bar was a bloated, carbuncled, whiskered young man, whom I had long known as the abandoned son of a deceased friend. I sighed and was silent. Ever and anon as one after another, or squads of two, three or more, approached his shrine, to receive and empty their glasses, and deposit their sixpences, I heard the short, peremptory formula of the Bacchanal minister—"*What will you have?*—brandy? gin? punch? *What will you have?*" And the victims severally made their bids, for a smaller, a cocktail, a sling, or a julep, as the case might be. The constant repetition of "the form

in that case made and provided," set me upon a drowsy meditation on the pregnant question *What will you have?* "Methinks I can answer the question," said I to myself, as I cast a glance around the murky apartment. And first to the young shoemaker, who, with a pair of newly finished boots, is asking for "grog." What will you have? Young man, you will soon have *an empty pocket.*

There is a trembling, ragged man, with livid spots under the eyes. He is a machine-maker, and has lodgings in the house. What will you have? Ah! the bar-keeper knows without an answer: he takes gin and water. Poor man! I also know what you will have. Already you have been twice at death's door; and the gin will not drive off that chill.—You will have *typhus fever.*

There comes my neighbour the bookbinder. His hand shakes as he raises his full glass. Ah, Shannon!—I dread to say it—but you will have the *palsy.*

The glasses are washed out, not cleansed, in the slop-tub under the bar-shelf. Now a fresh bevy comes up, cigar in hand. Gentlemen, what will you have? I choose to supply the answer for myself; thus: The baker there will have an *apoplexy* or a *sudden fall* in his shop. That tailor

in green glasses will have, or rather has already, a *consumption.* And I fear the three idlers in their train will have the next epidemic that shall sweep off our refuse drunkards.

But what will that man have who leans over the table, seeming to pore over the last "Herald"? He is scarcely resolved what he shall drink, or whether he shall drink at all. I understand the language of his motions; he is a renegade from the Temperance ranks. He has borrowed money this week. John, you will have *lodgings in a jail.*

Sorry indeed am I to see in this den Mr. Scantling, the cooper. Not to speak of himself, I have reason to believe that both his grown sons are beginning to drink. He looks about him suspiciously. Now he has plucked up courage. He takes whisky. You will have a pair of *drunken sons.*

That young fellow in the green frock coat and coloured neckcloth, is a musician, a man of reading, and the husband of a lovely English woman. He takes his glass with the air of a Greek drinking hemlock. You will have a *heart-broken wife.*

What! is that lad of fifteen going to the bar! He is: and he tosses off his Cogniac with an air. You will have an *early death.*

The old man that totters out of the door has

doubtless come hither to drown his grief. His last son has died in prison, from the effects of a brawl in the theatre. The father has looked unutterable anguish every sober moment for two years. Wretched old man! You will have the *halter of a suicide.*

I must take the rest in mass, for it is Saturday night, and the throng increases. The bar-keeper has an assistant, in the person of a pale, sorrowful girl. Two voices now reiterate the challenge: *What will you have? What will you have?*

Misguided friends, I am greatly afraid you will all have a *death-bed without hope.*

My man has arrived. I must go; glad to escape to purer air: and still the parrot-note resounds in my ears, *What will you have?* You will have—to sum up all—you will have a *terrible judgment* and an *eternity of such retribution as befits your life.*

As I walked home across the common, I thought thus: "And what will he have, who, day after day, and month after month, and year after year, doles out the devil's bounty to his recruits; and receives his sixpences, as it were, over the coffin of his victims? You, to say the least, hardened tempter, (if memory live hereafter) will have the recollection of your triumphs, and the vision of their eternal results."

III.

THE MECHANIC'S REVERSE.

Reverses of fortune befall all men, and a sudden one befell Joseph Lewis. He had entered on a lucrative handicraft business with more capital than often comes to the hand of a cabinet-maker, such as he was; and, like a true-born American, who is never willing to let anybody get above him as long as he is able to rise, he shone out in a style of equipage, dress, and living, which was almost aristocratical. His chaise and horse, his marble mantel, his greyhound, his Joe Manton, his pointer, his dinner-service — all savoured of Bond street or St. Mark's place Was he happy? He ought to have been so. A quiet, beautiful wife; a child such as Titania might have stolen; a full warehouse and a full pocket; are just the things to make a young man happy. So flushed was Joseph with success and hope, that he could not find vent for his exuberant satisfaction alone, or on cold water; he invited frequent groups to late dinners; he opened bottles

of Hock and Sauterne; he imported his own Parmesan.

I met Joseph in Broadway. He had come to town to make preparations for a ball. Was he happy? Ah! you must answer that yourself. He was abundantly *fine*—too fine for a gentleman; he was as smart as a barber on Sunday evening, or a wedding journeyman. His hat was a St. John; his mosaic pin was Baldwin's richest Tuscany; his whole manner was that of high fashion, save that it was all too full of a certain consciousness. And then he did *so* blush when a brother chip passed us; and his eye sparkled with the glimmer, not of serene joy, but of unaccustomed wine.

That day fortnight Joseph Lewis became insolvent. What a reverse! But stay—was he ruined? By no means. Let me bring forward another personage, thus far a mute in the scene. His wife threw her arms more passionately around his neck, on that evening, than ever before. Was Joseph now unhappy? His great house and useless stables were soon cleared. Finding himself a poor man, he began life at a new corner. *He* began, did I say?—No, *she* began; *Mary Lewis* began, not to assume the husband's place, but to fill her own. She sang a sweeter song after his frugal evening meal, than

had ever echoed over his sumptuous dinner from New York parasites, or stage-struck clerks. Is he unhappy? Let us see: he has neither carriage nor wines, but he has his hands full of work, and his two yellow-haired girls sit on his knee in the hour which he used to spend at the theatre. He has no cards; he gives no concerts; but he rests more sweetly at night; and he and Mary make good music on the guitar and flute, accompanying very passable voices. Last week I met him again. He was carrying home a picture which he had been framing. One blush—and then a hearty shake of my hand, and "O Charles! come and see us—we are rich enough to give you a good cup of tea—and my wife and children will be too much rejoiced to meet you."

I went, and found him quiet, healthful, self-possessed, temperate, domestic; amidst a lovely home-circle; with music, books, a few philosophical instruments; living within his means: in a great reverse, but never so happy before.

The ancient philosophers spent a good part of their time in studying out rules by which men might sustain themselves under the changes of fortune. I have read many of these in my younger days. In none of them do I find any allusion to two things which I now regard as the

most indispensable in every such discussion: I mean domestic life and religion—the hearth and the altar. For when both sources of comfort are united in a gently pious wife, the working man who has this treasure, has that which in a reverse is more precious than rubies.

IV.

THE MECHANIC'S PLEASURES.—No. 2.

George Brown is a shoemaker in this village. He grew up from a pale apprentice, into a still paler journeyman, with little prospect of long life. After being several times very low with coughs, he was supposed to have fallen into a consumption; and when I came to inquire into the case, I found that the physician had ordered him to seek a southern climate. It was not until the spring of 1835, when Brown returned from New Orleans, florid and robust, that I discovered what it was that had impaired his health. The fact was, he had become a great reader, and had most imprudently sat up a third part of his nights, studying such books as he could beg, borrow, or buy.

Those who have acquired no taste for learning will not believe me when I say, that there is scarcely a passion felt by man which is more powerful than the *thirst for knowledge*. It has slain its thousands; and it came near slaying George Brown. Why do I mention this? Cer-

tainly not to lead any promising apprentice into the like snare; but simply to show that those mistake egregiously who think there is no pleasure in reading and study.

George Brown loved knowledge as much as ever, on his return from a residence of two years in the South; but he had learned wisdom from experience. I have a little collection of good books, and by frequent lending, I had gained George's confidence. He let me into his plans. He now works with a thriving boot-maker, and is said to be one of his best hands; and he is as different from his fellows in the shop, as young Ben Franklin was from his fellow printers. Wherein are they unlike? Not in mere labour, for George's hammer, awl, and lapstone are plied as briskly as theirs; the difference is all out of shop. While they are careering through the streets, arm in arm, puffing tobacco smoke, smiting the pavement with their cudgels; or even worse, hanging about tavern doors, or playing at "all fours" with a greasy pack, or doing overwork in the nine-pin alley, George Brown is dividing his spare time between two things, *reading* and *recreation*.

In summer, he takes a good long walk, or he strays along the river bank, or he joins a party of quiet friends, until he feels the labour of the day to be half forgotten. Then, after a thorough cold

bath, which he learned in the South to be worth more than a whole medicine chest, he sits down to his books. True, he never gets more than an hour a day for reading, and often not ten minutes: but what of that? "Does not the jeweller," says he, "save the smallest filings of his gold?" *Time is gold.* Every little helps. Constant dropping wears away rocks. Take care of the minutes; the hours will take care of themselves. Never throw away an instant. These are maxims which he has laid up for life. And the young man who acts on these will never fail to be a scholar.

George Brown is as happy as the day is long. Being the best reader in the shop, he is, by common consent, permitted to read aloud from the newspaper and the Penny Magazine. The boys will laugh at him for a book-worm, and a parson, and so forth; but George smiles knowingly, and says, "Let them laugh that win!" While he labours with his hands, he is often turning over in his mind what he has read the night before. Some of his evenings are spent in taking lessons from an accomplished gentleman who instructs a class of young men; and others in hearing philosophical lectures at a neighbouring Lyceum.

He has not a novel or a play-book on his shelves. These he calls the *champagne* of reading; pleasant to take, but leaving you uneasy.

He is fond of history and travels: and books are now so cheap that he has more than fifty volumes. He showed me the Bible in several forms; Josephus; Tytler's History; Plutarch's Lives; Ramsey's United States; Mackintosh's England; Edwards's Lives of Self-Taught Men; The Library of Entertaining Knowledge; the Rambler; the Spectator; Milton, Thomson, Cowper, and Wordsworth; and others of which I do not remember the titles.

Here is another of the mechanic's pleasures. And I am sure all who ever tried it, will agree that it is the best of the three. I hope, before long, to go into this subject more at large, in order to encourage the reader to enter a new field. It lies invitingly open to every young man who is willing to enjoy it. These fruits hang near the ground; if the tree is hard to climb, it is only until you reach the first boughs. Young mechanics! take a friend's advice, and TRY.

V.

THE MECHANIC'S SOCIAL PLEASURES.

When any man's business grows so fast as to stand in the way of his being neighbourly, you may lay it down as a rule that it grows *too fast.* This is true of every sort of labour, whether of the mind or the body. We were not made to be unsocial, sullen, independent machines, but to love and help one another. "He that is a friend must *show* himself friendly;" and this is to be done by a pleasant and frequent intercourse with acquaintances and neighbours.

No wealth, nor power, nor selfish pleasure, can ever compensate for the absence of kindly intercourse. Working men may work so hard as to work out their best native propensities. In our haste to make money, let us look to it that we do not lose what no money can buy—true friendship.

The tendency to form friendly connexions and cultivate associations is so strong, that where it has not a good outlet, it will find a bad one. If a young man is not allowed to enjoy company at home, he will enjoy it at the tavern, or some

worse place. I find it in my heart to honour that principle of our nature which abhors a vacuum, and cries out that it is not good for man to be alone. The parent, the teacher, and the employer, in proportion as they seek the welfare of the youth under their care, will try to afford healthful exercise to the social principle.

Let me ask old housekeepers, whether amidst the great improvements of the times, there is not a change for the worse in our domestic and social intercourse. How did this matter stand some thirty years ago? Much as follows. John Den and Richard Fen, when they established themselves in this village, were both lately married, and had little families gathering like olive branches round their tables. They had worked in the same shop, and they remembered it. They had been apprentices *of the old stamp*, labouring a good seven years, and making six working days in every week. They knew one another thoroughly, and kept up a friendly communication. Scarcely a day passed in which John was not in Richard's shop, or Richard in John's: and Mrs. Den and Mrs. Fen ran across to one another often half a dozen times in a day. Their children grew up as friends, and once every week they made a joint concern, and took tea together. There was then but one grog house in the village, and neither

of these men was ever seen in it, except when Richard had occasion to go thither in his capacity of constable. It was a pleasant way of life. The little circle increased; and other families quietly fell into the same arrangements; so that, as I well remember, you could scarcely ever sit an hour of a summer's evening, in the house of any one of these mechanics, without witnessing the friendly entrance of a number of the neighbours. They did one another good, and their friendships, however humble, were comparatively pure.

But how does this matter stand now? Much as follows. John Den and Richard Fen are dead and gone. In their place there are Dens and Fens, and husbands of Dens and Fens—enough to people a town in Illinois. Business is driven on in double quick time. George Washington Den has more journeymen this moment than his good father ever had in all his life. Napoleon Fen makes more money in one year than old Richard ever possessed. Meet these men where you will, and you will find them in a hurry. They are rushing forward, and can no more pause than can a railroad car. Their social intercourse is hasty, fitful, irregular, unsatisfactory, and feverish. Their earnings are spent at political meetings, at Trades' Unions, at entertainments, at taverns—in short, anywhere but *at home*.

Their sons and daughters are very fine, and gay, and to a certain degree polished; but they are growing up in total ignorance of that old-fashioned, wholesome, serene, and profitable intercourse, which gave to their parents an unwrinkled old age.

What is to be done? I think the remedy is obvious; but I fear most will resist it. *We must return to simplicity of manners.* We must cease to live so fast. We must take a little breath, and persuade ourselves that there are other and higher purposes to which hours may be devoted, than the earning of so many dollars and cents. It is poor economy of life to lay out all our time on mere gain, when by so doing we actually bid fair to make life not only shorter but less sweet.

Among the thousand evils of our unreformed taverns, it is not the least, that every one of them is the rival of some score of firesides. The real competition is between the bar-room and the sitting-room. License a new tavern, and you dig a sluice which draws off just so much from domestic comfort. Write it down—for it is true—whenever you see a young man standing much on tavern steps or porch, you see one who has little thrift, and who will die poor, even if he do not die drunk.

It is the great error of many parents to discour age evening visits between their own children and those of their neighbours. What is the consequence? The young men *will* and *must* have company. If they are frowned on at home, they will spend their evenings abroad. And as no youth can very freely visit young companions whom he is not allowed to entertain in return, the young men of these churlish families will be found at the bar-room. Here is a wide sluice prepared for intemperance and vice. Already, in some towns, *all the associations of working men are in the streets or in public places.* The evil cries aloud for speedy reformation. Who will set the example?

VI.

THE MECHANIC'S GARDEN.

In the garden the mechanic finds a sort of relief from his toils of mind, which he can nowhere else find so cheaply. Let it not be thought strange that I speak of toils of *mind*. Every physician knows that it is the jaded soul, no less than the jaded body, which brings to his office the pale and tremulous working man. This may be seen in comparing different trades. The house carpenter, who works here and there, in every variety of situation, and most of all in the open air or the well-ventilated shed, shows a very different complexion from the tailor, the shoemaker, or the printer, who tasks himself from morning till night in the same spot. No man is called upon to spend all his hours at one sort of work. He who does so, works too much, and injures both mind and body. We all need elbow-room, resting-places, and breathing-spells, in every part of the journey of life.

It is often asked why we have so few good musicians among the mechanics of this country

One reason is, that they allow themselves so little time. From morning until night, it is hurry, hurry, hurry! Few men ever accomplished more than John Wesley, and his motto was, *Always in haste, but never in a hurry.* It is good to go out of doors sometimes, if it were only to cool down this American fever of the blood.

You are in too great a hurry to be rich, or you could take an hour before breakfast, and an hour after tea, for the purpose of healthful recreation; besides a good quiet hour in the middle of the day for absolute rest, including your principal meal.

"Ay, but I am already behindhand, and I must husband every moment to bring up arrears."

Perhaps so: and this is only an evidence of bad management somewhere, in time past. Necessity has no law; but you ought to plan such a life as, by the blessing of Providence, may keep the wolf away from the door, and not leave you the prey of urgent necessity. You have already lost days by ill health; and this ill health was brought on by neglect of the laws of your animal economy; and one of these fundamental laws is, that a machine always running in gear, and never oiled or refitted, must go to pieces. Take your spade and hoe and rake, and come with me into the garden.

"I have no garden."

No garden! why, what is that little enclosure which I see behind your house?

"O, it was once a garden—but—but—"

Yes, I see how it is; it was once a garden, but you have made it a rubbish-heap. See there, your cow is actually devouring a row of good spinach, this instant. Yes, yes—where your garden should be, you have a vile hog-stye; and there is your ley-tub dripping away in the prettiest corner of your court-yard.

"Why, to be sure, we have let matters go rather at sixes and sevens back here; my wood and coal are thrown over the fence, and we have chopped our fuel in the old garden path; but then nobody ever comes to see this part of the establishment."

Surely, your wife and children see it; you see it yourself: I am afraid you would never wash your face if no one were to see you. This will never do. Take your spade and come out of this stupor.

"To tell you the truth, I have no spade!"

The more shame for you! Then throw off that apron, and go with me to the hardware shop, and I will pick you a good one, and we will get Barney to sharpen it, and go to work.

"I feel weary and dull—I have a headache

from leaning over my work so long; I am not fit to dig."

Yes, you *are* dull enough; and duller yet you will be, unless you amend your ways. Your skin is dry and sallow; your eyes are heavy; you are getting a sad stoop in your shoulders; you are not the active, cheerful man you once were. In fact you are this moment ten years older than you have any right to be.

"I know it—I know it! My wife has said so every day for a twelvemonth. I know it—but what can I do? I have eaten half a hundred of bran bread; I have taken three boxes of pills."

Miserable man! I wonder you are not in your coffin! Throw your bran bread and your pills into the swill pail.

"But, dear sir, what must I do?"

Do! Take your spade, as I have been telling you. Here, I will show you how to begin. You have a very decent lot there; only it has seven or eight boards off the fence.

"Yes, they have been coming off all winter."

Surprising! and you have slept over it all this time! Here, John! Jacob! Call out your apprentices for five minutes. Let me take the command.—Bill can stay and have an eye to customers. John, run to Mr. Deal's for his saw. Jacob, pull out that pile of old boards from under

the wheelbarrow. I'll take my coat off, and if your strength allows, perhaps you had better take yours off too. We shall have this breach stopped in ten minutes, if you can produce a hand ful of nails.

"Well, Mr. Quill, I really never thought of this way before!"

I should like to know what other way there is! "Off coat, and at it," is the only way I am acquainted with.

"Now you have the fence up, what next?"

Clear off this rubbish. Rake together these stalks of last year's weeds, and burn them. Gather out the thousand and one sticks, and stones, and old shoes. Get a bit of old cord and mark out some walks. Furnish yourself with tools, and begin to-morrow morning by sunrise to dig up the ground. I will be ready to give you seeds and plants; and by this day week, my word for it, you will show some circulation in your wan cheeks, and not look so black under the eyes. The only pity is, that you should not have had your peas and beans in ten days ago: but better late than never.

When God made man, he placed in his hand the spade and pruning-hook. When God restored man to the beautiful earth, after the flood, he promised not to curse the ground any more,

and to give seed-time and harvest as duly as day and night. When God spake to man, he condescended to use the language of the gardener; for the gentlest invitations and incitements of Holy Writ come to us breathing the odours of the "rose of Sharon," the "fig-tree and the vine," and the "lily of the valleys." And I am fain to believe that in the cool morning hour, when, with devout thankfulness, the father of an humble family, with his little ones about him, gently tills his plot of ground, training his vines, and watering his tender herbs, God often condescends in the secrecy of a heart brought into harmony with nature, to whisper words of awful grace.

I entreat my friends of the labouring classes to cultivate the earth. I entreat them to take advantage of every little nook of ground about their dwellings. Flowers are the gems of the soil; we ought to nurture, to gather, and to enjoy them. I shrink from the denaturalized creature who has outlived his childish love of flowers. Better have a gay garden than a gay parlour; better keep a bed of tulips than a horse and chaise. "When ages grow to civility and elegancy, men come to build stately sooner than to garden finely; as if gardening were the greater perfection." So saith my Lord Bacon.

VII.

THE MECHANIC'S FASHIONS.

Every one is ready enough to cry out against the tyranny of fashion, yet almost every one meekly submits. Here and there, in my daily walks, I fall in with a few elderly men, fellows of the old school, who prefer comfort to appearances. You may know them a hundred yards off, by the easy, contented, independent carriage of their bodies, and the fulness and simplicity of their garb. The cut of their coats is not very unlike that of the year eighteen hundred, and their red cheeks would dissolve in a healthy smile if you should speak to them of the reigning mode.

I am no friend to mere fashion as a directress of life; she is a capricious sultana who mocks us into disguises, and then punishes us for compliance. Who can tell the money out of which she has cheated the mechanics of America!

If we were systematically inclined, we might draw up a brief, as thus: I. Fashion in general. II. Fashion in particulars. 1. In dress. 2. In equipage. 3. In furniture. 4. In living. 5. In

manners. 6. In opinions. 7. In religion. But before I could reach the remaining specifications I might possibly wax wearisome. Let us forbear undue method.

Frederick Fitz-Francis, in despite of his name, is a haberdasher; so he used to be called in Cheapside, but in America, where rivers, cataracts, and names, are bigger than in the old world, he is a dry goods merchant. He is a proper man, and the very mirror of gentility, giving the ray after its third or fourth reflection; his neckcloth is immaculate; his collar pokes beyond his black whiskers, in the precise acute angle which is just the thing. Not long since he chose to call on his neighbour and former friend, Thomas Chubb, the carriage-maker, who had recently established himself in a new house.

"Well, Chubb," said Mr. Fitz-Francis, "I thought I would look in upon ye."

"I am sure you are welcome, Frederick, and I shall be pleased to show you over my new house."

"Just what I came for; but look ye, Chubb, I don't like this arrangement of your court-yard. Nobody in town has such a space laid out in flowers."

Here Chubb smiled.

"Let us go in. How is this! Upon my word you can't be furnished yet, in this parlor."

"Yes, I am; what's the matter?"

"Matter! Why I don't know, but things have a very odd, unfashionable look."

"Perhaps so, Frederick; I am not a man of fashion, though I sometimes turn out a fashionable carriage. But what is wrong?"

"Why, your chairs are very droll."

"Are they? Just sit in one of them, and tell me whether you find them easy."

"Pshaw! that is not the thing. Hem—ah—on my word, they *are* uncommonly easy, but out of date—nobody has the like."

"Very likely; they were made in my own shop, and after my own plan, and they are wider, lower, and softer than any chairs in town."

"Dear me, Mr. Chubb! have you not a pier-glass?"

"None, I assure you. If you wish to dress, or look at your whiskers, I have an old mirror in the other room."

"Come, come, no drollery: but surely you mean to introduce a centre-table."

"Not I," said Chubb; "I find it irksome to look at a toy-table, with playthings, albums, and little smelling-bottles, standing forever in the way." And he smiled to think that even Mr. Fitz was here behind the fashion.

"Well, Mr. Chubb, if you are bent upon

saving and living without expense, pray be consistent, and carry matters out.—Why have you these oil paintings on your walls? They must have cost you more than a pier-glass or a claw-foot table."

"They did; and I am *not* bent on saving. The pictures gratify my taste; the gimcracks would have been only a tax paid to that of other people. Where money gives me or my friends real comfort, or innocent pleasure, or solid profit, I grudge it not; but not a cent in mere aping of others. I wear a high-priced boot, but I take care that it shall not pinch my toes into corns. That sofa, on the other hand, cost me but fifteen dollars, but it is as comfortable as a bed. And that homely piece of furniture which you are eyeing with so much contempt, is an old organ which my wife's father once played on, and which my daughter is beginning to touch quite pleasantly. You perceive I am what the world considers an odd fellow; but I find independent satisfaction in abstaining from a chase after ever-varying modes. Even *you*, allow me to hint, are only half-way in the race, and are as ridiculous in the eyes of the grandees you imitate, as I am in yours. Come in this evening, and we will show you our fashions in food."

VIII.

THE MECHANIC IN STRAITS.

Historians have been busy for several thousands of years, but they have not described any one class of men which is exempt from trouble. The most sturdy beggars, in the greatest paradise of mendicity, are sometimes brought to a non-plus. Belisarius, the champion of the wealthiest empire yet recorded, was reduced to beg his farthing. And a European king, in the last century, died penniless in England.

After this becoming preface, we may go fairly to work on our subject. I heartily sympathize with the man who is reduced to want, without his own fault; especially if he is a man who earns his bread with the sweat of his brow; and, most of all, if he has to share his sorrow and loss with a confiding wife and helpless children. There are many such, for we meet them in almost every walk, downcast and unemployed; there are more than we at first suppose, for the greatest sufferers shun the glare of observation.

American mechanics are said to love money,

and Mrs. Trollope writes, that one cannot hear two Americans talking together for five minutes, without the repetition of the word *dollar*. Jeremy Bentham makes the same remark of the lower English, except that for *dollar* he reads *beer*. Europeans seem resolved to fix on us the charge of loving gold. If this be true in any discreditable sense, it is so in a sense different from that of the olden time. The money-lover of our day is bad enough, but he is not the *miser* of old stories. He grasps, but does not hoard. The excitement which drives him on to rapid gains is only one branch of a wider excitement having many branches, characteristic of our time and country, and susceptible of a direction to good as well as evil. The old-time money-maker was a tortoise, and when a storm came he closed his shell. The modern money-maker is a bird of the air; the tempest drenches, and peradventure stuns him, but at the first laughing sunshine he is again on the wing. Let the mechanic in straits hope strongly for deliverance. Many are now reduced to great difficulties by changes in the commercial world, which they had no hand in producing. In such circumstances, when the father of a family sees the dearest object of his affections brought into want and distress, there is a great temptation to discontent and repining.

This tendency must be resisted; it never did any good, and it never can. No man ever gained by grumbling. Complaint, recriminations, and even curses, serve neither to make the hunger smaller nor the loaf larger. Stick a pin there, and consider. Here is a starting point.

Not many hours ago I heard *Uncle Benjamin* discoursing this matter to his son, who was complaining of the pressure. "Rely upon it, Sammy," said the old man, as he leaned on his staff, with his gray locks flowing in the breeze of a May morning, "murmuring pays no bills. I have been an observer any time these fifty years, and I never saw a man helped out of a hole by cursing his horses. Be as quiet as you can, for nothing will grow under a moving harrow, and discontent harrows the mind. Matters are bad. I acknowledge, but no ulcer is any the better for fingering. The more you groan the poorer you grow.

"Repining at losses is only putting pepper into a sore eye. Crops will fail in all soils, and we may be thankful that we have not a famine. Besides, I always took notice that whenever I felt the rod pretty smartly, it was as much as to say, 'Here is something which you have got to learn.' Sammy, don't forget that your schooling is not over yet, though you have a wife and two children."

"Ay," cried Sammy, "you may say that, and a mother-in-law and two apprentices into the bargain. And I should like to know what a poor man can learn here, when the greatest scholars and lawyers are at loggerheads, and can't for their lives tell what has become of the hard money."

"Softly, Sammy! I am older than you. I have not got these gray hairs and this crooked back without some burdens. I could tell you stories of the days of continental money, when my grandfather used to stuff a sulky-box with bills in order to pay for a yearling or a wheat-fan; and when Jersey-women used thorns for pins, and laid their teapots away in the garret. You wish to know what you may learn? You may learn these seven things:

"First, *That you have saved too little and spent too much.* I never taught you to be a miser, but I have seen you giving your dollar for a 'notion,' when you might have laid one half aside for charity, and another half for a rainy day.

"Secondly, *That you have gone too much upon credit.* I always told you that credit was a shadow; it shows that there is a substance behind, which casts the shadow; but a small body may cast a great shadow; and no wise man will follow the shadow any further than he can see

substance. You may now learn that you have followed the opinion and fashion of others till you have been decoyed into a bog.

"Thirdly, *That you have been in too much haste to become rich.* Slow and easy wins the race.

"Fourthly, *That no course of life can be devended on as always prosperous.* I am afraid the younger race of working men in America have had a notion that nobody could go to ruin on this side of the water. Providence has greatly blessed us, but we have become presumptuous.

"Fifthly, *That you have not been thankful enough to God for his benefits in time past.*

"Sixthly, *That you may be thankful that our lot is no worse;* we might have famine, or pestilence, or war, or tyranny, or all together.

"And lastly, to end my sermon, you may learn to offer with more understanding the prayer of your infancy, '*Give us this day our daily bread.*'"

The old man ceased, and Sammy put on his apron, and told Dick to blow away at the forge-bellows.

IX.

THE MECHANIC'S WIFE.

In America, every mechanic is supposed to have, or to be about to have, a wife. The many thousands of these spouses are divided into sorts. Thus we have good and bad; very good and very bad; unspeakably good and insufferably bad; and—as a sort of *par* expression—*tolerable*. It is not every good woman who is a good wife; nor is it every good wife who is a good wife for the mechanic. A working man needs a working wife; but as to qualities of mind, manners, and morals, she cannot run too high in the scale. There is an error prevalent concerning this.

Giles says, "I do not want a wife with too much sense." Why not? Perhaps Giles will not answer; but the shrug of his shoulders answers, "Because I am afraid she will be an overmatch for me." Giles talks like a simpleton. The unfortunate men who have their tyrants at home are never married to women of sense. Genuine elevation of mind cannot prompt

any one, male or female, to go out of his or her proper sphere. No man ever suffered from an overplus of intelligence, whether in his own head or his wife's.

HODGE says, "I will not marry a girl who has too much manners." Very well, Hodge: you are right; *too much* of any thing is bad. But consider what you say. Perhaps you mean that a fine lady would not suit you. Very true; I should not desire to see you joined for life to what is called a "fine lady," to wit, to a woman who treats you as beneath her level, sneers at your friends, and is above her business. But this is not good manners. Real good manners and true politeness are equally at home in courts and farm houses. This quality springs from nature, and is the expression of unaffected good will. Even in high life, the higher you go the simpler do manners become. Parade and "fuss" of manners are the marks of half-bred people. True simplicity and native good will, and kind regard for the convenience and feelings of others, will ensure good manners, even in a kitchen: and I have seen many a vulgar dame in an assembly, and many a gentlewoman in an humble shed. Nay, your wife *must* have good manners.

RALPH declares, "I hope I may never have a wife who is too strict and moral." Now, my

good Ralph, you talk nonsense. Who taught you that cant? I perceive you do not know what you mean. Are you afraid your wife will be too virtuous?

"Bless me! no."

Then you rather prefer a moral wife to an immoral one?

"Surely."

Are you afraid, then, of a religious wife?

"Why something like that *was* in my head; for there is neighbour Smith's wife, who gives him no peace of his life, she is so religious."

Let me hear how she behaves herself.

"Why, she is forever teaching the children out of the Bible."

Indeed! And you, Ralph, are an enemy of the Bible?

"O, no! But then—ahem—there is reason in all things."

Yes, and the reason you have just given is that of a child, and, like the child's *because*, is made to do hard service. But let me understand you. Does Mrs. Smith teach the children any thing wrong?

"O, no! But plague it all! if one of them hears Smith let fly an oath, it begins to preach at him."

Then you wish, when you have children, to

have liberty to teach them all the usual oaths and curses, and obscene jokes that are common.

"Dear me, Mr. Quill, you won't understand me."

Yes, I understand you fully: it is you, Ralph, who do not understand yourself. Look here. Mrs. Smith is so religious that if she proceeds as she has begun, her children will break their father of his low blasphemies. I hope you may get just such a wife.

"But then, Smith can't spend a couple of hours at the tavern for fear of his wife!"

Ah! what does he go to the tavern for?

"Just to sit and chat, and drink a little."

And how does his wife interfere? Does she fetch him home?

"No."

Does she chastise him on his return?

"O, no!"

Does she scold him then?

"No."

What is it then that disturbs him?

"Why, she looks so solemn and mournful, and shuts herself up so and cries, whenever he is a little disguised, that the man has no satisfaction."

Good! And I pray he may have none until he alters his course of life.

A proper self-respect would teach every noble-hearted American, of whatever class, that he cannot set too high a value on the conjugal relation. We may judge of the welfare and honour of a community by its wives and mothers. Opportunities for acquiring knowledge, and even accomplishments, are happily open to every class above the very lowest; and the wise mechanic will not fail to choose such a companion as may not shame his sons and daughters in that coming age, when an ignorant American shall be as obsolete as a fossil fish.

Away with flaunting, giggling, dancing, squandering, peevish, fashion-hunting wives! The woman of this stamp is a poor comforter when the poor husband is sick or bankrupt. Give me the *house-wife*, who can be a "help-meet" to her Adam:

> ——— "For nothing lovelier can be found
> In woman, than to study household good,
> And good works in her husband to promote."

I have such a mechanic's wife in my mind's eye: gentle as the antelope, untiring as the bee, joyous as the linnet; neat, punctual, modest, confiding. She is patient, but resolute; aiding in counsel, reviving in troubles, ever pointing out the brightest side, and concealing nothing but her

own sorrows. She loves her home, believing with Milton, that

> "The wife, where danger and dishonour lurks,
> Safest and seemliest by her husband stays,
> Who guards her, or *with her the worst endures.*"

The place of woman is eminently at the fireside. It is at home that you must see her, to know who she is. It is less material what she is abroad; but what she is in the family circle is all-important. It is bad merchandise, in any department of trade, to pay a premium for other men's opinions. In matrimony, he who selects a wife for the applause or wonder of his neighbours, is in a fair way towards domestic bankruptcy. Having got a wife, there is but one rule—*honour and love her.* Seek to improve her understanding and her heart. Strive to make her more and more such an one as you can cordially respect. Shame on the brute in man's shape, who can affront or vex, not to say neglect, the woman who has embarked with him for life, "for better, for worse," and whose happiness, if severed from his smiles, must be unnatural and monstrous. In fine, I am proud of nothing in America so much as of our American wives.

X.

THE MECHANIC DOING GOOD.

The duties of life are not all of the great and exciting sort. There are many duties in every day; but there are few days in which one is called to mighty efforts or heroic sacrifices. I am persuaded that most of us are better prepared for great emergencies, than for the exigencies of the passing hour. Paradox as this is, it is tenable, and may be illustrated by palpable instances. There are many men who would, without the hesitation of an instant, plunge into the sea to rescue a drowning child, but who, the very next hour, would break an engagement, or sneer at an awkward servant, or frown unjustly on an amiable wife.

Life is made up of these little things. According to the character of household words, looks, and trivial actions, is the true temper of our virtue. Hence there are many men reputed good, and, as the world goes, really so, who belie in domestic life the promise of their holiday and Sunday demeanour. Great in the large assembly,

they are little at the fireside. Leaders, perhaps, of public benevolence, they plead for universal love, as the saving principle of the social compact; yet, when among their dependents, they are peevish, morose, severe, or in some other way constantly sinning against the law of kindness.

Why do you begin to do good *so far off?* This is a ruling error. Begin at the centre and work outwards. If you do not love your wife, do not pretend to such love for the people of the antipodes. If you let some family grudge, some peccadillo, some undesirable gesture, sour your visage towards a sister or a daughter, pray cease to preach beneficence on the large scale.

What do you mean by "doing good"? Is it not increasing human happiness? Very well! But *whose* happiness? Not the happiness of A, B, or C, in the planet Saturn, but that of fellow terrestrials; not of the millions you never see, so much as that of the hundreds or scores whom you see every day. Begin to make people happy. It is a good work—it is the best work. Begin, not next door, but within your own door; with your next neighbour—whether relative, servant, or superior. Account the man you meet the man you are to bless. Give him such things as you have. "How can I make him or her happier?" This is the question. If a dollar will do it, give

the dollar. If advice will do it, give advice. If chastisement will do it, give chastisement. If a look, a smile, or warm pressure of the hand, or a tear will do it, give the look, smile, hand, or tear. But never forget that the happiness of our world is a mountain of golden sands, and that it is your part to cast some contributory atom almost every moment.

I would hope that such suggestions, however hackneyed, will not be without their influence

> "On that best portion of a good man's life,
> His *little*, *nameless*, *unremembered acts*
> Of kindness and of love."*

In a season of great reverses and real suffering in the mercantile and manufacturing world, there is occasion for the luxury of doing good. The happiest mechanic I ever knew was a hatter, who had grown rich, and who felt himself thereby exalted only in this sense, that his responsibility as a steward was increased. It was sacred wealth,

> "For God, who gave the riches, gave the heart
> To sanctify the whole, by giving part."†

The poorest man may lessen his neighbour's load. He who has no gold may give what gold cannot purchase. If religion does not make men

* Wordsworth's Tintern Abbey. † Dryden.

who profess it more ready to render others happy, it is a pretence. We are to be judged at the last by this rule. The inquiry is to be especially concerning our conduct towards the sick, the prisoner, the pauper, and the foreigner. The neighbour whom we are to love is our *next door* neighbour; that is, the man who falls in our way. The Samaritan knew this. It was but a small pittance he gave: the poorest among us may go and do likewise. Do not allow a townsman, or a stranger, or even an emigrant, to suffer for lack of your endeavours. It will cost you little, but it will be much to him.

"'Tis a little thing
To give a cup of water; yet its draught
Of cool refreshment, drained by fevered lips,
May give a shock of pleasure to the frame
More exquisite than when nectarean juice
Renews the life of joy in happiest hours.
It is a little thing to speak a phrase
Of common comfort which by daily use
Has almost lost its sense; yet on the ear
Of him who thought to die unmourned 'twill fall
*Like choicest music."**

Let no one be surprised at my quoting choice poetry to mechanics. Servile boors may stare in amaze; but the *American* mechanic is no boor.

* Mr. Sergeant Talfourd.

Who shall dare to say that the poorest journeyman may not reach forth his hand in the garden of the muses? And who shall deny to the honest labourer the solace of doing good? It is the best work, in the worst times. Help others and you relieve yourself. Go out, and drive away the cloud from that distressed friend's brow, and you will return with a lighter heart. Take heed to the *little things*—the trifling, unobserved language or action—passing in a moment. A syllable may stab a blessed hope: a syllable may revive the dying. A frown may crush a gentle heart; the smile of forgiveness may relieve from torture. He that is faithful in that which is least, is faithful also in much; and he that is unjust in the least, is unjust also in much.

XI.

THE MECHANIC'S FOUR TEMPTATIONS IN HARD TIMES.

Of the city of Trenton there was a plumber, of quiet life and good habits, and his name was Simon Stark. We met in the market on a fine morning, and talked over the distresses of the times; for I sometimes go to the seats of justice and legislation, and always take pains to survey the public gatherings. I perceived that Simon was in trouble. He was out of employment, out of money, and out of heart. So sad was his visage, that I thought of him all day, and then dreamed of him at night; and my dream was this.

I saw Simon sitting under the light of the new moon, at his back door, which looks into a small garden. The scent of roses and Bermuda grape vines filled the air. He clasped his hands and looked upward. Occasionally, the voice of his wife, hushing to sleep a half-famished child, caused him to groan. Simon was pondering on

the probable sale of his little place, and the beggary of his family.

A heavy cloud passed over. A thin silvery haze veiled the surrounding shrubbery. An unaccustomed whispering sound was heard, and Simon rubbed his eyes and looked up wistfully.

From amidst the vapour, a figure dimly seen emerged into the space before the porch, as if about to speak. It resembled a haggard old man. He seated himself near Simon, who shuddered a little, for the visiter was lank and wretched in appearance, and his hollow eye shot out the glare of a viper. Hatred and anguish were blended into one penetrating expression. He trembled as he spoke, and I could now and then catch a word, which seemed to be injurious to the character of various persons. Simon was much moved, and ever and anon clenched his fist, smote his thigh, and muttered, "True, true! all men are liars—all men are oppressors—all men are my enemies!"

The old man drew nearer, and spoke more audibly: "Simon, you are a discerning person. You have been wronged. The habits of society are tyrannical. The rich grind you to the dust. The poor cheat you and rejoice in your woes. Learn wisdom; forget your idle forbearance;

cease from womanish love to the race. They are all alike."

Then there was a pause; the old man moved slowly away, and Simon gazed on vacancy, as he pronounced several times the syllable, *hate! hate! hate!*

How long the reverie would have lasted I know not, but a sweet, fair, cherub-like child, thrust its curled head out of the adjoining window and said, "Father, I have got another verse, 'Love your enemies, bless them that curse you, do good to them that hate you, and pray for them which despitefully use you.'"

Simon arose, shook his limbs, and said, "Now I know the tempter! It is the demon MISANTHROPY. Begone!"

Again I looked, and Simon had aroused himself, and was looking towards the garden walk, where a tall female form in mourning weeds was approaching with grave and languid pace. She stood over the poor plumber, who shrank from her fascination, for there was an unearthly influence issuing from her leaden countenance, and he seemed benumbed by an indescribable nightmare. She drew from under the folds of her mantle a phial of some black mixture, which she held to his nostrils. His face immediately assumed a hue like her own: it was the visage of

hopeless grief. She said in his ear with a sepulchral tone: "All is lost! all is lost! Think of your wife in a poor-house—your dear babes in beggary — yourself in a prison. — All is lost!"

Then there was a pause, during which Simon seemed bowing towards the earth, his face buried in his hands. The phantom's eye lightened with a flash of diabolical joy, as she slipped into his hands a glittering dagger.

At this instant the window opened, and the same lovely child, with infantile joy, cried out, "Father, listen to another pretty verse: 'Take, therefore, no thought for the morrow; for the morrow shall take thought for the things of itself. Sufficient unto the day is the evil thereof.'"

Simon wiped the cold moisture from his brow, and feebly smiled; the phantom vanished, and he waved his hand, saying, "Begone, DESPAIR!"

I then saw in my dream that the clouds cleared away, and the moon shone pleasantly over all the neighbouring gardens. Simon arose, saying, as he took a turn in the little green alley, "Surely I must have been asleep—I will walk in among the flowers, and then I shall not be haunted by these doleful thoughts. He soon found every thing take a more cheerful hue; and just as he

began to recover from his gloom, he thought he heard the footsteps of some one entering the back gate of the garden. He moved in that direction, and met a gentleman in black, with a gold-headed cane, gold spectacles, and gold chain—a fair-spoken, bright-eyed man, whom he thought he had seen at one of the banks. Simon was in error, for he had never seen him before.

"Mr. Stark?" said the stranger.

"That is my name."

"I was passing, and was pleased with the smell of your stock-gilley flowers—thought I would look in."

"You are welcome, sir," said Simon, a little surprised.

"And since I am here," said the gentleman, "I should like to hear a word or two about the state of money-matters, as I am rather a stranger in your place."

Simon gave him the information sought, involuntarily mingling some accounts of his own trouble. The stranger listened eagerly; his eye gleaming with benevolent interest, while he jingled eagles and dollars in his pockets. Then wiping his glasses with a white handkerchief, and settling his stock, he smiled knowingly, and said:

"Stark, I am glad I came in. I am some years your elder—have been abroad—know the world—long in the East India service—three years cashier of a bank—some acquaintance with finance. Stark, you are a happy man. 'Tis an ill wind that blows nobody good. Let us go into your house, while I untie these papers, and I'll put you in the way of making your fortune in two weeks. I know your look—you are too keen a one to fail of being a rich man, for the sake of any old primer proverbs. Live and let live; that's my motto."

They went in.—He opened piles of papers, some of which resembled uncut sheets of bank notes. I could not hear the particulars, but Simon's face glowed at beholding a purse of gold which was thrown carelessly on the table. But while the gentleman was mending a pen for Simon to write something, a door opened—the dear little girl entered with an open book, and asked her father to hear her read the following passage, viz: Proverbs, chapter first, verses 10—19. Upon which the strange gentleman looked for his hat, and vainly tried to pick up the card, on which he had given his address; he departed with a sulphurous smell, and Simon read on the card the name of Mr. FRAUD.

Simon looked as if he rejoiced at a great escape, while at the same time he was alarmed at being surrounded by such bad company. He therefore opened his closet, and took a draught of ale, and then went to the door to see who had knocked. It was a beautiful woman, and Simon was about to call his wife, but the visiter said, with a voluptuous smile,

"No, do not call her; my visit is to you. Several of your friends have heard of your straits, and have discovered what it is that you want. Could you relieve me from this faintness which has come over me by a glass of wine?"

Simon of course took a glass himself. The lady looked lovelier than ever — her cheeks were roses; her hand was velvet; her breath was the perfume of the vine. She enchanted poor Simon with a voice of music, and over another glass of wine, into which she sprinkled certain atoms, he began to feel as rich as Astor, as happy as a child.

"Why, O why," said she, "have you allowed yourself to sink in despondency. Live while you live! A short life and a merry one!"

And Simon, with a cracked voice, began to carol, *Begone, dull care:* when a little sweet voice cried through the key-hole, "*Wine is a*

mocker." The lady departed, and Simon dashed the decanter to the floor, exclaiming, *Begone*, INTEMPERANCE!

And I awoke from my dream.

XII.

THE MECHANIC'S VACATION.

It is supposed that American mechanics work more days in the week than any free men on earth, as it is certain that they effect more in a given time than any slaves. For even where there is no Sunday, working men have many festivals, holidays, and fasts, which give the pretext for relaxation. In great manufacturing establishments these habits of persevering labour are sometimes impaired by the practice of assigning weekly tasks to the younger workmen; but in rural districts the cheerful hum of honest toil is heard from Monday morning until Saturday night. We are a busy people, and must ever be so, while high prizes are held out to all alike, and while no caste excludes the labourer from attaining respectability as well as affluence. Whether this persistency in hard work has a good moral tendency, is a grave inquiry which I shall leave to more profound heads. As matters stand, the generality of the productive classes have no voluntary vacations. The lawyer relaxes between his

terms; the doctor between his cases, and in healthy seasons. The sallow nervous clergyman flies to Saratoga or Rockaway; the merchant leaves town for the dog-days; but my neighbour the saddler seems to me to have been at his brisk employment late and early these ten years. Thus it is with multitudes of our mechanics.

These are thoughts which have often occurred to me when passing through the towns and villages of Pennsylvania and New Jersey; and I have mused and calculated how much money these busy bees must have laid up against the season of ice and tempest. Yet I am not sure that I should have alighted on so happy a title as that which graces this paper, if it had not been for the following incident. On a prime day of this leafy month of June, I was passing along that beautiful road which leads up the right bank of the winding Raritan, in a northwesterly direction from New Brunswick. There are few more desirable drives in Jersey. The hills, divested of forest, but clad in herbage, stand high enough to invite the free access of every breeze; in this resembling the downs of England. It is what Old Burton would call "a cotswold country, as being most commodious for hawking, hunting, wood, water, and all manner of pleasures:" and the gentle river sleeps along under the green bank with a quietude which

the early Dutch settlers of Somerset must have regarded as paradisiacal. It was the season of clover, and to say that, is to say enough to any man who lacks not the two great senses for vegetable enjoyment. In the corner of a rank field, besprinkled with a million of fragrant flowering heads, and under the shade of a cherry tree, on which the earliest blush of the fruit was visible among the dark green, there sat, or rather reclined, two travellers. Their light packs lay by their side, and their hats were flung over upon the greensward. One was a man about sixty, the other a mere youth. It does me good, now and then, amidst our business stiffness, to snatch a scene like this, which half realizes some of the pastoral pictures of my boyish reading. There they lay, as careless as though Adam had never done a day's work, as unaffectedly rural as any vagabond in Gil Blas, or any shepherd in a landscape of Poussin or Claude.

I mean no disparagement to a respectable and indispensable craft, (and ancient withal, for I have before me good authority for declaring that the "merchant tailors were completely incorporated in the year 1501, by Henry VII., their arms being argent a tent, three robes gules, on a chief azure, a lion passant regardant, or with this motto, *concordia parvae res crescunt*,") but I at once per-

ceived them to be tailors; by what free masonry I shall not define. I made free to tie my horse and join company, and before ten minutes had elapsed, I had become well acquainted with their views of that commercial pressure, of which no two men have precisely the same understanding. After having fully learned how well they had thriven, how many dollars they had earned each week, how handsomely they had lived, and how all their hopes had been dashed by the loss of employment, I adjusted my hat, wiped my spectacles, and after a few grimaces, such as all lecturers deem suitable to an exordium, I proceeded to administer a little admonition.

I perceive, my good friends, said I, that times have begun to pinch you.

"Not at all," interrupted the elder, "we are only enjoying the *Tailor's Vacation*."

Bravo! cried I, forgetting in an instant my previous train of condolence, there is a new idea, which is always worth a day's work to any man.

"Not so new, either, with Roger," said the youth, "for he has said the same thing at every green resting-place since we left Somerville."

"But good," replied Roger, "whether new or old. I am no Ben Franklin, and never expect to invent any thing to catch lightning, or to be in Congress; but, for all that, I do sometimes moral-

ize a bit, and I see that every thing goes down better with us under a good name. *Pressure* is well enough, to be sure, as I can testify when the last dollar is about to be pressed out of me; but *Vacation* is capital. It tickles one's fancy with the notion of choice. 'Nothing on compulsion' is my motto. I have often thought that if I were a slave, I should put a good face on it, and strut among my tobacco-hills with a show of good-will."

So you keep up your cheer, said I, even in the worst weather?

"Why not? I am learning a good lesson. Fifteen years have I worked without losing a month by sickness, or a day by dissipation. I have seen others resting, but I have scarcely ever rested. The repose which they got by driblets I am getting by wholesale. I am learning that I have worked too much, saved too little, and made no provision for winter days. It would be a bad state of things in which men could feel sure of being above reverses. The pressure impresses me with a sense of the instability of things. Then it tries my resolution. He who wants content can't find an easy chair. 'Better days will come,' as my good old mother in the old-country used to say; I have had sunshine, and perhaps I need the shade. There is a saying of somebody, 'I

myself had been happy, if I had been unfortunate in time.' It is time enough for Frank here, but he grumbles more than I do; let him lay up wisdom for the next storm."

Sir, said I, it was my purpose to advise you, but I had rather listen.

Roger blushed and smiled.

"It is a way I have got," said he, "by talking among my juniors. Being a bachelor, I live among boys, and perhaps I discourse too much; but I am resolved to turn the best side of my coat outside. And if I live through this pinch, rely upon it I will be more wary. True, it is becoming a bad business, and before two days more I shall be like the tailors of Twickenham, who worked for nothing and found thread. But I am learning. Experience keeps a dear school, but fools will learn in no other. I can dig or plough; nothing is plentier than land, and my weak chest needs the balm of the country. It is worth something to lie among this clover; and when I marry I shall have more adventures to tell than if I had grown double over the press-board."

After further discourse, I left the cheerful tailor enjoying his vacation.

XIII.

THE MECHANIC'S CHILDREN.

LET a group of children be gathered at a school or play-ground, and whether they be rich or poor, gentle or simple, they will coalesce so as to realize the most complete levelling theory. If this is true of the very poor, how much more apparent is it, when the comparison takes in the offspring of the well-doing mechanic. Children, take them one with another, are beautiful creatures—at least in America,—nay all the world over. Sir Joshua Reynolds has observed that children, until mistaught, always throw their limbs into graceful attitudes. I trouble myself very little, when I meet a rosy, ingenuous, clean, and happy child, with the inquiry, whether it be aristocratic or plebeian in its origin. John Randolph, of Roanoke, was often in the habit of alluding to certain families, as having no ancestral portraits. Now I question whether the great orator would not have given Bushy Forest, or even Roanoke, for a pair of boys. It is better to have fruit on the limbs, than ever so many dead roots under

ground. A cluster of merry, healthy boys and girls, is better than a family crest, or old plate, or faded pictures, or a genealogical tree, or the pitiful pride of penniless grandeur. These olive branches around one's table afford good presumption of a certain degree of health and virtue; and are just what the effete patricians of lordly Britain often sigh for in vain. Every now and then some great family goes out, like a dying lamp, with an impotent conclusion. Blessed are those poor men who are rich in children such as I mean!

I plead guilty to the charge of living at the corner of a very narrow alley with a somewhat ignoble name. My window looks upon this humble avenue, which is properly a *cul-de-sac*. At a certain hour of every day it is filled with boys and girls; for at the further end of it there is a "madam's school." My writing is ever and anon interrupted by the joyous laugh or the scream of ecstasy from these romping creatures: I seldom fail to look out, and am generally as long nibbing my pen at the window, as they are in making their irregular procession through the lane. True, they have pulled a board off my garden fence, and foraged most naughtily among my gooseberries; but what of that? I have many a time paid a heavier tax for a less pretty sight.

They are happy: and so am I, while I look at them.

Surely nothing can be more graceful or attractive than the fawn-like girl, not yet in her teens, not yet practising any factitious steps, and not yet seduced into the bold coquetry and flirting display of the "young miss." Whose children are these? The children of mechanics; almost without exception. Call it not pride in the anxious mother, that she decks these little ones in the cleanliest, fairest product of her needle, and shows off with innocent complacency the chubby face or the slender ankle; call it not *pride*, but *love*. The mechanic's wife has a heart; and over the cradle, which she keeps in motion while she plies her task, she sometimes wanders in musing which needs the aid of poesy to represent it. She feels that she is an *American* mother; she knows her boy not only *may* but *must* have opportunities of advancement far superior to those of his parents. She blushes in forethought to imagine him illiterate and unpolished when he shall have come to wealth: and therefore she denies herself that she may send him to school.

What a security Providence has given us for the next race of men, in the gushing fulness of that perpetual spring—a mother's heart! I said

I was proud of our American wives: I am ready to kneel in tears of thankfulness for our American mothers.

But let me get back from the mothers to the children. Our future electors and jurymen, and legislators, and judges, and magistrates, are the urchins who are now shouting and leaping around a thousand shops and school-houses. Shall their parents live in disregard of the duty they owe these budding minds? I am half disposed to undertake a sort of lectureship, from house to house, in order to persuade these fathers and mothers that, with all their affection, they are not sufficiently in earnest in making the most of their children. I would talk somehow in this way. "My good sir, or madam, how old is that boy? Very well; he is well grown for his age, and I hope you are keeping in mind that he will live in a different world from that in which you and I live. Bring him up accordingly. Lay upon him very early the gentle yoke of discipline. Guard him from evil companions. Save him from idleness, which is the muck-heap in which every rank, noisome weed of vice grows up. Put work into his hands, and make it his pleasure. Make him love home; and by all means encourage him to love his parents better than all other human beings

Allow me to beg that you will not fall into the absurd cant which some people, parrot-like, catch and echo, against book learning. Determine that this fellow shall know more than ever you have known; then he will be an honour to your declining years. Keep him at a good school; reward him with good books; and he will one day bless you for it. I know men in our legislature, who were brought up to hard work, and are now very rich; but they cannot utter a single sentence without disgracing themselves by some vulgar expression or some blunder in grammar. They know this, but have found it out too late. They feel that their influence is only half what it might have been, if their parents had only taken pains to have them well taught. Now look ahead, and give your child that sort of fortune which no reverse in trade can take away."

It is a great and prevalent error, that children may be left to run wild in every sort of street-temptation for several years, and that it will then be time enough to break them in. This horrid mistake makes half our spendthrifts, gamblers, thieves, and drunkards. No man would deal so with his garden or lot; no man would raise a colt or a puppy on such a principle. Take notice, parents, unless you till the new

soil, and throw in good seed, the devil will have a crop of poison-weeds before you know what is taking place. Look at your dear child, and think whether you will leave his safety or ruin at hazard.

XIV.

THE MECHANIC'S CHILDREN.

WHAT! more about the children? Yes; for they are to be the *men* of the coming age; and he has looked but drowsily at the signs of the times. who has not discerned that these little ones are to act in a world very different from our own. The question is, shall we prepare them for it?

These pauses in business, these cloudy days of distress, are given us for some end; perhaps as intervals of *consideration*. Let us then consider the ways and means of making something out of these beloved representatives of our very selves. Let us build something of the spars that float from our wreck; this will be our best speculation.

> "Let us know,
> Our indiscretion sometimes serves us well,
> When our deep plots do fail; and that should teach us
> There's a divinity that shapes our ends,
> Rough-hew them how we will."*

Sit down among your little children, and let me say a word to you about family-government. We

* Hamlet.

good people of America, in our race for self-government, are in danger of not governing ourselves. Our lads grow up insubordinate—finding out to our and their cost, that "it is a free country." An English traveller could find no *boys* in the United States; all being either children or men. The evil is undeniably on the increase. Parents are abandoning the reins; and when once this shall have become universal, all sorts of government but despotism will be impracticable.

Take that froward child in hand at once, or you will soon have to be his suppliant rather than his guide. The old way was perhaps too rugged, where every thing was accomplished by mere dint of authority; but the new way is as bad on the other side: no man is reduced to the necessity of choosing an extreme.

We often visit houses where the parents seem to be mere advisory attendants, with a painful sinecure. Let such hear the words of a wise Congressman of New Jersey, and a signer of the Declaration: "There is not a more disgusting sight than the impotent rage of a parent who has no authority. Among the lower ranks of people, who are under no restraints from decency, you may sometimes see a father or mother running out into the street after a child who has fled from them, with looks of fury and words of execration; and

they are often stupid enough to imagine that neighbours or passengers will approve them in their conduct, though in fact it fills every beholder with horror." I am afraid none of us need go many rods from home to witness the like. What is commonly administered as reproof is often worse than nothing. Scolding rebukes are like scalding potions—they injure the patient. And angry chastisement is little better than oil on the fire. Not long since, I was passing by the railroad from Newark to New York. The train of cars pursued its furious way immediately by the door of a low "shanty," from which a small child innocently issued, and crossed the track before us just in time to escape being crushed by the locomotive. We all looked out with shuddering, when lo! the sturdy mother, more full of anger than alarm, strode forth, and seizing the poor infant, which had strayed only in consequence of her own negligence, gave it a summary and violent correction in the old-fashioned, inverse method Inference: parents often deserve the strokes they give.

Implicit obedience—and that without question, expostulation, or delay—is the keystone of the family arch. This is perfectly consistent with the utmost affection, and should be enforced from the beginning, and absolutely. The philosopher

whom I cited above says of parental authority: "I would have it *early* that it may be *absolute*, and absolute that it may not be *severe*. It holds universally in families and schools, and even the greater bodies of men, the army and navy, that those who keep the strictest discipline give the fewest strokes." Some parents seem to imagine that their failures in this kind arise from the want of a certain mysterious *knack*, of which they conceive themselves to be destitute. There is such a knack; but it is as much within reach as the knack of driving a horse and chaise, or handling a knife and fork, and will never be got by yawning over it.

Not only love your children, but show that you love them; not by merely fondling and kissing them, but by being always open to their approaches. Here is a man who drives his children out of his shop, because they pester him; here is another who is always too busy to give them a good word. Now I would gladly learn of these penny-wise and pound-foolish fathers, what work they expect ever to turn out, which shall equal in importance the children who are now taking their mould for life. Hapless is that child which is forced to seek for companions more accessible and winning than its father or its mother.

You may observe that when a working man spends his leisure hours *abroad*, it is at the expense of his family. While he is at the club or the tavern, his boy or girl is seeking out-of-door connexions. The great school of juvenile vice is the STREET. Here the urchin, while he "knuckles down at taw," learns the vulgar oath, or the putrid obscenity. For one lesson at the fireside, he has a dozen in the kennel. Here are scattered the seeds of falsehood, gambling, theft and violence. I pray you, as you love your own flesh and blood, make your children cling to the hearth-stone. Love home yourself; sink your roots deeply among your domestic treasures; set an example in this as in all things, which your offspring may follow. The garden-plant seems to have accomplished its great work, and is content to wither, when it has matured the fruit for the next race: learn a lesson from the plant.

XV.

THE MECHANIC IMPROVED BY LITERATURE.

* * * "Strongest minds
Are often those of whom the noisy world
Hears least; else surely this man had not left
His graces unrevealed and unproclaimed.
But, as the mind was filled with inward light,
So not without distinction had he lived,
Beloved and honoured—far as he was known.
And something that may serve to set in view
The feeling pleasures of his loneliness,
His observations, and the thoughts his mind
Had dealt with—I will here record."

WORDSWORTH.

In the belief that the common mind in every age is best reached by parables, I have sometimes indulged in a little fiction; always, however, using the invention only as the embroidered veil of truth; and drawing up the curtain in time for the serious performance. But this license has made it necessary that in what I am about to relate I should declare every jot and tittle of the story to be absolute fact, to the best of my knowledge and recollection. Having kept no memoranda, I may be in error as to a date, or the exact

succession of events, but the statements may be relied on as in every main point true.

It is now more than twenty-three years since I became acquainted with a coach-painter in a village of New Jersey. At that time he occupied a very small shop adjacent to a larger building which was used by the coach-maker. Even in early youth I was led to observe something in the manner and countenance of this man, indicative of superior reflection. I shall conceal his name under that of AUGUST, which will point him out to many who knew him. As I advanced in life, I gained access to his painting-room and his dwelling; and as he was particularly kind to young persons, I passed in his company some of the pleasantest hours which it is my fortune to remember. August was then in the prime of life, and his character and habits were fully unfolded. In looking back upon the acquaintances of many years, I can declare with sincerity, that I have never known a more accomplished man. In his trade he was exemplary and approved. His taste led him to make excursions beyond the sphere of his daily work; and I call to mind a number of portraits and fancy-pieces which ornamented his own house and the apartments of his friends. I am not prepared to say, however, that he was eminent as an artist. But there were va-

rious other walks of life in which he was a master. He was fond of reading to a degree which wholly interfered with the care of his business and his health. Indeed, he was a devourer of books. Attached to his easel one was sure to find an open volume; and sometimes he caused a favourite boy to read aloud while he was grinding his colours. I well remember that, on a certain day when he had to walk five miles to do a piece of work, he travelled the whole distance book in hand; it was a quarto volume of Hobhouse's Travels.

There was nothing in the whole circle of English literature, so far as it is traversed by most professed scholars, with which August was not familiar. He had made himself master of the French language, spoke it with some facility, and had perused its chief treasures. Among other evidences of his application, he put into my hands a laborious translation from the French, of a work by Latude, detailing the events of his long and cruel imprisonment; a narrative not unlike that of Baron Trenck. In my youth I read this with avidity; and some years later, on the death of August, I endeavoured to obtain the manuscript from his widow, with a view to its publication for her benefit. We were, however, so raw in the matter of book-making, as to con-

clude that the public taste would not warrant the adventure. Many years since, an English translation of the same memoirs has been published in Great Britain. I have vividly before my mind the scene, when August was busy with his palette, in a rude loft, and a little boy seated on a work-bench was pouring into his delighted ear the early fictions of the author of Waverley. Sir Walter himself would have been repaid by the spectacle.

Such tastes and habits gave a richness to his mind, and a refinement to his manners. August was fully suited to mingle with any group of scientific or literary men. His love of talk was unbounded, and his hilarity most genial. I remember no acquaintance whose discourse was more stimulating or instructive. Many an hour of summer days I whiled away in his shop, listening to the sentiment, humour, and wit, which would have graced any company I ever met. All this was without a trace of self-conceit or arrogance. His conversation was the easy overflowing of a full mind. It was always animated, and always arch: there was a twinkle of unutterable mirth in his expressive eye, which won regard and awakened expectation.

August was a musician. This delightful art had been his solace from childhood. He played

on several instruments, but the clarionet was that of which he had the greatest mastery. Often have I heard its clear melodious tones for successive hours on a summer evening. He seemed to use it as the outlet for those musings which found no vent among his ordinary associations; for most of his performances were voluntaries and fitful *capriccios*. Yet he was a sight-singer, and read even intricate music with ease. It was one of his whims to have a number of flageolets, lessening by degrees until the smallest was a mere bird-pipe, with the ventages almost too near together for adult fingers. Such is the power of association, that to this very day I sometimes amuse myself with that feeblest of all instruments, a French flageolet, in affectionate recollection of poor August.

I have heard that he sometimes wrote verses, but have never been so fortunate as to alight on any specimen. August was a man of poetic tendencies, living habitually above the defiling influences of a sordid world, and seeking his pleasures in a region beyond the visible horizon of daily scenes. In this connexion, I ought with great seriousness to mention, that during all the years of my acquaintance with him, he was an open professor of Christian faith, which he exemplified by a life of purity, patience, and benevo-

lence. His family was a religious household. When he came to enter the valley of poignant trial with which his life terminated, he is said to have evinced great joyfulness of confidence in the propitiation and grace of our Lord Jesus Christ.

These scattered memorials of a friend of my youth are grateful to my feelings in the delivery, but are given with the higher intention of inciting young mechanics to seek the same cultivation of mind. What was there in the case of August which should deter any young man of ordinary parts from attempting to gain the same eminence? He was a man of the people; he was under the necessity of daily labour for his support; yet he made himself respected by the most accomplished scholars around him, as a man of mental culture. There was no magic in this. Do as he did, and you will have the same respectability, the same pleasures, and, perhaps, the same knowledge. Seek your pleasures in mental pursuits; discipline your intellect; READ—READ—READ—and you will find yourself soon in a new world.

XVI.

THE MECHANIC'S DOG AND GUN.

NOTHING can be more natural, than that a man of sedentary and confined pursuits should feel a strong attraction to sports of the field. It has been so in all countries and in every age. The freedom of traversing the open country, in fine weather, with a sense of leisure, and the buoyant excitement of expected trophies, has something which enchants a mind at ease. And it cannot be denied, that when taken in moderation, the amusement and exercise of the sportsman are highly productive of vigorous health. The American, restrained by no game-laws, and enjoying a state of social confidence, which in most cases prevents any vindictive action in cases of trespass, is led to exercise his prerogative; hence many addict themselves to this recreation, who have no great taste for its labours.

There is something independent and athletic in the pursuit of game, and this is particularly enchanting to those who are most of their time condemned to employments within doors, which

afford little active exercise to the limbs. It is the same principle which fills our volunteer companies with working men; the great majority, and the most zealous members, are commonly from trades which are the least manly. When a boy has a fowlingpiece on his shoulder, and a trusty dog gamboling before him, he feels exalted into manhood; and we are all children of a larger growth.

After all, these field-sports are not to my mind. I am not prepared to denounce them as cruel and iniquitous, or to debar the young mechanic from all indulgence in them; but they are seductive pleasures, and in one region bring in their train some very undesirable consequences. If a man is an indifferent marksman, it is a poor business, producing little fruit, and much weariness and chagrin; and many days must be expended before great dexterity can be attained. If, on the other hand, one is what Miss Sinclair calls "a horse-and-dog man," he becomes engrossed in the pursuit, and neglects his business. To say truth, I cannot now call to mind any mechanic remarkable as a good shot, or very successful in bagging game, who was not at the same time distinguished for indolence in his proper calling, or for some frivolity of manner, or looseness of habits. Every fair day yields a temptation to forsake the shop for the field. The enthusiasm

of the chase must be high to ensure success: and when high it scarcely admits of sudden checks. One day of capital sport is no more satisfactory than one glass of exhilarating liquor; it incites to another experiment; and thus I have known days and weeks squandered by men whose business was languishing at home.

The dog and gun introduce the young man to strange companions; and the more, as his skill makes progress. In every town or village, there are found a number of prime fellows, who have learned all the capabilities of the Joe Manton and percussion cap, and are very Nimrods in the field. Such persons naturally become the patrons and oracles of the inchoate sportsman. Such a worthy I have known for many years, and his influence has been only evil upon two or three generations of amateur fowlers.

Ned Nichol was a watchmaker in some ancient day; for he is now on the wrong side of sixty. His ruinous house has a wing which is never opened to the street; the closed windows used to show an array of watches and silver spoons, but he seldom enters it except to deposit his accoutrements, or to file and tinker at the lock of his gun. Around his door one seldom fails to see three or four setters or pointers, duly trained, and for laziness fit emblems of their master. All

other faculties in Ned's nature seem to have been absorbed by the faculty of following game. He has ceased to pique himself on his ability; it has become an instinct. No doubt he could load and fire in his sleep; as indeed I knew him on one occasion to bring down a woodcock while he was falling over a broken fence.

Ned is sometimes descried in the dun of the morning sauntering forth in a shooting-jacket of many colours. His appointments, like the Indian's, are for use, not show. His game-bag is capacious, and as he despises the coxcombry of patent flasks and chargers, he has slung around him a gigantic horn, which he has decorated in a whimsical manner. Two or three dogs are playing in circles before him, and evince far more life than their leader. Ned's impulse is pure love of sport and of the fields. The wilderness of swamps and glens has been his Paradise. What he bags is never talked about or offered in the market. He is of course a venerable character in the eyes of all young fowlers. As a dog-trainer he is unrivalled, and this secures him the attendance of a group of gaping loungers, who consign to him the education of their puppies. When a crazy firelock labours under some almost immedicable disease, it is carried to Ned; and hence, on a summer's noon, when he sits under his great

shady willow washing his gun or worming his dogs, he is sure to be encircled by inquirers. The shadow of this tree is his dispensary.

Strange to say, though everybody recognises Ned Nichol as a good-for-nothing knave, it is the ambition of a score of would-be sportsmen to imitate and accompany him. The young mechanics who follow him at humble distance, need only raise their eyes to his tatters and his tangled locks, to behold what they will become, if their idle aspirations prove successful.

The wise mechanic will *scorn* to be a poor shot and *dread* to be a good one. The passion for this sport becomes a mania, and ruins multitudes. It does not admit of partial devotion; it cannot be indulged for mere hours, but for whole days, and for day after day. Then how paltry a sight is it to see a full-grown man coming home weary at night, with a few poor robins, a half-grown squirrel, and a solitary snipe—slain on the ground! It is a far different thing in a wild, hunting country, where there is abundance of deer and wild turkeys. Here the use of the rifle becomes a necessary means of livelihood, and the pack of hounds is an indispensable part of one's stock. Not for a moment would I throw into the same class the fowler of our Atlantic towns and the frank hunter of the West. There is something

at once picturesque and sublime in the fortunes of these frontier men; and their sports are lordly. But there is something inglorious in the grave pursuit of tomtits.

Shooting-matches, where a number of harmless pigeons are let out to be scared to death by the competing heroes, in some green meadow, with liquors and refreshments spread under the trees, are scenes of rude clamour, and usually end in drunken brawls. I scarcely know why, but it is an unquestionable fact, that great attachment to the dog and gun is usually coupled with other loose pursuits. The famous sportsman is sometimes a black-leg, and often a tippler. Other flasks than those for powder are wont to stick out of the shooter's pocket. To be brief and candid—if you desire the reputation of a thriving artisan, avoid that of a capital shot.

XVII.

THE MECHANIC'S MORNINGS.

"Falsely luxurious, will not man arise
And, leaping from the bed of sloth, enjoy
The cool, the fragrant, and the silent morn,
To meditation due and sacred song."

THOMSON.

IT was Franklin, if I mistake not, who uttered the adage, "If a man lie in bed late, he may trot after his business all day, and never overtake it." There is no class of men concerning whom this is more true than mechanics. Indeed, it is so generally received as a maxim, that any working man's character for thrift is gone if he is not an early riser. In regard to mere enjoyment, it is something to add an hour or two of conscious existence to every day of life. It matters not whether we make our days longer, our years longer, or the sum total of days and years longer: in each case life is by so much prolonged. By making this addition at the better end of every day, we gain much in the quality of what is redeemed. An hour before breakfast is commonly worth two

afterwards. The whole day is apt to take the colour of the morning. There are certain things which, if not done early in the morning, are likely to be left undone altogether. Late risers are usually indolent. "Love not sleep, lest thou come to poverty." Late rising is also conjoined with slovenliness in every kind of performance.

The luxury of early rising is a mystery to the uninitiated. People of quality deny themselves the very choicest portion of a summer day.

> "Sweet is the breath of morn, her rising sweet,
> With charm of earliest birds."

What can be lovelier than the aspect of nature at sunrise, during the season of flowers? No man knows any thing about the music of birds who has not heard their performances between dawn and sunrise. No man appreciates the unbought odours of the vegetable world, who has not quaffed them at this hour. Let any one who has been so unfortunate as to keep his bed at this enchanting season of the day, henceforth amend his habits. He will find himself in a new world. The current of his thoughts will flow more healthfully and purely. After rising early, I have often thought that I was in a better humour with myself and others all the succeeding day. This is the suitable time for planning out the day's

work. No thriving man can live without method and foresight; and these are but names, where indolence robs us of the day's prime. Every man of business knows how idle it is for a master to indulge in sleep in the expectation that his subordinates will at the same time be diligently employed.

The duty of making the most of every day should be inculcated on children. Let the habit be well fixed, and it will never leave them. Whatever may be the change in their circumstances, and however they may affect more delicate fashions, they will never be able to forget the elasticity and fragrance of their boyish mornings: nor ever prefer the sickly damps of a hot bed to the refreshing breezes of dawn.

Under another head I will give an instance or two of surprising attainments in learning, made in early hours redeemed from sleep, by labouring men. In every thing that concerns the mind, the morning is invaluable. After the repose and corroboration of sleep, the spirits are new-made, and the faculties act with twofold alacrity. Hence the ancient proverb, *Aurora is a friend to the Muses*. On this account, I would venture to commend to mechanics the practice of getting all their pecuniary accounts into proper order before breakfast. It is well known that many in-

dustrious and sober men get behindhand in their affairs, simply because their books become deranged. This derangement frequently arises from the great hurry of business during the day, which prevents a leisurely settlement. Where a man is not much versed in arithmetic and book-keeping, these settlements are somewhat serious affairs, and cannot be duly performed at a counter among customers, or in the hum of a busy shop. Let the master-mechanic rise an hour earlier than is usual, for this very purpose. He will then have unbroken time for his accounts; and will be able, with great satisfaction, to enter on the day's work, with the feeling that his papers and books are in a good state. A little of this every morning will soon make itself felt; constant dropping wears away the rock. This practice is immensely better than that of leaving this ugly job until night, when there is an urgent temptation to neglect it altogether. I need not say that the practice of posting one's books on Sunday is at once profane and injurious.

Let me quote Milton; for it is a part of my creed, that the great masterpieces of human genius are a part of the working man's inheritance. Some one had spoken of the poet's morning haunts: he replies with just indignation: "These morning haunts are where they should

be, at home; not sleeping, or concocting the surfeits of an irregular feast, but up and stirring, in winter often ere the sound of any bell to awaken men to labour or to devotion; in summer as oft with the bird that first rouses, or not much tardier, to read good authors, or cause them to be read, till the attention be weary, or memory have its full fraught." For the same, or other purposes, such as our business may render important, let us shake off slumber, and enjoy the happiest hours of the twenty-four.

The influence of early rising upon health may have been overrated by zealots, yet none can deny the great salubrity of the practice. Too much sleep is relaxing to the animal fibre, and instead of rendering one less drowsy through the day, is often observed to induce a lethargic state of mind and body. Early rising presupposes good hours at night; and these afford a good security to health as well as morals. It is too often the case, that young mechanics, after a day of hard work, give themselves the license of passing many hours of the night in street-walking, carousing, or tavern-haunting.

There is one class of duties still to be mentioned, which demands the proper use of the morning hours; I mean the exercises of devotion. The cry echoes every morning from the

turrets of Mohammedan mosques, *Prayer is better than sleep! Prayer is better than sleep!* The man, whether rich or poor, who never communes with God and with his own heart, lives like a brute. Natural religion may suffice to teach us that our first thoughts are due to God. In this connexion, one cannot but be reminded of the brilliant passage of the Shakspeare of preachers: "When the sun approaches towards the gates of the morning, he first opens a little eye of heaven, and sends away the spirits of darkness, and gives light to a cock, and calls up the lark to matins, and by-and-by gilds the fringes of a cloud,and peeps over the eastern hills, thrusting out his golden horns, like those which decked the brow of Moses, when he was forced to wear a veil, because he himself had seen the face of God; and still, while a man tells the story, the sun gets higher and higher, till he shows a fair face and a full light, and then he shines one whole day."*

Amidst the fragrance and sabbath quiet of morning, all nature allures us to serious and thankful consideration. When the beautiful face of the world, refreshed by the moisture and the coolness of night, bursts once more upon our view, it is a dictate of every good feeling within

* Jeremy Taylor.

us, to elevate our hearts to our Creator and Redeemer. The devout and rational soul will say:

"Witness if I be silent, morn or even,
To hill or valley, fountain, or fresh shade,
Made vocal by my song, and taught his praise.
Hail! universal Lord! be bounteous still
To give us only good; and if the night
Have gathered aught of evil, or concealed,
Disperse it, as now light dispels the dark."

XVIII.

THE MECHANIC'S FRIENDS.

It is a wise direction of a certain philosopher, that every man, as he advances in life, should contract new friendships among men younger than himself. The reason is obvious. Every year lessens the circle of our youthful coevals, and the old man often finds himself going down the hill of life absolutely bereft of every friend of his boyhood. We must therefore do what we can to repair these wastes, and indemnify ourselves for those heavy losses.

A celebrated poet has given us a memorable verse on this subject: *Poor is the friendless master of a world!* But this is only the voice of all history, philosophy, and song, as well as of the proverbs of all ages and nations. One of the loveliest productions of the most eloquent of Romans is on the subject of Friendship; and when we moralize, we are all apt to harp on the same string.

The mechanic needs, no less than other men, the solace and profit of friendly connexions; and

yet I fear the value of this treasure is sometimes overlooked in our hurry to gain wealth. The love of money being a root of all evil, produces a great harm in this very direction. It is a selfish passion; and all selfish passions narrow and sear the heart. Therefore it is, that we look more readily for warm friendships in the simple scenes of rural and pastoral society.

Let me indulge my humour by recording sketches of two very dissimilar characters. There was a thriving silversmith in our village in years gone by. He was a moral and industrious man, and a clever workman; so that he rapidly gathered a little property, sufficient to make him comfortable for life. HARPER, for so I shall call him, was a bachelor, and had no kinsfolk in our neighbourhood but a mother and two sisters, with whom he resided. He was regular in his engagements, and punctual in every part of business. You were sure to meet him at a certain hour at market and at church. But it was observed that he never appeared in company. His walks were always solitary. He visited nobody; and nobody visited him. So it continued to be, year after year, until he became a grey-headed man. Yet he was said, by those who sometimes called on his family, to be pleasant enough in his own house. I never heard a whisper of any unkind-

ness between him and his mother or sisters. Still he was a friendless man. Without being positively surly, he was selfish. He had his pleasures and his pains all to himself. True, he hurt no one; but he helped no one. As well might he have lived on Crusoe's island, for any contribution that he made to the stock of social enjoyment.

Harper was not a misanthrope; yet he had no tenderness for his fellow men. He confided nothing to them, and he sought not their confidence. The next-door neighbour might be sick in bed, but Harper visited him not. He seemed to indulge a proud independence, and to seek nothing so much as to be let alone. This will not do in such a world as ours. The trait is unamiable, and, I doubt not, usually meets with a retribution in Providence. As Harper grew older, his habits became more rigid. He had enjoyed the kind offices of his female relations so long, that he had forgotten that they were not immortal. His aged mother died. This gave him a severe shock, but did not alter his habits; he only clung more closely to the survivors. After a few years, the younger of his sisters married and removed to the West. The brother and remaining sister were now inseparable; but at length this sister fell into a decline, and finally died. Poor Harper had

made no provision for such a state of things. He had become rich, but his wealth could not brighten his long melancholy evenings. He was friendless; even if he had been willing to seek new alliances, he had outlived the ductile period when friendship takes its mould. His latter days were cheerless; he sank in hopeless melancholy; and when he died, I presume there was no human creature who felt the loss, even for a moment.

I gladly change the subject, for the sake of introducing another mechanic, Joseph Ritson. Joseph is still living, and with as much enjoyment of life as any man I have ever known. He also is industrious and successful, but after another sort. His maxim has been that of Solomon: "He that is a friend must show himself friendly." Joseph is one whom you would sooner love than revere. He has marked faults, but they are on the side of frankness and generosity. If any inhabitant of our village should be asked, "What man of your acquaintance has most friends?" I doubt not the unhesitating reply would be, "Joseph Ritson."

Several sets of apprentices have issued from his shop, to all of whom he stands almost in the relation of a father. He has made it his business to seek out promising young lads, and help them on in the world. In every one of these he will

find a fast friend. No day passes in which he may not be seen going with a hearty, open countenance into the houses of the neighbours; and his face always carries a sort of sunshine with it. His own house is the abode of hospitality. Indeed he has harboured more travellers, and lodged more strangers, than any man I ever knew. There is not a poor family in our neighbourhood who is not acquainted with him. When any one is sick, Joseph is sure to find it out, and to be on the spot before the minister, and often before the doctor. Whenever a man falls into trouble, he resorts, by a kind of instinct, to Joseph Ritson. In consequence of this temper, he is, I confess, often imposed upon; but what then? he has vastly more enjoyment than if he never made a mistake. Business crowds upon him rather too fast, for he is executor to half a dozen estates, and is really overladen with other people's affairs. But then he has his reward. Man is made for affectionate intercourse. Joseph is always enjoying the genial flow of kindly emotions. Every day he feels the warm grasp from hands of those whom he has befriended. As he advances in life, he will find himself surrounded by those who love him, and who will be the friends of his children after him. Besides this, he possesses the un-

speakable satisfaction which arises from the exercise of true benevolence.

I trust these lines will not be altogether lost upon young mechanics. They should early learn the value of real friendship; not that which is cemented by association in vice, and always ruinous; nor that which springs from indiscriminate and jovial intercourse; but such as is the fruit of wise selection, founded on cordial esteem. I would say to the young man—fail not to have a small circle of true friends. Choose your own companions, and do not allow yourself to be the intimate of every one who may choose you. Beware of immoral comrades. The man who is not true to his own conscience, will never be true to you. Shun the man who has even once been guilty of falsehood. Cultivate no friendship over strong drink. "Make no friendship with an angry man, and with a furious man thou shalt not go; lest thou learn his ways, and get a snare to thy soul." Be slow in choosing a friend, but once chosen do not forsake him for slight faults. One friend of your boyhood is worth a dozen of later growth. And make it your purpose to stand by a friend to the very last drop of your blood.

XIX.

THE MECHANIC'S CHANGE OF TRADE.

THERE is something in the homespun philosophy of UNCLE BENJAMIN which always secures my attention. Rude as it is, it has that strength which is often wanting in schools and books. Uncle Benjamin has never read Lord Chesterfield, and, therefore, has not learned how exceedingly vulgar it is to use a common proverb; indeed, these concentrated morsels of wisdom, handed down from father to son, form a considerable portion of his discourse. Poor Richard is his favourite author, and if his son Sammy has not become a ripe proverbialist, it is his own fault.

I regret to say that Sammy is sadly destitute of thrift. Being disappointed in the trade to which he was brought up, he has been thinking of a change to some other business. But no sooner did the old man hear of this freak, than he hobbled over to his son's as fast as his legs and staff would carry him, and without ceremony opened the business thus:

"Ah, Sammy, so you are going to break ground in a new place, and begin life over again!"

"Why, yes, father: I make out so poorly at my trade, and the times are so hard."

"Let the times alone, Sammy. They will be as bad, I dare say, for your new trade. The fault is not in the horse but the rider: not in the trade but the tradesman. You will run through many callings before you outrun laziness. Look about you, and see if you can find one man who has bettered himself by forsaking his business. We have many such; jacks-of-all-trades and masters of none. You know the old saw, 'the rolling stone gathers no moss.' My advice to you is, to go forward in the road you are in: it is waste of life to open a new road and take a fresh start every few years."

"But, father," said Sammy, "the times are altered, and there are new chances for rising in the world. A great many of my acquaintances are growing tired of being little country-mechanics. I am not alone in my notions."

"Perhaps not, Sammy. If all fools wore white caps, we should look like a flock of geese: most of our working men seem bitten by the gadfly of change. But they may turn and turn, and gain nothing until they change their habits.

With a good trade, good health, good habits, and a good wife, any man may grow wealthy. But pray what is to become of a man's seven years' apprenticeship, when he goes into a new business?—Would you throw this into the sea?"

"O, no, father! That would be all loss, if I were going to slave it again at the anvil; but I mean only to superintend the work of others."

"That indeed!" cried the old man. "I begin to see your drift. You are going to leave a trade to which you were bred, for one of which you know little or nothing. You are going from an old business, in which you have to work with your own hands, to a new one in which you expect to play master. And are you so green, Sammy, as to think it requires no skill to oversee the work of others? Look at our gentlemen-farmers, when they come out of the cities, and see in what style they superintend the work. No, no! take an old man's word for it, unless you stick to your last, you may expect to go barefoot. One may decant liquor from vessel to vessel till there be nothing left. Let well enough alone. You have every thing but perseverance; now have that. Remember the epitaph, 'I was well—took physic—and here I am.' I have often heard it said, that three removes are as bad as a fire: it is as true of trades as of tene-

ments. Remove an old tree and it will wither to death. To make such a change is at best but bartering certainty for hope. Your bright prospects may turn out like those of the country-mouse: you remember the fable."

The conversation of the old man put me on a recollection of the cases which have occurred in our own neighbourhood, and I believe uncle Benjamin is in the right. I have seen the rise and progress of some hundreds of working men. Where they have stuck to their business, observing economy, and adding little to little, they have in almost every case arrived at comfortable substance. On the other hand, where they have been restless and versatile, even though these changes seemed to be for the better, they have, usually, lost all, and died beggars. In this free country, mechanics are not bound down by legal restrictions to the trade which they have learned, but may exchange one line of business for another, at their pleasure: and there are many temptations to do so, particularly when the times are unfavourable. It is the more necessary, therefore, to inculcate the principle that, as a general rule, perseverance ensures success, and change brings disaster. Men of lively genius often grow weary of the dull routine of business, and are tempted to forsake the beaten track upon new ad-

ventures; while your dull plodding fellows are laying a foundation for lasting wealth and usefulness. Hence the erroneous adage, that fortune favours fools. Sparkling qualities and elastic enterprise are not always coupled with practical wisdom.

Let me give the name of RUPERT to a man whom I formerly knew. His case is that of hundreds. He was indented to a harness-maker, with whom he served his time without any remarkable occurrence. He was considered very clever in his trade, and lived with his first employer about a year as a journeyman. At the end of this time, he thought fit to leave his former calling, in order to open a shop for the sale of glazed leather caps and similar articles. Having little capital and less perseverance, he had not been more than a twelvemonth in this occupation, before papers were seen in the windows, purporting that the stock was selling off, &c., and shortly thereafter the house was closed. For several weeks Rupert walked the streets, in the manner usual with those who do nothing because they cannot pay their creditors. When I next observed him, he was again labouring as a journeyman, but this did not last long, as he soon appeared among us as the agent of a line of stage-coaches. After acting his part for a few months

in this vocation, he was enabled by one or two of his friends to set up a shop for ready-made clothing; and we really thought he was about to manage prosperously. But his unstable temper again betrayed him. Just about this juncture, certain new resources were developed in the water-power of our creek, and several mills and manufactories were enterprised. Rupert became a partner in a paper-making establishment; was once more embarrassed; sunk in the stream; and after a suitable time, arose upon the surface in the new character of a lottery-agent. This gambling employment finally ruined him. It brought him into acquaintance with idlers, sportsmen, and black-legs. He became well known upon the turf. His whole appearance and dress were changed, for it may be observed that sporting characters strangely choose to be conspicuous. When I saw him last, he was on his way to Long Island races. He wore a white hat, plush vest, green broad-tailed, single-breasted coat, with fancy buttons, coloured stock; and had a whalebone wand in his hand, a paltry large ring on his finger, and a would-be cameo, as large as a half-dollar, on the soiled bosom of his striped shirt. Every feature and every motion indicated uneasiness and drink.

How was this catastrophe to have been avoided?

The answer is simple: by sticking to the shop. Keep your shop and your shop will keep you. The patriarch Jacob gives his eldest son a very bad name: "Unstable as water, thou shalt not excel."* It is the character and the lot of many a young mechanic. There are some employments which seem to lie open as snug harbours for those who have failed of all other ports. They are occupations which are supposed, whether truly or falsely, to need no foregoing apprenticeship. In country villages, it is too common to imagine that any man is fit to be an apothecary, though our very life may depend on a druggist's knowledge of pharmacy, and though more than one has sold arsenic for magnesia. Most men have talents sufficient for vending confectionary or old clothes. Tavern-keepers are seldom such as have been bred to the craft; though our best hosts are certainly those who have grown up in the bar. The same may be said of bar-keepers, booking-clerks, and travelling agents. The hawkers, and other travellers who go about so importunately with subscription-papers, pictures, German-silver spoons, or cheap books, wrapped up in greasy pocket handkerchiefs, have all seen other days, and would even now do better, if they would return to their proper

* Gen. xlix. 4.

calling. The worst of it is, this is the last thing they ever think of doing. Who was ever known to re-marry a divorced wife? The only safety is in dogged perseverance. Industry and time will wear away all the little disquietudes which prompt to change.

XX.

THE MECHANIC IN CELIBACY.

WITHOUT going to the extreme of him who compared an old bachelor to the odd half of a pair of snuffers, I have always looked upon this specimen of human nature as something out of the way, and pitiable. To the honour of mechanics, be it said, that they are more rarely in celibacy than men of other callings. He who works hard for his living finds abundant evidence that it is not good for man to be alone. Nevertheless, we now and then fall in with a veteran bachelor even among this class. As I am persuaded that truth is more attractive than fiction, all the world over, I will gratify my fondness for portrait by giving a half-length of my old acquaintance LUKE PEARMAIN.

Luke—for I love to be particular—is a last-maker, and learned his trade in a shop in Tooley street, within stone's throw of the old London bridge; now, alas! no more. He has room enough for a single man, for besides a front-shop, back-room, kitchen, and shed, he has two good

chambers and a garret. Moreover, he owns the house, and about an acre of land appurtenant to it. The reader has observed the tendency in all Benedicts towards punctuality, nay punctilio. They get a set, and crystallize in a rigid form. Luke is the most regular of men. Long since he has ceased to feel the need of severe labour, so that it is only by fits and starts that he works in his shop; indeed he has few calls, and the windows are half the time closed. He is by no means an extreme case, and I select him as a fair average specimen.

On Sundays he is one of the earliest at church, whither he repairs exactly once a day, and deposits in the proper receptacle exactly one cent. No eloquence ever thawed him into an enlargement of his charity. He is six feet high, erect, and spare in figure, with a rough, healthy ruddiness on his cheeks; and as he has that sandy hair which wears best with time, he shows not a gray lock, though he must be above sixty. In his apparel he is scrupulously clean, and his coarse shoes are well polished; but the cut of his garments is antique. His carefulness and ease of motion are such that dress lasts with him a long time. His brown surtout with metal buttons has appeared every Sunday for ten years. A tailor not long since pointed out to me a summer coat

upon Luke's back, as an article which he had himself made twenty years ago.

This honest man is not at all morose or snappish in his salutations or discourse; he is only *particular*. Yet living by one's self engenders selfishness, and a man must have a warm heart, if it is not congealed by forty years of bachelorhood. Luke buys little, and gives nothing, though he sometimes has money to lend. He has few visiters, and makes no calls, except at a few shops. He has a housekeeper, with whom he sometimes takes a formal drive, on a fair afternoon, in a gig which looks as if he might have made it himself, drawn by a bony horse, whose age nobody knows. But he is evidently very shy of the woman, and never manifests any recognition of the existence of children, unless they make undue noise about his door. His sitting-room is decorated with an old map of London, and a print of Westminster Abbey; and I have seen him reading Tristram Shandy with his spectacles on.

If any grave person now inquire what the moral of all this may be, I reply, it is not a fable but a true description. Yet it has its moral, and this I shall humbly endeavour to unfold. I scarcely ever meet Luke Pearmain without re-

flecting on the advantages of happy wedlock. His staid and precise demeanour cannot altogether mask a certain unsatisfied air which he always carries with him. Luke is not happy. Natural dispositions may be greatly stunted in their growth, but cannot be altogether eradicated: and when the social principles of our nature are suppressed, it is at a great expense. The process is gradual, and cannot be perceived in youth, but its effects are very manifest in a course of years. No man can go on through a long period, caring only for himself, without having many of the generous and nobler sensibilities of his nature deadened. It is often thought that a bachelor escapes many of the vexations of life. So he does; but at the same time he loses some of its most excellent lessons. He has no sick wife, with whose repeated sorrows to condole; but it were better for him if he had. Tears of conjugal sympathy are blessed in their softening effects on the heart. He has no children to give him perpetual anxiety; but if he had, he would find his best affections enlarged and clarified by flowing forth among beloved objects.

An old man, without wife or children, is like an old leafless trunk; when he dies, his memorial is gone forever; he has none to bury him, or to

represent him. Look at Luke Pearmain. His long evenings are dreary, and he hastens to bed; thus constraining himself to rise before cock-crow. What a different sight is witnessed next door. There is old JOHN SCUDDER, quite as old a man, and much feebler, as well as poorer; but ten times happier. He has had many a buffeting with hard times, has lost one eye, and followed four children to the grave; but see him on a winter's evening! The very remembrance of the scene does me good. There he sits in his stuffed arm-chair, by the glowing grate; his wife knitting by his side; his children around him at their books or work; his grandchildren climbing up his knees; or in the summer twilight, as he smokes his pipe under the oak-tree before his door, and chats with every old acquaintance.

Even beggars learn that they fare but ill at the doors of bachelors. Domestic troubles teach us to be compassionate. When a man so narrows himself as to present scarcely any mark for the shafts of adversity, he commonly lessens his benevolence in the same proportion. Besides, who can calculate the effect produced on the mind, manners, and heart of any man, by the intercourse of many years, with a gentle, loving, virtuous woman? In fine, there is no greater token of the

prosperity of America, than the facts—that all things around us conspire to encourage early wedlock;—that among our yeomanry marriages are seldom contracted for money;—and that we have our choice among thousands of the loveliest and purest women in the world.

XXI.

THE MECHANIC'S TABLE.

LET me say a word about the mechanic's meat and drink. Here there are two extremes to be avoided, namely those of *too little* and *too much* And first of the first. It may seem strange that any man should need to be cautioned against too meager a diet; yet such is really the case, in consequence of the fanatical hoax of certain grandame writers on Hygiene, and certain errant preachers turned quacks. Every one who is acquainted with the environs of London, has heard of the "Horns of Highgate," which used to be kept at each of the nineteen public houses of that suburb. There, in ancient times, the wayfaring man used to be "sworn on the horns," that he would not eat brown bread while he could get white, unless he liked the brown best; nor drink small beer while he could get strong, unless he liked the small the best. Among the "old ale knights of England," there were none who could not safely take this oath; but we have changed all this; and the American doctrine, among a cer-

tain class, is, that white bread is poison, and flesh an abomination. Many a man, whose mouth waters for a savoury chop or steak, is, by the stress of humbug, kept upon a lenten regimen for year after year, living on bran bread and vegetables.

The mischief is greatest among those who need the sustenance of generous viands—working men, and often invalids, to whom, in this land of plenty, a kind Providence has given an abundant variety of flesh and fowl. Some good people, having had their consciences schooled awry, believe the slaughter of animals to be akin to murder. They have, in their reading of Scripture, omitted the grant made to Noah: "Every moving thing that liveth shall be meat for you; *even as the green herb have I given you all things.*" Gen. ix. 3.

The entrance of one of these modern Pythagorean teachers, to the kitchen or table of a mechanic, produces the same effects as the wand of a certain doctor in Sancho Panza's island. Among pallid young ladies the system has great vogue; as also with dyspeptical matrons, and hypochondriacs of all classes. The converts profess to return to *natural food*, and eschew all artificial preparations. Swift must have had them in his eye when he said of a former race of herb-eaters,

"I am told many of them are now thinking of turning their children into woods to graze with the cattle, in hopes to raise a healthy and moral race, refined from the corruptions of this luxurious world."

In seriousness, let me dissuade every man who values his health, from trying experiments on so delicate a subject as the human constitution. The experience of many centuries has sufficiently evinced the fitness of a temperate animal diet to preserve our powers in good order. Many generations of sound and stalwart meat-eaters have lived to a good old age. The learned physiologist, Dr. Pritchard, has shown by numerous examples, that the nations which subsist wholly on vegetable food, cannot compare in robust health and muscular strength with the rest of mankind; and any one who has seen a tribe of the South Western Indians, who live exclusively on flesh, will find it hard to believe that it is a deleterious article of food. I plead only for a judicious mixture, and against the senseless clamours of charlatan lecturers.

It merits the particular consideration of working men, that in the statistical reports rendered to the Parliament of Great Britain from the manufacturing districts, the want of proper animal food is mentioned as a chief source of infantile

disease, scrofula, and premature decrepitude. No work on philosophy, as connected with diet, has received a more deserved popularity than Dr. Combe's treatise on "Digestion and Dietetics." This able physician and sound philosopher writes thus: "As a general rule, animal food is more easily and speedily digested, and contains a greater quantity of nutriment in a given bulk, than either herbaceous or farinaceous food." And again he says of vegetable substances: "to a person undergoing hard labour, they afford inadequate support." He also maintains, with our countryman Dr. Beaumont, that the *reason* of this is to be sought in the "adaptation of animal food to the properties of the gastric juice provided by nature for its solution." But I am beginning to talk too much like a doctor.

The wise mechanic will be careful to provide for his family and workmen a sufficiency of such food as is in season, provided the experience of the country declare it to be wholesome; without joining in a crusade against any accredited article of diet. Providence has given to us, in great profusion, both the fruits of the earth and the beasts of the field; let us make a temperate use of these bounties. I would banish from the table the intoxicating glass, but at the same time

would welcome the rich variety of good things which adorn our American market.

I am now ready to pass to the other extreme, namely, that of *too much*. This, it will be readily acknowledged, is by far the more common. As it regards animal food, there is surely a golden mean between eating too much and eating none at all. There is no civilized nation which devours more flesh than our own. While the peasantry of Europe have meat on their tables, in some countries about once a month, in others about once a week, the labourers of the United States indulge in animal food every day, and often at every meal. This is greatly overdoing the matter; and the stimulating effects of such excess is witnessed in the inflammatory and febrile disorders which prevail.—Besides, it is common for men who work hard to eat by far too much of what is set before them.

"Intemperate eating," says Professor Caldwell, "is perhaps the most universal fault we commit. We are guilty of it, not occasionally, but habitually, and almost uniformly, from the cradle to the grave. For every reeling drunkard that disgraces our country, it contains one hundred gluttons—persons, I mean, who eat to excess, and suffer by the practice. Like the ox in rich pasture-ground, or the swine at his swill-

trough, men stow away their viands until they have neither desire nor room for any more." This gorging of the stomach probably slays as many as strong drink. And this eating *too much* arises, in great measure, from a practice which is unfortunately a disgrace to our whole nation, I mean eating *too fast*. This prevents necessary mastication, and of course healthful digestion. It carries the eater far beyond the point at which the natural appetite cries, *Enough*. It renders the cheerful meal a rapid and almost brutal *feeding*. "Nowhere," says Dr. Combe, "does man hurry off to business so immediately as in the United States of America, and nowhere does he bolt his food so much, as if running a race against time. The consequence is, that nowhere do intemperate eating and dyspepsia prevail to the same enormous amount." Even the philosophy of epicurism might teach us, that we altogether miss the exquisite savour of morsels which are swallowed in such inordinate haste.

When the mechanic comes in to his meals, he should regard the hour as devoted, not merely to being *fed*, but to gentle repose after labour, social relaxation, and deliberate intercourse with his family. How different the scene, when a gang of men and boys, at the sound of bell or horn, rush into the eating-room; seize upon the nearest

dishes with ravenous violence; hurry through their intemperate repast with the silence and ferocity of beasts; while each, as soon as he has stayed the rage of hunger, dashes out of the apartment, unrefreshed and overloaded.

To the mechanic's wife belongs the task of spreading the frugal meal in cleanliness and order. Much of the comfort of home depends on these minor arrangements; nay much of the husband's attachment to his own fireside has this source. The white and well-laid cloth, the bright knives and other implements, the scrupulous neatness of every dish, and the delicate grace of tidy arrangement, when coupled with smiles and good humour, can give a charm even to "a dinner of herbs." But as I look into the dining-rooms of my neighbours, I sometimes see another sight; the table thrust against the wall; the cloth rent, and stained, and scanty, and ill-spread; the knives mottled with rust; the dishes huddled together; and all that is to be eaten heaped up at one view. To the mechanic's wife, I would say, "Pray you avoid it."

XXII.

THE MECHANIC'S MUSICAL RECREATIONS.

It can scarcely be denied that we are not a musical nation. We have no popular ballads; and what we call our National air is a burlesque, and always sung to ludicrous words. Listen to the snatches of songs which resound in the streets, and you will find them to be, in nine cases out of ten, not traditional lays, rich in ancient associations, but fragments of the last play-house airs, and for the most part senseless buffooneries, such as "Billy Barlow," "Jim Crow," or "Settin' on a Rail."

Yet I do not despair, having strong faith in the possibility of reforming even National tastes. There is a *taste* for music in our people; and here we have a foundation for our structure. In half our shops there is some musical instrument; and even though nothing but horrid discord is extracted from the ill-tuned fiddle or cracked flute, the very attempt shows the existence of a natural desire for the pleasures of melody. If our me-

chanics would only go about the work in the right way, they might soon arrive at exquisite enjoyment. Two errors are to be avoided; first, the supposition that music is a luxury beyond the reach of busy men; secondly, that proficiency may be attained without any instruction. There is so much musical capacity in our population, that in every village there might be, within a twelvemonth, a respectable band or orchestra. Where the experiment has been tried, this has been abundantly evinced. Several of the best bands in our cities are at this very moment composed of young working-men. But then let it be carefully observed, that musical skill does not come by inspiration. It is the fruit of labour, and of labour directed by some competent instructer. There lives very near to my abode a young apprentice, who has for about a year been playing, or rather working, on a violin. The youth is clever enough to learn, and his instrument is decent; but I am persuaded that, in the way which he now pursues, he may perform for ten years without ever being able to execute a tune. His instrument is never in tune, and he systematically scrapes upon two discordant strings at the same time; the constant effect is not unlike the filing of a saw. He has begun at the wrong end;

for I am persuaded that in two weeks I could put him in the way of becoming a very tolerable performer. In this, as in other things, some preliminary instruction is necessary; and in music, more than in most pursuits, the first blow is half the battle. If five or six young men would appoint an hour, bring their instruments, and for a few months play together under an experienced leader, they would be enabled to proceed even to the intricacies of the art, and would secure to themselves a satisfaction, of which they can now scarcely form a conception.

In Germany, music is taught in the schools as an indispensable part of common education. The reading of musical notation is learned even in the snow-covered huts of Iceland. In traversing the continent of Europe, the traveller finds at most of the hotels, bands of musicians from the neighbourhood, who play while he is at his meals. Every festival, whether national or religious, is graced with music. Serenades, from the same class of persons, are heard every night in the streets. Music echoes from shops and boats and harvest fields. Some of the best performances of Mozart's difficult pieces are said to proceed from the privates of Prussian regiments. It may be stated, as a general fact, that every house in Ger-

many and Switzerland has some musical instrument. In the vicinity of Geneva, a friend of the people succeeded in exciting such a zeal for national music, that I have known two thousand persons to be collected for the mere purpose of practising patriotic songs. It is scarcely needful to speak of Italy, or of the gondoliers of Venice. The street-music of that country might compare with our best performances here. Dr. Burney, a fastidious judge, speaks of having heard masterly execution in the streets of Brescia, from a company of the inhabitants; and he names the instruments, which were two violins, a mandoline, a French horn, a trumpet, and a violoncello.

I once stopped at a German settlement of no great size, where I was invited to hear some music at the house of a mechanic. Here a small company performed, vocally and instrumentally, almost the whole of Haydn's Creation. The master of the house, a blacksmith, more than sixty years old, took the first violin. His aged wife, in spectacles, gave us a vocal part. The eldest son, a joiner from a neighbouring village, sat down at a Leipsick piano-forte, on which, after having tuned it, he then executed with great skill the whole accompaniment. Several young men and women filled the remainder of the score.

A boy, five years of age, was pointed out to me, as beginning to play on the violin. Upon inquiry, I found that there was not a house in the town without a piano-forte, or some keyed instrument. The recollection of this evening's entertainment has often occurred to me as illustrating the happy influence of music upon domestic life and social habits. If you would have your young people to love home, induce them to cultivate music. It will beguile many a winter night, which might otherwise be spent in far different and more questionable pursuits.

I would seriously recommend to such young working-men as have any fondness for music, to look a little into the state of this matter among our more respectable German emigrants, or in the Moravian settlements in Pennsylvania. That which, among us, is a luxury imperfectly enjoyed by the rich, is among them the free inheritance of the yeomanry. There are few pleasures cheaper, more innocent, or nearer home. The best instrumental music in our great towns is produced by the aid of foreigners. I have scarcely ever listened to more entrancing harmony than that afforded, not long since, in our village, by a strolling band of eight very common-looking Germans. A few years ago a party of emigrants

encamped for the night upon an eminence aoout half a mile from my residence. About dusk. we were surprised by the most delightful sounds wafted across the valley from these humble sojourners. It appeared to be their evening hymn, accompanied by horns. The effect was indescribable.

The drift of all these remarks is to induce mechanics to cultivate music. I would, however, go a step further, and say, that the subject is one of so much importance in a national and moral point of view, that public-spirited men should attempt some concerted action for the encouragement of latent genius among the people. In Paris there was instituted, several years ago, a company of instrumental performers, wholly from men in mechanical employments, numbering more than a thousand. When I last heard of them, prizes were about to be distributed to the greatest proficients. Without aiming at any thing gigantic or chimerical, we may still do something in furtherance of this object. For example, in our own town and village, we may take pains to gather the scattered talent already existing, thus forming an association of such as have some measure of skill. These persons may be placed under the direction of the most advanced

musician among them, and may have stated meetings for practice. I have seen wonders wrought in this way. It is scarcely to be believed, before trial, how rapid is the progress of a company, as compared with that of a solitary player. And there is so great a charm in orchestral music, even though the performers do not exceed ten or a dozen, that little more will ever be needed than a beginning. Further, something may be done to reduce the price of instruction in instrumental music. So long as it comes to us with the tax of a luxury, it cannot diffuse itself. This end would soon be gained, if we should open the door to some of our worthy German musicians. A class of fifteen or twenty, at a low rate, might support some honest foreigner who is now starving. But the greatest reform is needed in private families. Parents and employers might accomplish the work, if they chose. But the truth is, they set no proper value on music, either as a pleasure, or a moral instrument. Their boy may whistle, or sing, or drum, or twang the jew's-harp, if he choose; but it no more enters their heads that music is a thing demanding any countenance or supervision, than that they should regulate the matter of hoop and ball. I am very sure that if I could duly represent to the apprentice who

reads these lines, how much refined and constantly increasing satisfaction he might derive, without any expense, from the cultivation of this art, he would not rest until he had advised with a teacher, bought an instrument, and deliberately entered his name as a musical scholar.

XXIII.

THE MECHANIC'S CLUBS.

In a free country, the tendency to association for mutual benefit is very strong. Hence the great number of societies, clubs, unions, and other fraternities, for intellectual improvement, for political discussion, for defence, or for relief in sickness. The fascination of such alliances is so great, that young mechanics are often drawn in, before they are aware, to connexions, measures, and expenses, at once unjustifiable and ruinous. In times of pressure, ignorance is sure to impute every calamity to the designs of malignant persons—sometimes the government, sometimes corporations, sometimes capitalists and employers. It is thus that the cholera, in various unenlightened countries, has been ascribed to the arts of enemies. Under embarrassments and want, the sufferers cling together, and combine in associations for mutual defence; and in some cases these combinations remain long after their original work has been done. We have become

too familiar with "trades' unions" and "strikes" to need any special explanations. These associations, in the long run, fail of their professed aim; partly by encouraging conviviality, and withdrawing great numbers of men from regular work; partly from the fact, that employers, being few in number, can act in better concert, and being possessed of some capital, can stand out in resistance longer than the other party. From a careful observation of the way in which this thing works, I am inclined to advise every young mechanic to hold himself aloof from all entangling alliances of the kind.

Not long since, I met with the wife of a mechanic whom I had formerly known. Observing her to be in great want and distress, I inquired into the causes; upon which she gave me, in substance, the following history.

"My husband (John Glenn) worked in * * *, at the hatting business, in the employ of a Mr. Jones. He gave such satisfaction, that Jones put him into a decent house which he owned, allowing him a number of years to pay for it, and thus securing the continuance of his services. This suited both parties, and we were very happy in our little dwelling, until the hard times came. At this time we had more than half paid for the

house, and had a nice garden with abundance of fruit. Mr. and Mrs. Jones were very kind, and I really felt as if we were fixed for life. John seemed to get along comfortably enough, though we certainly had to use great economy; but at length his acquaintances began to put other notions into his head. They were determined to have higher wages, and declared that John should unite with them in their Union. He was as desirous as any one for higher wages, but then he had been well treated by his employer, and was in his debt, and therefore felt that it was against his real interest to join with them. He held out a long time, and was one of nine or ten who continued at the manufactory after all the others had struck for higher wages. But they ridiculed and even persecuted him. There was scarcely any shameful name which they did not call him. They used to come in by dozens, and laugh at him, saying that he was a coward, a sneak, and a deserter, Mr. Jones's *man Friday*, and his 'last apprentice.' In fact, they goaded him so much, that at last he threw up the game, and united in their combination. I was always against this; but, in such matters, a woman's advice goes for very little. Often, I assure you, I have shed tears to see him parading through the streets with

their procession and flags, or paying money to their union, when I knew that we had not a whole loaf for our dear little children. And then he used to come home at nights from their meetings, not exactly drunk, but in a state of excitement which was very new to him.

"Matters grew worse and worse, and we were brought nearer to absolute beggary than I had ever been in my life. After a while we began to see that we had been too hasty in condemning our employers; for we observed that they were as little able to help themselves as we had been ourselves. Mr. Jones was obliged to shut up his large factory; and, as for us, we were on the brink of starvation. Our hearts were too full for much talk; and we spent many a sad day without saying a word to one another about our affairs. At length John declared that this could last no longer, but that he must look for work somewhere else. We sold part of our little furniture, and went to Philadelphia. Here we had so little encouragement, and lived so poorly, that one of our children died, and John was taken down with a fever, which lasted nine weeks. When he recovered, he told me that all hope of getting a support in this part of the world was at an end. He is now on his way to Cincinnati, to

seek employment, and I am returning with our two remaining children to * * *, to see whether I can keep them alive among our former friends by taking in washing."

I am persuaded that this is the unvarnished history of many a mechanic's family, during the last year; and, also, that in many cases the evil has been greatly aggravated by rash connexion with clubs and combinations. The temptation to drink, to which this good woman alluded, is very common in most of these associations. When men without employment, and under strong passion, meet together in large numbers, they seldom fail to indulge in the use of liquor; and here it is that some lay the foundation of intemperate habits for life. Idleness, the parent of all vice, is inseparable from such connexions; and the whole system tends directly to produce irregularity of life and sullen discontent.

There are clubs and societies of other kinds, which might be mentioned as pertaining to the life of mechanics. Debating societies are popular in some parts of the country. They have a charm for young men of active minds, because they cultivate the social feelings, yield a sort of intellectual pleasure, and give opportunity for the excitements of public speaking. Such clubs

might be turned to good account; but in practice they are often found to be deleterious. As they frequently meet at taverns, the transition is too easy from the debate to the bar. The subjects discussed are apt to be those of party politics; and these are treated in most instances with asperity and heat. The leading members of these societies, not content with exercising the rights of freemen, are prone to fall into the current of factious turbulence, to the neglect of their proper business. You will seldom find a noted politician among working men who is not unthrifty in his trade.

It is pleasing to observe, however, that there is still another description of club or society, of which the influence is purely beneficial. I refer to those associations which have for their object the mental improvement of their members in knowledge and morals. There are many such connected with the town and village Lyceums of our country. Where these are conducted in an orderly way, and especially where they are connected with lectures, experiments, libraries, and reading-rooms, they cannot be too strongly recommended. It is to be wished that every young mechanic should be a member of some such institution. Their influence upon friendly

feeling is very benign. They afford a delightful recreation after the labour and tedium of the day. They draw their members away from the temptations of the tavern, the dance, and the circus; and they enrich the mind with the best of all worldly wealth, true knowledge. Yet even here I would be jealous of every thing which encroaches on the sanctity of the domestic circle, or breaks the flow of neighbourly fellowship. These associations become evil so soon as they keep any man perpetually away from his wife and children, or preclude the kindly interchange of visits between friend and friend. On this topic I must be allowed to repeat what I have said elsewhere, that the tendency of the age is adverse to the genial glow of old-fashioned social intercourse. In former days, neighbours spent a large part of their evenings in mingling with one another, and these pleasant, homely visits, cemented alliances which endured as long as life, and friendships which descended from father to son. There were lovely winter-evenings, "when this auld cap was new." But now, the chief assemblages of our young men are in the club, the bar-room, or the streets. If no other evil resulted, the necessary consequence is, that during all the time thus spent, they are debarred from

the humanizing influence of woman. I am ready to maintain that a society without female communion tends to barbarism. In a word, let us so regulate our associations that they may not invade the sacred intercourse of domestic and social life.

XXIV

THE MECHANIC ABOVE HIS BUSINESS.

"I HAVE often heard," said UNCLE BENJAMIN "that puss in gloves catches no mice. And this has been very much in my mind lately, when I have observed how great is the ambition of our young sparks to be thought gentlemen."

"Surely, father," said Sammy, "you have no objection to a man's dressing himself decently?"

"Not at all, Sammy; a man may be as decent, tidy, and even elegant as you please; but all in its proper place. I often hear people asking why Sunderland, which is one of our oldest villages, thrives so little; and I always answer, because the master-workmen are never in their shirt-sleeves. You may see them at their shop-doors in Sunday trim before they have got their third apprentice."

"Then, father, you would have a man always in his apron."

"Not at all, Sammy, I say again. When I was a lad, we made ourselves smart every evening; on Saturday nights we took a little foretaste

of Sunday; and when Sunday came, every man was rigged out in his best; and a very pretty sight it was, I assure ye, to see an old-time beau—his hair in powder, prettily clubbed—plated stock-buckle—ditto for knees and shoes—small-clothes and white stockings—and posy in the bosom.

"But then we earned it fairly by hard knocks. In working-hours there was no play; and no man was ashamed of labour. But now-a-days there is a great rage for being over-genteel. I often spy a rich waistcoat and gold chain under a butcher's frock, and see young mechanics twiddling their ratans in the street, when they ought to have their coats off."

"But you will allow that a man may do a good stroke of work with a clean shirt and decent vest?"

"Very good! perhaps he may in some sorts of business. Let every man be as neat as his work will allow; but a collier will have a black face, and he is a poor carpenter who makes no chips. But I am thinking of more than mere dress. Too many of our working-men are ashamed of that which is their honour, namely, their trade. When they appear in Broadway, they wear gloves, and ape the coxcombs who never do any thing."

"Father, father," said Sammy, "I am afraid

vou would have mechanics reduced to an inferior caste, who must never rise, but forever look up to the richer folks as the lords of creation."

"There you mistake me greatly, Sammy. I am an old mechanic. Many a long year have I wrought at a laborious employment. I am for giving every man a chance to rise. I honour an industrious working-man. I think nothing more honourable than honest labour; and *because* I think so, I don't like to see a man ashamed of it. Let me tell you a story.

"About a year ago, I was returning in the stagecoach from Philadelphia, where I had been to see your uncle Isaac. Next to me sat a young man, who did not recognise me, but whom I at once knew to be a shoemaker in Second street. He took his seat with an air, and looked the gentleman. Every thing was fine; kid gloves; spectacles; watch in a little pocket almost under his arm; underclothes with a perpendicular aperture; white sole-straps; gold-headed switch. I perceived that his plan was to 'sink the shop.' Poor fellow! I wished to teach him a lesson, because I had known his father; so I gave him line for a while, and sat mum, while he talked largely of what the Philadelphians consider the property of each and every citizen—Fair Mount—Laurel Hill—Girard College—the new gas-lights—the

big ship. Not a word about trade, but much of 'Councils,' election, politics, the Great Western, and the theatre. As the company was very complaisant, he grew more easy, and at length usurped most of the conversation. At a good pause, I ventured to put in my oar, and asked, 'Can you tell me, sir, how Spanish hides have been selling?' He looked at me hard, and said, 'Not exactly, sir;' and hastened to talk of something else. 'Pray,' said I, 'do you know whether this business of importing Paris shoes has turned out well for the ———'s in Walnut street?' He coloured a little, pulled up the angles of his collar, and said, 'Not being in that line, sir, you must excuse me for not knowing.' He was uneasy, but not quite convinced that he was found out, and went on talking quite largely about the shipping business. I thought I could come a little nearer home by another inquiry, so I said gaily, 'Allow me to ask you whether good old Mr. Smack sticks to the last? I remember the day when he could finish his pair of boots with any man in Jersey.' This was wormwood; for he knew in his heart that Mr. Smack was his own father; yet as he was not even yet quite sure that I was apprized of the connexion, he replied with some confidence, though with a red face, 'Mr. Smack?—ah—yes—the old man; he has no

been in active business for several years.' I should perhaps have been content with going thus far. had not young Mr. Smack launched out in a strain, more affected than ever, of very absurd discourse about playhouse matters. As it was, inasmuch as I never was ashamed of being a mechanic myself, I knew no reason why he should be; so at the earliest rest in the conversation, I said, 'Mr. Smack, I am pleased to see that you keep up the old business: a very pretty stand that of yours in Second street; and if you please customers as well as your good old father did, I can engage for your success.' This speech settled my man. He turned several colours; the passengers exchanged looks and smiled; and at the next watering-place Mr. Smack went outside and made the rest of the journey on the box."

"I can't help thinking," said Sammy, "that this was a little illnatured in you, father. The thing is this. We live in a land of liberty and equality: we are looked down upon as labourers, and twitted as mechanics, 'snobs,' and so on. It is very natural, therefore, that a man should try to escape these sneers, and put the best foot foremost."

"But hold, Sammy; I agree it is natural and right to escape from contempt; but take the right way to effect it. What is the right way? Cer-

tainly not by being above one's business, or trying to 'sink the shop.' For this is saying that you are yourself ashamed of your calling; whereas you ought to be proud of it. Why conceal a thing, unless you think it a disgrace? Can you expect other men to respect that which you despise yourself? There is no surer way of bringing honest industry into contempt, than by using low shifts to avoid the appearance of labour. If you wish the public to respect your vocation, show that you respect it yourself."

Such was the advice of this veteran mechanic to his son; and I verily believe there is sound wisdom in it. It is very common to find the very same persons complaining that they are looked down upon, who encourage the contempt by seeming ashamed of that which is their honour. After some years of careful observation, I have never seen a mechanic above his business, who did not meet with mortification where he sought respect; and I have never seen a working-man, however humble his sphere, who lost any consideration in society by frankly appearing in his real character, and laying his own hand to the task whenever it became needful. The workingmen of America constitute a powerful and increasing class, and should do nothing to betray a doubt as to their own respectability.

XXV.

THE MECHANIC IN SICKNESS.

THERE are, at any given moment, more scenes of heart-touching grief among the humbler classes of society, than are ever dreamed of by the gay and opulent. It is one thing to sigh over the pictured sorrows of a romance, and another thing to enter among the realities of human suffering. In the latter case, we have to do with the naked, and often loathsome evil, without deduction, and without qualifying refinements.

Not long since, my business led me to visit the family of a young mechanic a few yards from my own lodgings. He was a journeyman printer, who had known fairer days: as had also his wife, a very young woman of little more than twenty years. This couple, with two infants, occupied a confined room in a third story. Some of my readers know that such is the habitation of many a larger household; and when favoured with employment and health, there may be true comfort even in such a spot. But the case was here far different. At my first entrance, I felt

that I was inhaling the noxious air of a sick room. The apartment was kept much too warm by an unmanageable old stove, upon which were simmering, in one or two earthen mugs, various simples, imagined to be suitable to the patient. The fumes of these, and the atmosphere of a chamber which could never be duly ventilated, made the place oppressive in the extreme. In one corner, upon a sorry bed, lay poor JAMESON, haggard and wan, and plainly labouring under a violent pulmonary affection. The hectic spot upon the cheek, and the painful respiration, too clearly showed the nature of the malady. The hand which he languidly extended, on my entrance, was husky and hot, and I could feel the throb of the angry arteries, even without touching the wrist. His eye was lighted up with that peculiar glow which accompanies such visitations.

Near the bed, the pale and sorrowful wife, while she held her husband's hand, seemed at the same time to be making fruitless attempts so to arrange the tattered clothes as to conceal the meagerness of the covering. A puny child was hiding its face in her lap, and another was asleep upon the floor. But few words were needed to let me into the extent of their disasters. During the earlier summer they had enjoyed health, and

found ample employment. But the decline of business threw Jameson out of work; and as he had never earned enough to justify any savings, the end of the season found him almost penniless. Just at this juncture, an unavoidable exposure occasioned a cough, which settled on his lungs, and left him in the state I have described. At first they called in a physician, but finding that this was an expense beyond their means, and that his prescriptions were of little avail, they had abandoned this reliance. They were without friends, or a single acquaintance except the inmates of the house, who treated them with vulgar indifference.

When I proceeded to inquire more closely into their circumstances, the poor woman burst into lamentation, and begged me not to press the subject, lest the excitement should be too much for her husband; while I could perceive the eyes of the sick man himself filling with scalding tears. Indeed, it would be hard to imagine a wretchedness more abject. At that very moment they were without a mouthful of food. For the sick man it was not needed; and the heroic self-devotion of the wife seemed to raise her above the ordinary cravings of nature; but she admitted that her heart was breaking with the cries of her little ones for bread.

As I pursued my solitary way homeward, saddened by what I had beheld, my gloom was increased by the reflection, that even then, and in that single town, there were doubtless many repetitions of the same scene; and that the number of these must necessarily be increased upon the access of a severe winter. If, therefore, I could write a line which might serve to prevent or alleviate such burdens, I thought the effort would not be undesirable. Among working-men, who "live from hand to mouth," sickness is a sore calamity; and on an examination of statistical tables, I find that on an extended computation, the average number of sick days in a working-man's year is far greater than I had imagined. The late pressure and present embarrassments in commerce cannot fail to make themselves felt, by their operation on the mind. "Of the causes of disease," says a judicious English physician, "anxiety of mind is one of the most frequent and important When we walk the streets of large commercial towns, we can scarcely fail to remark the hurried gait and care-worn features of the well-dressed passengers. We live in a state of unnatural excitement; unnatural, because it is partial, irregular, and excessive. Our muscles waste for *want* of action; our nervous system is worn out by *excess* of action." We may add, that in

many trades there is an excess in both sorts of action, and the body is worn away by labour while the mind is exhausted by despondency. If, then, disease is so sore a calamity to the working-man, it were greatly to be desired that every such person should be in some measure familiar with the laws of his animal constitution, and by all possible means should guard against the decay of his animal powers. But, inasmuch as sickness is unavoidable, with even the wisest precautions, there are one or two considerations which every mechanic should ponder, with reference to what has been hinted above.

First, *Frugality and economy should be used in time of health, in order to lay up something for time of sickness.* Disease is most oppressive when it is conjoined with poverty. Though a money-loving, we are at the same time an improvident, race. Many good and thrifty artisans lay up nothing. I know men now in abject want, who, a few months ago, were earning each his twenty dollars a week. What can such men do to resist the sudden tide of disease?

Secondly, *Working-men should avail themselves of associations for mutual relief in case of sickness.* Beneficent societies of this nature are common, but hale and well-doing persons are in many instances neglectful of this resource until

it is too late. The manner in which these institutions are conducted is frequently most injudicious. The rates both of subscription and of disbursement are often unwise, and contrary to all sound principles of life-insurance and probability. The consequence is, that in bad times the fund is exhausted. Before any such scheme is ratified, it should be carefully examined by persons versed in the intricate calculations of annuities. And when the plan goes into effect, there should be great care taken to guard against wanton expenditure upon entertainments, processions, and other unnecessary wastes. I would commend this subject to the careful discrimination of all those who are interested in the well-being of the labouring classes.

Thirdly, *Private benevolence should busy itself in seeking out and relieving all such cases of distress.* Let the mechanic feel that his interest is identified with that of all his brethren. Let him be quick to descry, and alert to mitigate the sorrows of his own townsmen and neighbours. No associated action can reach every case; but private charity, inspired by the genius of the gospel, may extend its kindly arm to the humblest sufferer. It is one of the most striking particulars in the account of the last judgment, as given by our Saviour, that the great final doom is to be awarded

with a direct reference to duties of this very class. That which is done for Christ's poor brethren is done for Christ; and if we neglect them, we neglect our own salvation. For the King shall say to those who have been guilty of this omission, "I was an hungered, and ye gave me no meat; I was thirsty, and ye gave me no drink; I was a stranger, and ye took me not in; naked, and ye clothed me not; sick and in prison, and ye visited me not."

XXVI.

THE MECHANIC'S WINTER EVENINGS.

The dreariest of all the seasons is not without its charms. If we have no verdure, nor flowers, nor zephyrs, we have the bright fireside and the family circle. Some of our most valuable attainments may be made, and some of our purest pleasures enjoyed, during the long winter evenings. It is, however, unfortunately the case with too many, that these fine opportunities are thrown away.

The other evening, after my usual light meal. the thought struck me, that I would give something to know how some half dozen of my acquaintances were spending their hours of release. Now, as I have no familiar Asmodeus to unroof for me my neighbours' houses and disclose their contents, I was reduced to the necessity of seizing my good oaken stick, and sallying forth upon a rapid tour of espionage.

At the very first corner, I perceived through the window my old comrade Stith, employed, as usual, with his pipe. After a day spent at the lathe,

he thinks himself entitled to this luxury; and with his dog at his feet, and his tobacco-box at his elbow, he sacrifices long hours of every night to the subduing influence of a narcotic. As I should only disturb his reverie, thought I, I will pass on.

Boulanger, the French baker, was the next in order. When I knocked, there was no reply. At length a drowsy boy let me in, and, as I expected, there was the corpulent master of the house fast asleep in an arm-chair. It is surprising how "practice makes perfect" in the art of slumbering. There may be some excuse for the baker, who has to rise several hours before day; but the practice is by no means confined to him; and I know more than one working-man who prepares for the regular night's work of the bed, by a sort of prelibation in the chimney-corner. This case offered nothing to detain me.

My next call was at the Golden Swan, one of the numerous taverns of our village. The bar-room was highly illuminated with many lamps, and two bright coal fires: the atmosphere was almost palpable, so thick was the smoke; and the air was redolent of alcoholic mixtures. Here I found, as I never fail to find at this hour, four or five of our mechanics; some smoking, some chewing, some drinking; and all engaged with loud voices in discussing the affairs of the state

and nation. Of such men the tavern is the home. True, each of them has a residence, inhabited by his wife, and known by the assessor; and where indeed he eats and sleeps: but that is not his home. His heart is not there, but at the bar-room, whither he goes with the momentum of an unbent spring, whenever labour is over; in which he spends the long evening of every day; and from which he reels to his family, at a late hour. to chide his wife for being up so late, and for looking so melancholy.

I gladly passed on to the dwelling of Quince. the shoemaker. Alas! the scene was altered. but not improved. The spirit of intoxication leads some men to ruin in groups, others in solitude. Quince is not a tavern-brawler, but a sot. During the day he never drinks; during the evening he does little else. There are many that have a fair reputation in the world, who never go to bed sober. I am willing to drop a veil over the particulars which I witnessed.

The scene brightened when I reached the steps of John Hall, the cabinet-maker; for I found his front room illuminated, and occupied by a little religious meeting. But I proceeded, and stepped into the house of Dukes, my next acquaintance, and was near spending the whole hour there; for he and his wife and children were engaged in a

little musical concert, which was most enviable. Mary Dukes sung over her knitting, and Robert sung over his base-viol; while the two boys, one with a flute and the other with a violin, added a good accompaniment. As I hurried away, I perceived the silversmith, who hires their front room for a shop, busily employed in posting his books.

Having travelled thus far on one side of the street, I thought it no more than fair to return on the other; so I crossed over, and knocked at the door of Belden, the coppersmith. The house is one of the tidiest in our town, at whatever hour you may drop in; and this must be set to the credit of the notable partner. Truly the sight was a pleasant one which met my eyes as I was ushered into their best room; being nothing less than a genuine old-fashioned tea-drinking, with some dozen of pleasant neighbours, all in their best dress and best humours, around a well-laden table and a smoking urn. When I compared the healthy glow of their countenances with the excited glare of the tavern-haunters, I could not hesitate whose evening to prefer. But I denied myself, and went on. I hesitated a moment about intruding upon my friend George Riley, wheelwright, because I remembered how lately he had lost his wife; but long intimacy em-

boldened me, and I went in. George was sitting by the fire, with an infant on his knee, and two little girls seated by his side. He was talking with them in a low tone of voice, and a tear was twinkling in his eye as he rose to accost me. No doubt he was giving them some useful instruction, for a Bible was lying open on the stand, and George is a man of religious feelings.

Last of all, I chose to enter the little back-room of Henderson, the Scotch weaver, nothing doubting as to what I should find. As I expected, Colin was at his books. A large map was spread out upon the table, and on this he was tracing the triumphant progress of Napoleon, whose life he was engaged in reading. Henderson is a man of slender means, but he finds himself able to lay out a few dollars every year upon good books; and the number of these has increased so much, that he has lately fitted up a neat little bookcase in one corner of his room. He has also a pair of globes, and an electrical machine, and has made himself quite familiar with natural philosophy and chemistry. Almost all his evenings are spent in reading, or in making philosophical experiments; and I am persuaded that none of his neighbours enjoy more comfort than he. After a few minutes' conversation with him, I came home, musing upon the blindness of the

multitude, who cannot perceive the profit and pleasure of knowledge. But I defer my reflections on this subject for another paper, as I have much more to say than can be comprehended in a single communication.

XXVII.

THE MECHANIC'S STUDIES.

Importance of Education to the American Mechanic

I AM ready to believe that the day is past, in which any one could find the title of this paper strange or ludicrous. If there is any reader who is disposed to take such a view of the subject, I must set him down as an emigrant from some despotic state, or a native of some wild frontier. There are regions, and there have been periods of time, in which mechanics have been held at so low a rate, as to be ranked but one degree above beasts of burden; to whom we might look for valuable service, but who needed no illumination. A better doctrine prevails in America. Wherever God has made a soul, we maintain that he has furnished a receptacle for knowledge. Some men must indeed require more knowledge than others, just as some men acquire more wealth than others; but man is an intelligent, or, in other words, a knowing creature; and we wish the stream of knowledge to be conducted to every individual of our nation.

The working-man is not expected to become an erudite scholar, or profound philosopher; this is the lot of such only as make the pursuit of knowledge their great business for life. But there is no man who may not acquire information enough on every subject, to be highly useful and agreeable. I have already suggested, in the course of these papers, that knowledge is peculiarly important to mechanics in America. In our free and growing country there is no barrier to indefinite advancement. Among the Hindoos, the son of a carpenter must be a carpenter; and the son of a blacksmith, a blacksmith. In the despotic states of Europe, the hedge of caste is not quite so high; yet such is the state of society, that, in the long run, the labourer's son is always a labourer; and though many sink below, few rise above the level of their origin. How different is the case among us! Every reader of these lines will think of persons who were once poor working-men, but who are now not merely rich, but distinguished in political and civil life. We at once call to mind the names of Benjamin Franklin, David Rittenhouse, Nathaniel Greene, Roger Sherman, and Thomas Ewing. Here then is a strong reason why the working-man should have education. Perhaps he will not always be a working-man; nay, it is his aim and expectation

to be something more. Now, if this wish be gratified, he will find himself in a new circle, amidst new companions, and where new qualifications for respectability will be demanded. Among men of information and refinement of mind, he will need something of the same, in order to take an equal rank. There are few objects more laughable than a vulgar and ignorant man of wealth. Every young mechanic should resolve to gain as great a store of information as is possible, in order to be ready for these changes which may take place in his circumstances.

But there is another peculiarity of American society, which renders some learning indispensable to the mechanic. Not only may he cease to be a working-man, but, even *remaining such*, he may be admitted to the intimacy of the accomplished and the elegant. Amidst these last I am bold to enrol some friends among the labouring classes—enough, certainly, to show that the two things are by no means incompatible. Now, educated and refined persons do not enjoy the company of those who are just the reverse. If you desire to mingle with persons of this character, you must seek to have some of their excellencies: and having these, there will be no obstacle to your admission. In Europe it is not so; there the demarcation between ranks is strongly drawn. In

America, though demagogues are fond of crying *Aristocracy!* there is no aristocracy in the European sense of that word. Here, it is true, as all over the world, like seeks its like—the rich man consorts with the rich man—the poor with the poor—the mechanic with the mechanic. But let it be remembered, that in America the educated man also seeks the intimacy of the educated man; and this whether he be rich or poor. Few ties of association are stronger than the common pursuit of knowledge. If you are possessed of science, or even seeking it, you have a passport to the study of the scholar. My word for it, that this experiment will not fail. Let the humblest labourer, possessed of some philosophical acquisition, go to Bowditch, Silliman, Henry, Cleveland, Bache, or Emmet, with a view to confer on a topic of common interest, and I will engage that no one of these learned men will ask whether he is rich or poor—a professor or a pedler.

Take it into consideration, likewise, that posts of honour and responsibility are open to all classes of men in the commonwealth. No poor mother, who looks on her sleeping babe, can predict with certainty that this very child may not one day be President of the United States. Leaving this extreme supposition, however, let it be noticed, that a large proportion of our public functionaries,

especially in the new states, are men who have laboured with their hands. How did it happen that these, rather than many others, obtained such prizes? Was it by mere chance? Certainly not; but by the deliberate choice of their fellow-citizens. Were they then the only men of talents in all that class of society? By no means: there are thousands still at the last and the loom, whose native powers are equal to theirs. What then is the secret of their advancement? I will tell you: *They had a thirst for knowledge.* They pursued and attained it. Knowledge is power: they thus gained power over their fellow men, exactly in proportion to their mental attainments. Here is a motive to exertion, which might well move every young man of spirit to attempt the improvement of his mind.

All these reasons, notwithstanding their truth and importance, should still have less cogency than the conviction of duty, which must arise whenever we consider ourselves as rational and immortal creatures. God has not given us these minds to be unemployed. Our usefulness in life depends very much on the exercise which we give to our faculties.

In several subsequent papers, I propose to offer a few suggestions, intended to stimulate working men to more earnest intellectual endeavours; to

point out the advantages and pleasures of such pursuits; to give some hints of what matters it is desirable to know; to indicate the ways and means of acquiring knowledge; and to encourage even the busy mechanic in the hope that by redeeming time he may arrive at invaluable attainments.

Let me ask the attention of the industrious classes to these counsels of a friend.

XXVIII.

THE MECHANIC'S STUDIES.

The Pleasures of Knowledge.

No man ever needed any arguments to increase his desire for the pleasures of sense. Yet these pleasures are in their nature evanescent; soon palling upon the jaded appetite; and, when pursued beyond certain very narrow limits, productive of great pain. In their quality, also, they are acknowledged to be the lowest of our gratifications. It is far otherwise with the pleasures of the mind. These are high, and spiritual, and ennobling, and may be pursued without weariness and without satiety.

That there is a natural thirst in all men for knowledge, and that the gratification of this thirst conveys pleasure, are truths which are felt to be such as soon as stated. The infant's curiosity, and the inquisitiveness of the schoolboy, the search for strange or wonderful objects, and the universal passion for news, are all modifications of the same original propensity. If there is one boy in a shop, who has travelled more, or read

more than his fellows, he straightway becomes their oracle, and they extract from him all that he can communicate. Many readers of the newspapers are really hard students; but they have never yet entertained the important truths, that all serious reading is study; that the same propensities are gratified in perusing the news as in poring over the sciences; and that the process of acquiring knowledge is in both cases the same.

My desire is to impress on the mind of every young mechanic, that a little increase of learning will give him a great increase of happiness. *Knowledge is Power*, says Lord Bacon. *Knowledge is Pleasure*, we may add with equal truth. Perhaps you will grant this, but you have taken up the notion that this pleasure must be sought through a great deal of pain. No supposition can be more erroneous. The first steps towards these fruits are, indeed, over a rugged way. The trunk of the tree is of difficult ascent. The husk is rough. But these obstacles are little more than momentary, and, having once overcome them, you have nothing but a succession of enjoyments. Indeed, the pursuit of knowledge is so purely pleasurable, that I have often paused, and sat in amazement at the blindness and folly of those, who, with every opportunity and free invitation, never enter this garden. I may say

with Milton, to such as yield to my guidance, "We shall conduct you to a hill-side, laborious indeed at the first ascent; but else so smooth, so green, so full of goodly prospects and melodious sounds, that the harp of Orpheus was not more charming."

The pleasures of knowledge are distinct from its utility; and were there no profit in science, it might still be sought as the highest luxury. By reading and study you become acquainted with a great number of new and extraordinary truths. Hear Lord Brougham on this point: "How wonderful are the laws that regulate the motions of fluids! Is there any thing in all the idle books of tales and horrors, more truly astonishing than the fact, that a few pounds of water may, by mere pressure, without any machinery—by merely being placed in a particular way, produce an irresistible force? That the diamond should be made of the same material as coal; that water should be chiefly composed of an inflammable substance; that acids should be, for the most part, formed of different kinds of air; that one of these acids, whose strength can dissolve almost any of the metals, should consist of the selfsame ingredients with the common air we breathe; that salts should be of a metallic nature, and composed in great part of metals, fluid like

quicksilver, but lighter than water, and which, without heating, take fire upon being exposed to the air, and, by burning, form the substance so abounding in saltpetre and in the ashes of burnt wood: these, surely, are things to excite the wonder of any reflecting mind—nay, of any one but little accustomed to reflect. And yet these are trifling when compared to the prodigies which astronomy opens to our view: the enormous masses of the heavenly bodies; their immense distances, their countless numbers, and their motions, whose swiftness mocks the utmost efforts of the imagination." To this we may add the pleasure of discerning new relations between truths already known; of advancing in the track of discovery; and of conducting trains of reasoning to undeniable conclusions. For lighter hours, the records of past ages open a path of entertainment far more healthful, and far more enduring than the pages of the romance. Truth is more wonderful, more fascinating than fiction. I have recently been reading a detailed account of the French Revolution, by a very eminent statesman of France: and I can truly say, that although I have been a great devourer of novels in my day, I have never had my curiosity, sympathy, dread, and indignation, wound up to so high a pitch of interest, as in the perusal of these

volumes. Why should the mechanic, more than other men, be willing to remain in ignorance of all that has been occurring for centuries upon our globe? His interests are those of common humanity. An ancient has said, "Not to know what happened before you were born, is to be always a child." Why should not the mechanic, as well as his wealthier neighbours, enjoy the high satisfaction of reading the story of past ages, and especially of his country's independence? If it be possible for a working-man to have these exquisite satisfactions, surely every one will say at once, Let him have them without delay. That it is possible, I mean to show in the papers which follow. One of the greatest privileges of a freeman is denied to him who remains in ignorance—for he might as well be a slave. The religious man, also, who suffers his mind to continue without cultivation, buries one of his most important talents. "The delight is inexpressible," says the noble author quoted above, "of being able to follow, as it were, with our eyes, the marvellous works of the Great Architect of Nature—to trace the unbounded power and exquisite skill which are exhibited in the most minute, as well as the mightiest parts of his system. The pleasure derived from this study is unceasing, and so various, that it never

tires the appetite. But it is unlike the low gratifications of sense in another respect: while those hurt the health, debase the understanding, and corrupt the feelings, this elevates and refines our nature, teaching us to look upon all earthly objects as insignificant and below our notice, except the pursuit of knowledge and the cultivation of virtue; and giving a dignity and importance to the enjoyment of life, which the frivolous and the grovelling cannot even comprehend."

XXIX.

THE MECHANIC'S STUDIES.

The Profit of Knowledge.

KNOWLEDGE IS POWER, said Lord Bacon, and the aphorism has become immortal; but I think it has not been sufficiently considered that the same observation, in substance, was made many centuries earlier by Solomon, who says, *Wisdom is better than strength.* When I think of answering the question, "What are the uses of knowledge?" I am disheartened at the greatness of the subject. Volumes might be written in reply; and I am almost tempted to cut the matter short, by saying, "All conceivable uses." All the good there is in the world is in a sense the product of knowledge. Compare the Hottentot with the Englishman, and own the power of education. Knowledge is the instrument in civilizing the world; and in proportion to the knowledge of any individual is his exaltation above the savage state.

You are, let me suppose, an artisan; you know that some information is useful to certain ends, but you are contented to seek those ends by an

easier and shorter method, independently of science. Allow me to tell you that you egregiously mistake. You cannot throw out the influence of knowledge any more than the influence of gravity. It is still knowledge which governs, though it may not be possessed by you. The only option which you have, is between being under the dominion of other people's knowledge, or taking part in the direction by your own. This makes a striking difference among mechanics. One man is a mere imitator. He turns out good work, but precisely as his old master did fifty years ago. He has no principles, exercises no reason, and makes no improvements. It is his pleasure to drive his wheel in the old rut. This is more like instinct than intellect; thus the bird builds its nest precisely as its ancestors have done ever since the creation. But a second workman has knowledge; he learns to investigate; he applies a little science to his work, and he becomes a discoverer. His methods are the fruit of reflection, and they save labour, time, materials, and money.

Let me illustrate this a little more fully. The story is familiar of the boy who always took his sacks to the mill with the corn in one end and a great stone to balance it in the other: his father and grandfather, forsooth, had done so before him.

Here we have a picture of the way in which ignorant men go on from age to age without advancement. It may be safely alleged that there is no handicraft, however plain or humble, to which some of the principles of science may not be applied with advantage. In the more glaring cases, every one grants this. Thus a clock-maker should know something about oscillating bodies; a pump-maker something of hydraulics. Yet even in these instances many pursue their trades with a mere blind imitation, and are totally at fault when a new case occurs. The coachmaker, and even the wagoner, would gain by understanding a few principles about the proper line of draught, and the advantage or disadvantage of the several sorts of springs. A caster of metals was for months perplexed by finding that he could scarcely ever hit the precise weight of metal to be used in casting an article of irregular form; at length a neighbouring schoolmaster taught him a simple law of hydrostatics, and then he had only first to immerse his model in a tub of water, and then to throw in metal until it reached the same height. Every one sees that some science is required for the *invention* of the Nott or the Olmsted stove; but it is not so readily acknowledged that some science is required in order to *use* them with economy and advantage. The

roughening of surfaces which are to radiate heat is a dictate of philosophy which is often very important. Metallic coffee-pots sometimes burn the fingers: this is avoided by making the handle partly of a non-conductor; but I have seen the bungling imitator copy this very article, with the ignorant substitution of the painted metal for painted wood; thus defeating the object. Many a good miller spoils his mill by unphilosophical tampering; as, for instance, by placing cogs on one of the rings of the water-wheel, or using a driving-wheel of equal diameter; thus giving a check to the momentum.

Many valuable products of the earth are lost by the ignorance of their possessors. In some of our States, how long was it before the properties of marl were fully recognised; and how many agriculturists are still incompetent to make a discriminating use of this mineral substance. Within thirty years, manganese was imported into England from Germany for the arts, while masses of it were ignorantly used for the repair of roads; and it is not two centuries since the tinners of Cornwall threw away the ores of copper, as refuse, under the name of *poder*. "To how many kinds of workmen must a knowledge of mechanical philosophy be useful! To how many others does chemistry prove almost necessary!

Every one must perceive at a glance, that to engineers, watchmakers, instrument-makers, bleachers, and dyers, those sciences are most useful, if not necessary. But carpenters and masons are surely likely to do their work better for knowing how to measure, which practical mathematics teaches them, and how to estimate the strength of timber, of walls, and of arches, which they learn from practical mechanics; and they who work in various metals are certain to be more skilful in their trades for knowing the nature of these substances, and their relations to both heat and other metals, and to the airs and liquids they come in contact with. Nor is it enough to say, that philosophers may discover all that is wanted, and may invent practical methods, which it is sufficient for the working-man to learn by rote, without knowing the principles. He never will work so well if he is ignorant of the principles; and for a plain reason: if he only learns his lesson by rote, the least change of circumstances puts him out. Be the method ever so general, cases will always arise in which it must be varied in order to apply; and if the workman only knows the rule without knowing the reason, he must be at fault the moment he is required to make any new application of it."*

* Library of Useful Knowledge, vol. i. Prelim. Treatise.

So much for that knowledge which comes into play in the prosecution of the several trades. But over and above this, there is no sort of information which may not, at one time or another, conduce to man's comfort or emolument. In this country we are all fond of being politicians, and proud of the right of discussion, and the elective franchise. The history of states and revolutions is, after all, the great treasury of political science, and every free citizen should have access to these stores.

In a word, if you desire to rise in society, and to influence others, labour for an increase of your knowledge. The method is infallible. Look around you, and find the man who excels all his fellows in useful information, and you will perceive in him one who governs the minds and the conduct of a large circle.

XXX.

THE MECHANIC'S STUDIES.

Discouragements.

In smoothing the way for the working-man towards the attainment of knowledge, I find that I have not many predecessors.* It is only in modern times that any such assistance has been systematically proffered. Among the works of the ancients, there are none which invite the labouring classes to share in the banquet of science; and even in later days, the popular essays of Johnson and Addison have been addressed to the wealthy and the gay. Within a few years past, the cause of popular education, in all free States, has begun to assume its just rank; and various publications have been made to stimulate the productive portion of nations to inquiry and culture. Still there are many objections to be met, and many discouragements to be blown away, before we can awaken to action even those

* There is, of course, an exception here in favour of one or two excellent compilations, which are recommended on another page.

who admit the excellency of education. I propose to evince to the intelligent mechanic, that the acquisition of learning is practicable; that there is no obstacle which may not be surmounted; and then, in succeeding papers, to show by undoubted facts, that every sort of difficulty has actually been overcome. Let me consider some of the objections which are likely to arise.

1. *The acquisition of learning is a great work, and I am appalled by its vastness.* True, the work is great, but not impossible. To attempt the whole circle of sciences would be vain; but to gain a part, and that a large part, is by no means out of the question. Dr. Johnson somewhere uses a happy illustration, of which I can only recollect the outline. Let a man sit down at the foot of a high mountain, to contemplate its greatness, and he will be ready to say, "The attempt is futile; I can never go over it." Yet, on second thought, he perceives that the work is to be achieved, not at one mighty leap, but by successive steps, and by the simple process of putting one foot before the other. The same great philosopher has said: "The chief art of learning, as Locke has observed, is to attempt but little at a time. The widest excursions of the mind are made by short flights frequently repeated: the most lofty fabrics of science are

formed by the accumulation of single proposi tions." Sands make the mountain, moments make the year. The rock is worn away, not by sudden force, but by perpetual droppings.

2. *I am poor, and cannot hope to become a scholar.* Blessed be God! no golden key is required in order to enter the garden of knowledge. Poverty offers hinderances, but only enough to induce more strenuous efforts. I mean to adduce examples of wonderful attainments made by men whose penury was greater than that of any one who reads these pages. Much may be learned from a few books, and much may be learned without any books at all. Some of the most brilliant discoveries in philosophy and chemistry have flowed from experiments, the whole apparatus for which did not cost a dollar. Let the poor man think of Heyne, Hutton, and Ferguson, of whom more hereafter. Wealth does not ensure learning. Indeed, opulence relaxes perhaps quite as much as want contracts the mind. One of the papers of the Rambler is entitled, "On the difficulty of educating a young nobleman." It is possible that if you were rich you would be far less disposed to acquire knowledge than you are at present.

3. *My occupation is laborious, and I have no time for study* Certainly you are unable to

command as much time as men of leisure; but you overrate the difficulty. There is not one person in ten who does not spend some of his hours in idleness, if not in vice. Most hard-working men pass more of their time in actual labour than is good for either mind or body: nature is supported with moderate toil, and there should be a portion reserved for the refreshment and discipline of the understanding. Besides, more may be learned by devoting a few moments daily to reading, than you would at first suppose. Five pages may be read in fifteen minutes; at which rate one may peruse twenty-six volumes, of two hundred pages each, in a single year. By saving the broken fragments of time, and redeeming hours from sloth and sleep, it is almost incredible how much may be accomplished without interfering with the most industrious habits.

4. *I have no teacher or assistant.* A good instructer is of great use, and saves much unnecessary labour; but even this is not indispensable. You will see from the examples which I shall give, how many have become learned in spite of this defect. Most educated persons, even among those who have enjoyed the best tuition, will tell you, that by far the most valuable part of their education is that which they have given themselves. Some of the greatest philosophers and

scholars whom the world has seen have been literally *self-taught men*. Only determine to acquire knowledge; use the best helps you have; and wherever you may begin, you will certainly end in great acquirements.

5. *My early education was neglected, and I am now too old to begin.* Let me call the attention of every youthful reader to this objection. How powerful an argument may be drawn from it in favour of beginning at once! But even to those who are somewhat advanced in life, I would say with the proverb, "Better late than never." Be encouraged: you have lost the highest prize, but there are others behind. It is true that the man who begins his journey after the sun is high, cannot overtake him who started at dawn, but by activity he may still do a great deal. You will have to work harder than others, but your gain will be just in proportion to your own efforts.

6. *My talents are only of the ordinary kind.* Be it so: you may still employ them so as to add immensely to your profit and happiness. It is an injurious error to suppose that the difficulties in the way of knowledge can be overcome only by extraordinary genius. Sir Henry Savile, provost of Eton, and one of the translators of our English Bible, used to say, "Give me the plodding student. If I would look for wits, I would

go to Newgate. There be the wits." That same good sound common-sense which conducts you through the details of your trade, will, if properly directed, lead you to the most desirable attainments in knowledge. Perhaps you may never become a Bacon, a Newton, or a Pascal, but you may obtain enough to double your usefulness and your comfort. Lay it down as a maxim, that no difficulty, arising from outward circumstances, can effectually resist a steady determination to excel.

XXXI.

THE MECHANIC'S STUDIES.

Examples.

To say what *can* be done is less impressive that to say what *has* been done; therefore I propose by a number of examples to show what the love of learning and persevering industry have accomplished, even in the persons of the humble.* I might begin with FRANKLIN; but I take it for granted that every reader of these pages is familiar with his history. LINNAEUS is an instance less hackneyed. It is known that he became the greatest naturalist of his day, and the father of a system which bears his name. But it is not so generally known that Linnaeus, the founder of the science of botany, was once seated on the shoemaker's bench. JOHN HUNTER, one of the greatest anatomists of our own or any age, was a cabinetmaker's apprentice, and spent the first twenty

* It is no more than just to say here, once for all, that in a number of these instances the author has done little more than abridge the lives published by the "Society for the Diffusion of Useful Knowledge."

years of his life without education. At this late period, he was led, by the failure of his master, to become an assistant in his brother's dissecting-room; and here his genius was awakened. The great dramatist, BEN JONSON, was a working bricklayer, and afterwards a soldier. The greatest of modern comic writers, MOLIERE, was fourteen years old before he was an adept in reading and writing. HANS SACHS, an early German poet of great fame, and a very learned scholar, was the son of a tailor, and served an apprenticeship, first to a shoemaker, and afterwards to a weaver; and continued to work at the loom as long as he lived. JOHN FOLCZ, another German poet, was a barber. JOHN CHRISTIAN THEDEN, who rose to be chief surgeon to the Prussian army, had been a tailor's apprentice. PAUCTON, an eminent French mathematician, was bred in such poverty, that he received scarcely any education until he reached his eighteenth year.

A very remarkable exemplification of successful enterprise occurs in the case of STEPHEN DUCK, a native of Wiltshire. He was born about 1700, of poor parents, and received a little school instruction. He then became a common labourer for some years, and forgot all that he had previously learned. At length he began to read a little, and found a thirst for knowledge excited.

He was now twenty-four years of age, with a wife and family, engaged at hard labour, and too poor to buy any books. Yet by extra jobs he earned enough to purchase one or two works on arithmetic and surveying. These he studied with great avidity, at night, while others were asleep. From a comrade he borrowed a few books, such as Milton, the Spectator, Seneca's Morals, an English Dictionary and Grammar, Ovid, Josephus, a few plays, Dryden's Virgil, Hudibras, and the poems of Waller and Prior. In process of time he became himself a poet, and attracted some attention, so that he received a pension from the queen. He applied himself to the learned languages, took holy orders, and lived in much respectability until the year 1756.

This instance, in common with most which I cite, shows that poverty is no effectual barrier to the pursuit of knowledge. The history of the great scholar Erasmus is well known. While he was studying at Paris his necessities were very great, so that he was reduced to rags; yet such was his literary zeal, that he wrote to a friend: "As soon as I get money, I will first buy Greek books, and then clothes." Among the classical scholars of our day, there has been no one more distinguished than the German, Heyne, a voluminous commentator on Homer and Virgil,

and an eminent professor; yet his origin was humble, and he had to struggle through great poverty. His father was a poor weaver, with a large family. "Want," says Heyne, "was the earliest companion of my childhood. I well remember the painful impressions made upon my mind by witnessing the distress of my mother, when without food for her children. How often have I seen her, on a Saturday evening, weeping and wringing her hands, as she returned home from an unsuccessful effort to sell the goods which the daily and nightly toil of my father had manufactured." After the usual course at a village school, the poor lad wished to learn Latin, and engaged to pay a schoolfellow fourpence a week for instructing him; but even this pittance would have been too much for him to raise, if it had not been for the kindness of a baker who was his godfather. From this time forward he battled with misfortune till he entered the university. Here his ardour for study was such, that for six months he allowed himself only two nights' sleep in the week. It is needless to trace his further course: what has been stated shows that poverty is no effectual obstacle.

The great HERSCHEL was a self-taught astronomer. He was the son of a poor musician, and at the age of fourteen was placed in a band of

music attached to the Hanoverian guards. After going to England he undertook instruction in music; then became an organist. But while he was supporting himself in this way, he was learning Italian, Latin, and even Greek. From music he was naturally led to mathematics, and thence to optics and astronomy. His name is now inscribed among the planetary orbs.

The inventer of the Achromatic Telescope is another instance in point. JOHN DOLLOND spent his early years at the silk-loom. But even in boyhood he evinced a taste for mathematics, and used to amuse himself with making sundials, and solving geometrical problems. Yet he continued in his original business even for some years after his eldest son came to an age to join him in it. During all this period, however, he was making silent advances in scientific reading. At the age of forty-six, he and his son devoted themselves to optics, and proceeded from step to step until his great discovery respecting light, which elevated him to the acme of his reputation.

How many manufacturers, who may cast their eyes on these lines, might find in the imitation of Dollond an ennobling as well as entertaining pursuit!

XXXII.

THE MECHANIC'S STUDIES.

More Examples.—Learned Shoemakers.

When we have to wrestle with difficulties, it is cheering to know that others before us have met and overcome them. The working-man, who is earnestly endeavouring to obtain learning, will find much to incite him in the following instances.

Joseph Pendrell spent his days as a shoemaker. When he was a boy, he once happened to stop at a book-stall, where he saw a book of arithmetic marked fourpence. He bought it, and immediately began to study it. At the end of this volume there was a short introduction to mathematics. This awakened his curiosity, and he went on adding one book to another, and reading these at little snatches of time, until at length he reached the higher branches of mathematics. When he became a journeyman he used all possible economy in order to purchase books. Finding that many works on his favourite subject were written in French, he bought a grammar and dic-

tionary, and mastered this language. Then he proceeded to acquire the Latin and the Greek, and formed a collection of classical books. During all this progress, however, he kept himself concealed from public observation; but he contrived to make himself master of fortification, navigation, astronomy, and all the branches of natural philosophy. He also became versed in elegant literature. Pendrell died in London, in the seventy-fifth year of his age.

Alexander Murray was a Scottish shepherd's boy, and was born in 1775. His father taught him the alphabet by writing it on the back of an old wool-card. He then learned to read in an old catechism, out of which he used to copy the letters. In 1782, he exchanged this for a psalm-book. Next he procured a New Testament, and read the historical books; and afterwards became the master of a loose-leaved Bible. He spent much of his time, while tending sheep, in writing on boards with a coal. In 1784, he attracted the notice of an uncle, who sent him to school; but this was only for one quarter, and then for five years he had no teacher. During this time he read nothing but penny ballads and the Bible. In 1787, he fell upon Josephus, and Salmon's Geography, of which he copied the maps. At twelve years of age he became teacher of the neighbour's

children, for which service his winter's remuneration was sixteen shillings! After this he again went to school, pored over the arithmetic, perused the Spectator, and studied book-keeping. In 1790, he learned the Hebrew letters from the 119th psalm, in an old Bible. Then he studied French, and afterwards got an old Latin grammar, which he learned, comparing it with the French. So he went on, and with such patience that he carefully read the whole of a Latin dictionary. His next study was Milton's Paradise Lost, of which he never ceased to be an enthusiastic admirer. In 1791, he began the Greek, and also proceeded to apply himself in good earnest to the Hebrew. These languages he continued to cultivate, sometimes teaching, and sometimes labouring, but always depending on his own exertions. Thus he made progress, adding one attainment to another, till at length he became the author of a learned work, and professor of oriental languages in the university of Edinburgh.

Among modern critics and scholars there is no name more distinguished than that of William Gifford, the founder and editor of the Quarterly Review. He was born at Ashburton, Devonshire, in 1765. Being left an orphan, and about being sent to the poor-house, he was put to school for awhile by his godfather, and learned a few of the

elements. Then he became a ship-boy on board of a coasting vessel, and performed the most menial duties. At the age of fourteen, he returned to school, where he distinguished himself; but up to this time his only reading had been the Bible, Thomas à Kempis, and an old romance. He was now apprenticed to a shoemaker, but was a very poor workman, and devoted many of his hours to arithmetic and algebra. His only book was a treatise on the latter of these sciences; and for lack of other conveniences, he used to work out his problems on leather, with a blunted awl. At this juncture he began to make verses, greatly to the displeasure of his master. Six years he drudged as a shoemaker, often sinking into the deepest melancholy, when, at the age of twenty, he was taken up by some kind patrons, and prepared for the University of Oxford. He afterwards became one of the most celebrated ornaments of modern literature.

Robert Bloomfield, the author of the Farmer's Boy, may here be mentioned. His father, who was a tailor, died before Robert was a year old, and all the education which the boy ever received, out of his mother's house, was two or three months' instruction in writing. At the age of eleven, he became a farmer's boy. At fifteen, he began to learn the shoemaker's trade with an

elder brother living in London. He worked in a garret with four others, and used to be selected to read the papers to the others. An English dictionary, cost fourpence, was the first book he possessed; but after a while, the shoemakers took in weekly numbers of the British Traveller, a geography, and a History of England, which Robert read to them while they were at work. His brother calculates that he spent in this way about as many hours every week in reading, as boys generally do in play. "I, at this time," says the same brother, "read the London Magazine; and in that work about two sheets were set apart for a review. Robert always seemed eager to read this review. Here he could see what the literary men were doing, and learn how to judge of the merits of the works that came out. And I observed that he always looked at the 'poets' corner.' And one day he repeated a song which he composed to an old tune. I was surprised that he should make so smooth verses; so I persuaded him to try whether the editor of our paper would give them a place in 'poets' corner.' He succeeded, and they were printed." Such was his first leaning towards poetry. In this garret he composed the Farmer's Boy, amidst all the noise of the hammer and the last.

Thomas Holcroft is well known as the au-

thor of "Hugh Trever," and other fictions. He was born in London, in 1745. His father was a shoemaker, and his mother a huckster of greens and oysters. For a very short time he was carried to a children's school by an apprentice of his father's. After the removal of the family into Berkshire, the boy learned to read, and this kind apprentice used to bring him little books from the metropolis. The mother became a pedler, and Thomas trotted after her through the country, sometimes begging, and often near starvation. Soon after this he became a stable-boy at Newmarket, where he picked up a few volumes, such as Gulliver's Travels, The Whole Duty of Man, and the Pilgrim's Progress. He practised arithmetic with an old nail upon the paling of the stable-yard. After two years thus spent, he rejoined his father, who now kept a cobbler's stall in South Audley street. At the age of twenty, he attempted to teach a school, but returned to the stall. Then he began to write for the newspapers: and such were the beginnings of a man who became in time a learned scholar, and a writer of some popularity.

XXXIII.

THE MECHANIC'S STUDIES.

Examples of Self-instruction.

WHY may not the young artisan who takes up this volume become a learned man? The thing has been done before, and may be done again. Many a soul of genius is this moment buried in the shop and the factory. I shall proceed with my examples, availing myself of the authorities already mentioned.

The best beginning I can make is with the case of JAMES FERGUSON, the Scottish philosopher. James was the son of a day-labourer, and was born in 1710. Such was his early thirst for education, that he learned to read tolerably well before his father had any suspicion that he knew his letters. When about eight years of age, he began to make experiments with levers, which he called bars, and succeeded in discovering the great mechanical principle which regulates their operation. In the same manner he found out the law of the wheel and axle—being without books or teacher, or any tools but his father's turning-lathe

and a pocket-knife. He had actually written out an account of his supposed discoveries before he learned that the same things were contained in printed books. While employed as a shepherd's boy, he used to amuse himself, in the midst of his flock, by making models of spinning-wheels and mills; and at night he studied the starry heavens. His method was to wrap himself in a blanket, and, with a lighted candle, to lie for hours on his back in the open fields. "I used to stretch," says he, "a thread with small beads on it, at arm's length, between my eye and the stars, sliding the beads upon it till they hid such and such stars from my eye, in order to take their apparent distances from one another; and then laying the thread down on a paper, I marked the stars thereon by the beads." Mr. Gilchrist, the minister of Keith, coming to the knowledge of this, furnished him with compasses, ruler, pens, ink, and paper, and set him to copying maps. His kind master often took the flail out of his hands and worked himself, while James sat by him in the barn, busy with his pen, rule, and dividers. A neighbouring butler gave him some hints in dialling, decimal fractions, and algebra, and lent him books. Among these was a geography, which contained a description of a globe, but without any figure. This set Ferguson at

work, and he made a wooden ball, covered it with a map, and thus made the first artificial globe he ever saw. By the aid of this he solved problems.

Soon after this be became an invalid, and went into the service of a miller. Here he made a wooden clock, and afterwards a wooden watch, both of which kept time pretty well. From this he proceeded to clean clocks, to copy prints, and even to take likenesses; and followed the business of a painter for six-and-twenty years. Here we may leave him, after saying that his numerous works on philosophical subjects are still held in high esteem.

Next I adduce the case of THOMAS SIMPSON, the great mathematician. He was born in Leicestershire, in 1710. His father was a weaver, with whom Thomas, after learning to read imperfectly, began to learn his trade. But he loved books, and was resolved to be a scholar. This led to repeated quarrels with his father, who turned him out of doors. He found refuge in the house of a poor widow, and there stole a little time for reading. From a fortune-telling pedler, who pretended to astrology, he acquired some taste for astronomy. Cocker's Arithmetic and a book of algebra introduced him to the exact sciences. He became a schoolmaster for a time, but soon

returned to the loom, still making wonderful attainments in knowledge. Having heard of the mysteries of the differential calculus, he procured two works on fluxions, and not only mastered them, but qualified himself to write a book on this intricate subject, which was afterwards published, and gained great applause. After this time his mathematical publications rapidly followed one another; he became professor of mathematics at Woolwich and a fellow of the Royal Society, and died in 1761.

The next example is not less instructive, though it is that of a less celebrated man. EDMUND STONE was the son of the Duke of Argyle's gardener. As the duke was walking one day in his garden, he observed a Latin copy of Newton's "Principia" lying on the grass, and supposing it had been brought from his own library, called upon some one to carry it back. "Upon this," says his biographer, "Stone, who was then in his eighteenth year, claimed the book as his own. 'Yours?' replied the duke: 'do you understand geometry, Latin, and Newton?' 'I know a little of them,' replied the young man. The duke was surprised; and, having a taste for the sciences, he entered into conversation with the young mathematician. He asked him several

questions; and was astonished at the force, the accuracy, and the candour of his answers. 'But how,' said the duke, 'came you by the knowledge of all these things?' Stone replied, 'A servant taught me, ten years ago, to read. *Does one need to know more than the twenty-four letters in order to learn every thing else that one wishes?*' The duke's curiosity redoubled: he sat down on a bank, and requested a detail of the whole process by which he had become so learned.

"'I first learned to read;' said Stone: 'the masons were then at work on your house. I approached them one day, and observed that the architect used a rule and compass, and that he made calculations. I inquired what might be the meaning and use of these things, and I was informed that there was a science called arithmetic. I purchased a book of arithmetic, and learned it. I was told there was another science called geometry; I bought the necessary books, and learned geometry. By reading, I found that there were good books in these two sciences in Latin; I bought a dictionary, and I learned Latin. I understood, also, that there were good books of the same kind in French; I bought a dictionary, and I learned French. And this, my lord, is what

I have done: it seems to me that we may learn every thing when we know the twenty-four letters of the alphabet.'" Stone also became a useful mathematical writer, and a member of the Royal Society; and though he is by no means to be compared with Simpson, yet it was one of Stone's books from which Simpson acquired his first knowledge of fluxions.

To my other instances I might add those of three Americans, who are all living, all working printers, and, if I mistake not, all journeymen. From motives of delicacy, I must suppress names, but the truth of the statement can be abundantly vouched by many who will peruse these pages. The first is the case of a self-taught man in the city of Albany, well known as an excellent workman, and no less so among scientific men as one of the most profound mathematicians in America. The second case is that of a younger man, residing in Brooklyn, who, amidst the labours of the composing-desk and the press, has found time to make himself thorough master of the Hebrew, Greek, Latin, French, and German languages, and is, moreover, one of the few men in the United States who are versed in the Arabic tongue. The third is a journeyman in the printing house of the American Sunday-school Union, whose poetical effusions, under the signature of T. McK.,

though as yet little noticed, would not discredit more famous pens.*

In closing this paper, let me earnestly recommend to every inquiring mechanic, a book by Professor Edwards, of Andover, entitled the "Biography of Self-taught Men."

* I subjoin the shortest piece of this writer's that I can find.

THE SYCAMORE BOUGH.

Upon an ancient sycamore
A noble bough there grew,
And fostered myriads of leaves
That hid itself from view.
When winter came with angry breath,
The bough was brown and bare;
Gone were the summer-hearted leaves
That once were nurtured there.

Thus with vain man. In summer days
The world around him clings;
It guiles his heart, and o'er his faults
A leafy mantle flings;
It blinds him, till the bitter day
Of pain and death comes on,—
And leaves him, then, to bear his woes
Unaided and alone.

Not so the lowly man who walks
The path that Jesus trod,—
Who daily learns to die; whose "life
Is hid with Christ in God."
The world can ne'er between his soul
And God's love intervene;
In joy or sorrow, life or death,
His hope is evergreen.

XXXIV.

THE MECHANIC'S STUDIES.

Clarke—Coleman—Drew—Hill—Wild.

THERE have been few instances, in our day, of more successful perseverance against difficulties, than that of the great commentator, doctor ADAM CLARKE. Though not a mechanic, he had to surmount obstacles as great as those which lie in the path of most working-men. It is known that at the time of his death he took rank among the most learned men of the age; yet, in 1782, he was a poor Methodist preacher; and they who are acquainted with the labours of this indefatigable class, know that they have any thing but an easy life. The toils of journeying did not, however, prevent his learning. He had already made some progress in Latin, Greek, and French, but these he was forced to intermit in some degree, having to travel several miles every day, and to preach, on an average, thirty days in each month. That he might not lose the whole time which he was obliged to employ in riding,

he accustomed himself to read on horseback. In this way he read many volumes. He also began the study of Hebrew, in which he afterwards became such a proficient

In his biographical sketch of himself, he gives some account of another Methodist preacher, named ANDREW COLEMAN, who, though a poor youth, and destitute of the ordinary helps to education, "attained to such a pitch of mental cultivation before his seventeenth year, as few have been able to acquire in the course of a long life. He became master of the Latin and Greek languages, and made considerable progress in Hebrew. To these studies he joined geometry, astronomy, chronology, history, and most branches of the mathematics. When he was about fourteen years of age, he had the whole of the Common Prayer by heart. He had made himself such a master of the Æneid of Virgil, and the Paradise Lost of Milton, at the same age, that on the mention of any line in either of these poems, he could immediately tell the book in which it occurs, and the number of the line."*

At this point, I might adduce the late remarkable metaphysician, SAMUEL DREW. First a poor boy, and then a working shoemaker, he became one of the closest thinkers and most profound

* Clarke's Life, vol. i. p. 63.

reasoners of our age. Whatever may be thought of his opinions, no one can fail to admire the talent displayed in his works on the resurrection, the immortality of the soul, and the being and attributes of God. Samuel Drew was born in the parish of St. Austell, in Cornwall, March 3, 1765. He was the son of a poor labourer. All he ever learned at any school was his alphabet. At the age of seven, he was obliged to go to work, his wages being twopence a day. At the age of ten years and a half, he was bound apprentice to a shoemaker, in the parish of St. Blazey. During his apprenticeship he made some progress in reading, chiefly by means of a paper called the Weekly Entertainer. Nothing in this journal, he tells us, so much excited his attention, as the adventures, vicissitudes, and disasters to which the American war gave rise. On setting up for himself, as he did near Plymouth, he lost his opportunities of reading, which he did not regain until, after four years, he became, at St. Austell, the foreman of a shoemaker, saddler, and bookbinder, who afterwards removed to America. Here he had various books, and read diligently; though his knowledge of hard words was so scanty that he had to make perpetual use of a dictionary. Among other books brought to be bound, he had access to Locke's Essay.

He had never heard of it before. He read it with admiration, nay, amazement. It opened to him a new world, and made him a metaphysician for life. For several years, all his leisure hours were given to reading; but he tells us this never interrupted his business.

Perhaps Drew might never have become an author, if it had not been for an attempt made by a young gentleman to convert him to the opinions of Thomas Paine. The attempt failed, and Drew wrote down his answers to Paine, which, in 1799, appeared in a pamphlet, being his first publication. The reviewers praised the work, and the humble author continued to write and publish; nor did he cease until he had become known to the British public as the writer of several profound works on the most recondite points in philosophy.

Among these instances of self-instruction, it would be wrong to omit the name of Robert Hill. He was born in Hertfordshire, in 1699. At the age of fifteen, he was bound apprentice to a tailor, with whom he remained the usual term. In 1716, he chanced to get hold of broken copies of the Latin grammar and dictionary. He had already acquired the habit of sitting up the greater part of every night at his books, but he now received a powerful incitement to the study

of languages. During a prevalence of the small-pox, which drove him away from his former residence in Buckingham, he kept his uncle's sheep, in which employment he was very happy; "for," said he, "I could lie under a hedge and read all day long." On his return home, he resumed his Latin, and used to bribe the schoolboys, by small favours, to help him over his difficulties. He would willingly run on an errand, in consideration of being taught the meaning of some word which was not in his dictionary. Before he ended his apprenticeship, he had read a good part of Caesar, and of the Latin Testament. The next event was his receiving, as a present, copies of Homer and the Greek Testament. This was enough to start him with a new language; accordingly he taught a young gentleman to fish, in return for a Greek grammar, and some instructions. In 1724, he opened a school, which he taught for six or seven years. But, unfortunately, at his beginning he had only ciphered "a little way into division," and had, nevertheless, to teach arithmetic. One of his scholars had proceeded as far as decimal fractions. Hill adopted the following plan: he set his pupil, by way of preliminary exercise, to copy a series of tables, which had some apparent relation to the subject of his intended studies. This occupied

six weeks, during which the poor master often sat up nearly the whole night, in order to get a little in advance of his pupil. A few years after this, he bought a lot of thirteen Hebrew books, for as many shillings, and succeeded in learning this language also. Such were his methods, which need not detain us longer. Hill died in 1777.

Let the working-man who reads this, lay down the book for an instant, and ask himself, how much he might have acquired, if he had possessed the same thirst for knowledge; nay, how much he might still learn. For the encouragement of diffident minds, let it be noticed, that Hill was by no means what is called a genius. His attainments were made by dogged perseverance, such as the apprentice who reads this might use with equal success. He acquired every thing slowly. He said himself that he had been seven years learning Latin, and twice as long learning Greek; and though he declared that he could teach any person Hebrew in six weeks, he had to struggle alone against very great difficulties. "When I was saying to him," says Spence, his biographer, "that I was afraid his studies must have broke in upon his other business too much; he said that sometimes they had a little; but that his usual way had been to sit up very deep into the nights,

or else to rise by two or three in the morning, on purpose to get time for reading, without prejudicing himself in his trade." He lived to be seventy-eight years old.*

From the same invaluable book, in the Library of Entertaining Knowledge, which supplied me with several examples, I borrow one more, which shall be my last in this connexion.

Henry Wild, of Norfolk, was also a tailor. During seven years of service under his indenture, and seven more as a journeyman, he forgot all that he had previously learned at school. A lingering fever laid him aside from his trade, and he amused himself with some theological work, in which he met with Hebrew quotations. This determined him to become a scholar. By hard labour he became able to read Latin, of which he had known something when a child. Then he proceeded to Hebrew, using a lexicon in which the meanings of the words were given in Latin. "While he was thus engaged, his health gradually improved, and he was enabled to return to his business; but he did not, for all that, neglect his studies. After working all day, his general practice was to sit up reading for a great part of the night, deeming himself far more than

* Pursuit of Knowledge, vol. i. p. 352.

compensated for his labours and privations, by obtaining, even at this sacrifice, a few hours every week for the pursuit he loved: and in this manner, within seven years, he had actually made himself master of the Latin, Greek, Hebrew, Chaldee, Syriac, Arabic, and Persian languages. Yet his extraordinary attainments seem not to have been generally known till a fortunate accident introduced him to the notice of Dean Prideaux, a distinguished proficient in oriental learning. Dr. Prideaux soon after exerted himself to raise a small subscription for this poor and meritorious scholar, by which means he was sent to Oxford, not to be entered at the University, but that he might have access to the libraries, and find a more appropriate occupation for his talents, in teaching those oriental tongues with which he had in so wonderful a manner contrived to make himself acquainted." The students gave him the name of the *Arabian tailor*.

My readers may never choose to become great linguists; but the same assiduity will have the same results in any other part of the ample field of knowledge. Nor can I believe that these, my hasty recitals of such facts, can altogether fail to stir up some aspiring minds.

XXXV.

THE MECHANIC'S STUDIES.

Encouragement to make a beginning.

THERE is something pleasant in the anecdote which Boswell relates concerning Dr. Johnson and a boy who rowed him down the Thames. The two friends were conversing upon the use of learning, when Johnson said, "This boy rows us as well without learning, as if he could sing the song of Orpheus to the Argonauts, who were the first sailors." He then called to the boy, "What would you give, my lad, to know about the Argonauts?" "Sir," said the boy, "I would give what I have." Johnson was much pleased with his answer, and gave him a double fare. Dr. Johnson then turned to his companion and said, "Sir, the desire of knowledge is the natural feeling of mankind; and every human being, whose mind is not debauched, will be willing to give all that he has to get knowledge."

This truth is manifest, and I am persuaded that many thousands of working-men would be engaged in the pursuit of knowledge, if it were not

for their ignorance of the way to set about it, and their magnifying the difficulties of the task. Hence it is that I have gone to what some may think a tedious length in the citation of examples, to show that every sort of obstacle has been surmounted, and every sort of attainment made, by men of ordinary talents. In considering the cases which have been detailed, you will find them so various, that the individuals have nothing in common except *a determination to learn.* Where this exists, the man will succeed; no matter what method he takes. The Greek proverb says, *Love learning, and you will get learning.* Set about it—at once—at any subject—with any book—and you will not fail. Not that I would undervalue regular system. Method is invaluable, and a methodical man will do twice as much in a day as his neighbour, just as a good packer will put twice as much into a trunk. Yet the most untoward beginnings, if followed up, will end in something. If a man were bent upon clearing a certain forest, it would undoubtedly be best for him to observe some order, and go forward in such a way that the trees should not fall over each other, or obstruct his road: yet if he should neglect this, and begin anywhere, and work in any way, provided he continued moving, he could not fail in time to accomplish his work.

I make this observation for the encouragement of those who are disheartened by the want of any directions, and by ignorance of the way to begin.

The ancients tell us that Cato learned Greek in his old age. Let me entreat those who have passed the prime of life without much education not to give up in despair. They may not learn every thing; but they may learn enough to shed a serene pleasure around their declining days. I have myself had pupils in spelling, who were nearly seventy years of age. A new life is given by education, even to elderly persons, when the imagination and the heart begin to be cultivated, and they learn to extend their views beyond the little circle of visible objects. "In such men," says Dugald Stewart, "what an accession is gained by their most refined pleasures! What enchantments are added to their most ordinary perceptions! The mind awakening, as if from a trance to a new existence, becomes habituated to the most interesting aspects of life and of nature: the intellectual eye is 'purged of its film;' and things, the most familiar and unnoticed, disclose charms invisible before." The same objects and events which were lately beheld with indifference, occupy now all the powers and capacities of the soul—the contrast between the present and the past serving only to enhance and endear so un-

looked-for an acquisition. What Gray has so finely said of *the pleasures of vicissitude*, conveys but a faint image of what is experienced by the man who, after having lost in vulgar occupations and vulgar amusements his earliest and most precious years, is thus introduced at last to a new heaven and a new earth:

> The meanest floweret of the vale,
> The simplest note that swells the gale,
> The common sun, the air, the skies,
> To him are opening Paradise."

Fix in your minds the maxim, that of knowledge, as of gold, the minutest fragments are valuable. I have often wished that Pope had never penned that much-abused couplet:

> "*A little knowledge is a dangerous thing,*
> *Drink deep, or taste not the Pierian spring.*"

It has frightened many an humble pilgrim from the paths of science. The verses contain an important truth, when understood in their connexion as applicable to smatterers in classical literature; but in their vulgar acceptation they are false and dangerous. There is no sense in which a *little knowledge* is more dangerous than a little of any other good thing. *Great* knowledge is undoubtedly better; but even a grain of knowledge is good, so far as it goes. A few moments' reflection will

set any man's mind at rest on this point. You are afraid of a "little knowledge:" but, with all your fears, you already possess a little. Do you suppose that you are the worse for this? Has this little proved dangerous? Small as it is—are you willing to lose it? Not at all. If a *little* knowledge is a dangerous thing, (it has been well said,) *make it more.*

Where the avidity for information is great, all such apprehensions will vanish. The humblest attainments will have their value, and the learner will be disposed to avail himself of the most trifling accessions to his stock. Take the following authentic statement, made by one whose early education had been neglected.

"My boyhood and youth are now over, and, in reviewing my past career, I am sensible of many errors of conduct, and many omissions of the duty which each man owes to himself; but in adverting to the particular period I have mentioned, I am at a loss to perceive how, under all the circumstances, I could better have employed the uncontrolled and unguided leisure of my boyhood than I did. During this period, and subsequently, in the intervals of manual occupation, I read with eagerness every printed thing that fell in my way —from the placard on the wall, and the torn newspaper gathered from the street, to volumes

from the shelves of my neighbours—and from the nursery-book and the fairy-tale, to the poetry of Milton and the metaphysics of Locke. Thus, in the progress of years, I gathered together a considerable quantity of general knowledge, mixed with much rubbish and unprofitable matter. I gathered this knowledge together in solitude and silence, without the cognizance, direction, encouragement, or control of any living soul. I was even stirred by reading to think and to write for myself; and I acquired the power of expressing what I thought or wished to state, just as I now express it to you."

My great end will have been accomplished, if I can lodge deeply in the reader's mind two convictions: first, that knowledge is *desirable;* secondly, that it is *attainable.* He who has received the due impression of these two truths, may be safely left to himself. In my next I shall attempt to give a few useful hints in regard to the pursuit of knowledge.

XXXVI

THE MECHANIC'S STUDIES.

Hints and Directions.

LET not the reader expect too much from this title; for, after all, the grand direction is, TRY—TRY—TRY. Yet a few general counsels may prove useful to such as are entering upon an untried way. The great object in all pursuit of knowledge is, the formation of habits; and the earlier one begins to form good habits the better. Therefore, I would address the remarks of the present paper more especially to apprentices and young journeymen; while, at the same time, they have an application to working-men of any age, who are addicting themselves to study. I will now proceed to offer the following directions.

1. *Begin at once.* Do not put off your learning till some better opportunity. The first blow is half the battle. This is eminently true in the matter of study. There is always a difficulty in beginning. It is like the starting of a car on the railway: overcome the first resistance, and the

remaining progress is easy. It might take a little time to "get your hand in," but not so long as you suppose. Begin from this very day; resolve—as you now sit and read these lines—that you will commence the work of self-improvement. Take time by the forelock; or, if you have already lost a good part of your life, acknowledge this as a strong reason why you should husband that which remains. If you can only bring yourself to take the first step, there will be a good hope of your continuance.

2. *Learn something every day.* If you read only by fits and starts, you will probably lose a great deal in the intervals. It is by slight, but perpetually repeated strokes, that the iron is wrought into shape. Begin every morning with the inquiry, "What can I add to my stock this day?" In this respect, act with regard to knowledge, as you are ready enough to do with regard to money. We are all wise about the wealth of the world; but learning is wealth. I could take all the maxims of frugality, and show how they apply to the accumulation of knowledge. "A pin a day is a groat a year." Consider no day's work as complete, unless you have tried to learn something useful.

3. *Set a value on the smallest morsels of knowledge.* These fragments are the dust of

diamonds. Of these fragments the mass of learning is composed. "It is true," as Poor Richard says, "there is much to be done, and perhaps you are weak-handed; but stick to it steadily, and you will see great effects, for constant dropping wears away stones; and by diligence and patience the mouse ate in two the cable; and little strokes fell great oaks." A man may learn that in two minutes which may be valuable to him all his life. Even if you see no use in the thing learned, do not despise it. Learn all that you can, and you will live to see its value. Never let slip an opportunity of gaining a new idea. And remember that the beginnings, even of the most sublime sciences, are often so simple as to seem worthless.

4. *Redeem time for study.* The busiest workman can spare some moments. If you mean to get wisdom, you must learn the value of moments. Great attainments have been made in these little snatches. Whether you work or play, do it in earnest; but never be unemployed an instant. Unstable and indolent people lose much of life in thinking what they shall do next. Always have a book within reach, which you may catch up at your odd minutes. It is incredible, until trial has been made, how much real knowledge may be acquired in these broken scraps of

time. Resolve to edge in a little reading every day, if it is but a single sentence. The man who pursues this method will infallibly become learned. Take a little time for reading from each end of your night's rest. If you can gain fifteen minutes a day, it will make itself felt at the close of the year. I have sometimes thought that the mind acts with double vigour when forced into these brief periods of application. By degrees, you will learn to save moments from recreation, from idle talk, and even from work. And in the long winter evenings, you will certainly be inexcusable, if you do not devote an hour or two to your books.

5. *Regulate your thoughts when not at study.* A man is thinking even while at work: why may he not be thinking about what is useful? Study is intended to discipline the mind; let your mind be kept under check and rein, while your hands are employed. Revolve in your mind what you have last been reading. Commit useful things to your memory, and turn these over in your thoughts, while you ply the hammer or the wheel. Remember that most of the matchless effusions of Robert Burns were conceived while he was toiling after his plough. Moreover, there is such a thing as study without books. Keep your mind in an inquiring mood,

and you cannot be in any situation where you may not be learning.

6. *Try to get companions in learning.* Every one has felt the pleasure and profit of having a companion in a journey. It is the same thing in the pursuit of knowledge. The way is thus made lighter, and even shorter. If you have no acquaintance who is rightly disposed, seek to inspire some friend with the desire of knowledge; you will thus be benefiting another as well as yourself. If possible, however, attach yourself to one who is somewhat in advance of you; he will be a sort of instructer and guide; and this will prove a great saving of time and labour. Where two persons are engaged in the same pursuits, they encourage one another, and find a stimulus in the little amicable rivalry which is awakened. Above all, talk with some companion, as often as possible, about the subject of your reading. Conversation about what we study is almost as useful an exercise as the study itself. Not only does each communicate the light which he has gained himself, but new sparks are struck out by the collision of mind with mind. There will be also an exchange of books, and each will alight upon plans and methods which might not have occurred to the other.

7. *Seek the advice and aid of some man of*

education. This is not indispensable, but highly to be desired. In travelling an intricate road, it is well to be guided by one who has passed it before us. I am sure that half the labour of a lifetime may be saved in this way. There is scarcely any man of real learning who would not take pleasure in lending a helping hand to a beginner. Young mechanics are too diffident in this matter. Any young man who has difficulties in his solitary studies, may feel assured that he will be welcomed oy the true scholar whom he goes to consult. I cannot call to mind an instance in which applications of this kind have failed to give pleasure. You will particularly need advice about the books which you should read. There are elementary, or first books, in every branch of knowledge. If you begin with one of these, much unnecessary trouble will be avoided, and you will have less need of a teacher. Get from your most approved adviser a list of such books as you should from time to time procure.

8. *Lay aside a little money for books.* If you love learning, I need not say a word about the value of books. A little economy will enable you soon to have a little collection of your own. When I consider how much is squandered by apprentices upon superfluous dress, trinkets, horses and vehicles, strong drink, tobacco and

cigars, I see at once a fund from which many a little library might be founded.

9. *Be not discouraged by the seeming slowness of your progress.* All progress in learning is by imperceptible degrees. You cannot see the minute hand of your watch move; yet it completes its circle eight thousand seven hundred and sixty times every year. Call to mind the steps by which you learned your trade; in any given week you could discern no advancement. The growth of knowledge is like the growth of the body; you do not feel yourself growing, but you know that you have grown, by comparison at long intervals. Be of good cheer, delay not, and you will one day thank me for my counsels.

XXXVII.

THE MECHANIC'S STUDIES.

Reading.

LET no great scholar read this essay. It is meant for those whose education has been neglected, and who are willing to go back and lay the first stone of the structure. The subject is, the *Art of Reading*.

If our system of popular education was what it ought to be, no boy of fourteen would be put out to a trade, without a thorough acquaintance with reading, writing, arithmetic, and plain composition. If parents and guardians were awake to their duty, the same result would take place. But as matters now stand, it is an undeniable truth, that not more than half our young apprentices are even good readers.

Reading is rather an instrument than a part of education. It is the indispensable key. Many are said to know how to read, who still find the greatest difficulty in picking out the sense of a common paragraph in the newspapers. Others can, indeed, spell out the words, but the effort is

such as to absorb their whole minds, and to leave them scarcely any ability to catch the train of ideas. Now, it should be laid down as a principle, that no man is yet a reader, who has not so much facility that he never considers it a task, or finds any more labour in it than in eating his daily food. This is to be gained only by constant practice.

Again, there are persons who take pleasure in the solitary and silent perusal of books, while they are ashamed or afraid to read aloud for the benefit of others. Their pronunciation is barbarous; they stammer, and hesitate, and miscall the words; they have no idea of giving proper expression to what they utter. They are, therefore, unfit to teach their children, or even to entertain their friends.

The proper remedy for these evils is to be sought in careful and constant practice; and especially in reading aloud; which, besides being a useful accomplishment, is highly advantageous to the health, and is recommended by the best physicians, as a preservative of the lungs. All this may be gained without any self-denial, by the custom of reading the papers, or other entertaining publications, during the intervals of labour. This is an advantage possessed by mechanics whose operations are sedentary and within doors;

and this, I suppose, will go far to account for the fact, that learned men have so frequently proceeded from the shops of tailors and shoemakers. It would be vain for the bricklayer, the blacksmith, or the ship-carpenter, to attempt such an exercise, amidst the clang of the hammer and the adze; but the privilege may frequently be enjoyed by the saddler, the painter, and the watchmaker. There is no shop in which there is not occasionally an individual waiting for his work, or otherwise unemployed. In such cases, how much improvement and satisfaction might be derived from a wise economy of the odd minutes! The case of Bloomfield, already mentioned, may be referred to as an illustration. Even the little boys of the family might sometimes be introduced for the same purpose. But, as my present subject is improvement in reading, nothing will be effectually gained, unless the person who feels his deficiency actually practises himself. And here let me earnestly warn every young mechanic against that wretched and ruinous false-shame, which would tempt him to avoid the means of learning, for the sake of concealing his ignorance. However gross your defects may be, do not scruple to make them known: in no other way can they be supplied. You will find it to have been the invariable practice of all who have

become eminent, to confess their ignorance, as the first step towards acquisition. Every man is ignorant of something; but it is the part of the truly wise to be constantly filling up these vacancies, in every practicable way.

With this principle in view, the apprentice, or the journeyman, or even the master-mechanic, who feels the shame and loss of ignorance, will slight no methods of improvement. If he cannot get the private instruction of some more gifted friend, he will seek the advantages of a night-school, or club with some half dozen of his acquaintances to secure the assistance of a teacher for an hour or two during the week. As I have hinted, there is but a small proportion of our working-men who can be called good readers; and yet there is, perhaps, no man who, during the course of his life, is not placed in circumstances where the want of this facility is the source of loss or mortification. In public meetings or committees, the routine of ordinary business often demands the reading of papers, and a man must have at least forty years over his head before he can decline the office under the pretext of having forgotten his spectacles. Most of all is this element of education necessary in training up a family of children. Even if a man can contrive to get through the world without ever reading a pleasant anecdote

to his wife—how is it possible for him to do his part by his children, if he is unable either to instruct them by books, or to help them in their tasks? How can he act as the domestic priest and religious head of his household, if he is unfit to read with them a chapter in the Bible, or a family prayer? I have said little about literal and absolute inability to read, because I would really flatter myself that few working-men among us are in this sad condition; and because such persons, by the very supposition, are out of the reach of my essays: but more is needed than what is called reading in our hedge-schools; and which often partakes more of the qualities of whining, snuffling, and singing, than of human elocution. If then, among the readers of this volume, there should happen to be even *one*, who, after spelling out my meaning, has been made sensible of his neglects, and desirous of redeeming lost time, let me affectionately clap him on the shoulder by way of encouragement: my good fellow, it is never too late to learn!

Such is the benignity of Providence, that the things which are most necessary are most accessible. Among all human arts, there is none more rich in its fruits than the art of reading; and there is none more easily acquired. Resolve to make up for lost time; acknowledge your im-

perfections; begin in the right way, and you will assuredly succeed

Without such facility in reading as may allow the mind to follow without distraction the current of an author's thought, there can be no real pleasure in the exercise. And where there is no taste for reading, a man's school-learning is of little value. How many are there who have gone to school, and have books in their houses, who yet are making no improvement in knowledge! If, for form's sake, they open a volume and turn over the leaves, you see by the vacant eye and sleepy countenance that they have no pleasure in it. The task is heavy; and after a few yawns, and perhaps nods, they lay the book aside, or let it drop, to find more congenial satisfaction in the arm-chair or the pipe. On the other hand, if you read with ease, you will read with pleasure, and will have opened to you the door of universal knowledge. As Edmund Stone said to the Duke of Argyle: "It seems to me that we may know every thing, when we know how to read. Does one need to know any thing more than the twenty-four letters, to learn every thing else that one wishes?"

XXXVIII.

THE MECHANIC'S STUDIES.

Writing.

By working so long under ground, among the rude foundations, I am likely to deter from the perusal of these essays all who think themselves already well-informed. Such an effect will give me no concern, as I shall be the better able to lay a broad and solid basis for the structure, without the interference of critical or conceited meddlers. My business lies with the working-man, and most of all with him who frankly owns that he knows but little, and would fain know more. My heart warms at even the remote probability that these lines, penned in solitude, and often in weakness and pain, may prove a guiding light to one or two of my industrious fellow-citizens. But lest I wax sentimental, let me proceed to the *Art of Writing*.

I now use the term *writing* in a wide sense, including *orthography*, or what is commonly called spelling, because our proficiency in this is evinced only in what we write; and *plain com*

position; but for which the mere manual dexterity is of little account.

One might readily suppose that every mechanic and tradesman would be desirous to write a fair and legible hand. The clergyman, the professor, or the man of wealth, may scrawl the vilest pot-hooks and hieroglyphics, and yet manage to avoid exposure; but the working-man has his books to keep and his accounts to render. His writing is therefore seen by hundreds; and we are all very apt to form some notion of a man's neatness and general improvement from the way in which he handles his pen. It is needless to say that not one in fifty possesses this accomplishment. Alas for our common schools! Alas for the indolence and indifference of our young men! I will not dwell long on this part of the subject, but I do seriously maintain, that every man who has his complement of fingers, and resolution to begin at the beginning, and set himself regular copies, may attain to a decent, clear, and intelligible hand. And, by so doing, many a man might avoid the mortification which has been known to ensue upon the exhibition of a day-book in a court of justice. In order to write well, one must have so far mastered the manual operation as to write with some pleasure. If our schools were what they should be, this matter

would be secured before boys enter upon their apprenticeship. At present, I dare say there are not a few mechanics who find less trouble in the manufacture of a table or a boat, than in drawing off a fair copy of a bill.

But suppose the mere handwriting to be unexceptionable, there is another matter which is quite as important, namely the art of *spelling*. So far as my observation goes, orthography is never adequately learned without the practice of writing. It is one thing to get by rote endless columns of words in a spelling-book, and another thing to take a pen and write off the same words promptly and accurately. I could show laughable specimens from my files of accounts, and I presume every reader can do the like. This evil often betrays itself in a way somewhat mortifying, when a man rises in the world, and is invested with public office. There is within my knowledge a very worthy personage, a justice of the peace, whose records of evidence are among the rarest curiosities in the collections of the lawyers who have made them laughing-stocks. Some ten or twelve years since, I visited a hall of legislation not a thousand miles from our state capital. The barrier between the dignitaries and their constituents had not then been elevated so as to shut out the pragmatical glances of saucy observers;

and as I leaned over the railing, just behind a portly legislator, my eye undesignedly fell on the engrossed title of a bill, the topmost in the little tape-tied parcel on the assembly-man's desk. He had intended to entitle it "Bill concerning Horse-racing—postponed." Instead of this, I beheld, in a very legible copyhand, the following words—

BILL AGAINST HORS RASSING—
POSPONDED.

Those who are willing to mend their ways in this particular, should furnish themselves with a good copy of Johnson's or Walker's Dictionary; they should consult this whenever they are in doubt; and they should cherish their doubts, in order to secure themselves against that blindness to their own errors, into which every man is tempted to fall.

Yet all this is merely instrumental, and in order to something beyond itself. Under writing I include *plain composition*, but for the sake of which a man might safely be ignorant of pen and ink. Let me distinctly say that I am far from summoning the young mechanic to attempt any thing like authorship, or even elegant composition. But it is certainly desirable that every one should have the ability to sit down, and without

hesitation or embarrassment, express with his pen such things as he daily has to express with his voice. He should know how to write a decent letter, not merely in a fair hand and correct spelling, but without grammatical blunders or awkward construction. Every man who has friends or customers will sometimes need to write a business letter; and weighty interests may sometimes depend on the manner in which this is done. And any man who can pen a creditable letter, without vulgarity or affectation, will be in the same degree able to prepare a resolution at a public meeting, to draft the report of a committee, or to compose a memorial. Where is the American freeman who is not liable to be called to some such service? This is a branch of education which should be taught in every common school; and if it has been neglected, he who is sensible of his defect should spare no pains to repair it.

XXXIX.

THE MECHANIC'S STUDIES.

Grammar.

If there is any one thing which more than all others distinguishes the improved from the unimproved man, it is the manner in which he uses his mother tongue. Apparel does not form such a distinction, for the richest dress is often the disguise of the simpleton. Big words and lofty periods are so far from designating the man of information, that they are most common with the smatterer and the pedant. But perfectly grammatical English is the infallible countersign of an educated mind. It is too late to attempt the cure of a bad habit in regard to language, when one has passed his prime; this subject is therefore important to young men. Your business may prosper; your wealth may increase; you may live in splendour, and imitate the manners of the great; you may even grow purse-proud and scorn your former associates; but all this will be in vain if you cannot open your lips without breaking

"Priscian's head." Your grandeur will be only a costly frame for a show of ignorance.

It is not by merely committing to memory pages of rules, however excellent, that any one becomes a grammarian. Many persons are able to repeat dozens of rules, which they break even while they are talking of them. The best method of gaining the desired accuracy, is to converse with those who never blunder in their English: thus the children of educated men come to speak correctly, even before they have learned a word of the book. The next best method is to seek with care the discovery of all your common errors. If it were not for false shame—the greatest bane of self-instruction—this might soon be accomplished. Nothing is necessary but to ask some literary friend to point out to you every case in which you trip. And this will soon prove effectual: for, be it observed, solecisms, or grammatical mistakes, are of such a nature, that if a man makes them at all, he will make them repeatedly. You may be assured, that in three or four conversations of an hour's length, you will be likely to fall into every error of this kind to which you are liable. I have friends who are men of sense and knowledge, but whose sad breaches of grammatical propriety expose them to ridicule. How often have I wished that their

feelings would allow me to show them the cases in which they offend! In a fortnight, I feel persuaded, they might succeed in freeing themselves from this blemish forever.

But supposing that only such as have a very strong purpose to excel, and some elevation of mind, will avail themselves of the foregoing hint, I would propose, as an alternative, the use of a good grammar; which, indeed, ought not to be neglected in any case. In the choice of a grammar, we should be regulated, not by the transient popularity of some late production, but by the solid judgment of literary men in the mother country as well as in America. We speak the blessed tongue of good old England: may we ever continue to be one in language. The books of worthy Lindley Murray are still unsurpassed, so far as principles are concerned; and any man will be safe who frames his diction after the guidance of this gentle Anglo-American Quaker.

It must be observed, however, that the portion of any grammar which is of most value to one who is to be his own instructer, is that which consists of *exercises*. Here you will find specimens of every sort of error, and in reading them you will descry many an old acquaintance. Carefully and repeatedly write these off in their cor-

rect form. There is no surer way of detecting and weeding out your ungrammatical expressions. Examine a list of erroneous phrases, and you will find many such as these, which perhaps have escaped from your own lips in earlier days, viz: "I *seen* John when he *done* it." "He *plead* not guilty." "He writes *like* I do." "He is *considerable of* a scholar." "I *telled* him that he *drink'd* too much." "The carriage or the sleigh *were* sent." "You *hadn't ought* to have come," &c. But I am almost ashamed to have inserted even these: in Dr. Bullions' grammar you will find pages of such blunders exposed and corrected.

There is another class of expressions which offend, not so exactly against grammar, as against purity and propriety of language. Lists of these have been made out by Pickering and other eminent scholars; but still they are used by newspaper editors and certain members of congress. For example: "*I calculate* to leave Boston." "He *conducts* well." "I *expect* he was there." "The event *transpired*, (that is 'occurred,') on Friday." "The bill was *predicated* on these facts." "An article *over* the signature of Cato." "James went up *on to* the ship." "I was *raised* in Kentucky." "He is an *ugly* man," meaning an ill-tempered man. "He has too much

temper;" using the word in a bad sense, whereas in sound English it always has a good one.

There is a single caution which it may be useful to add: there is such a thing as overstraining grammar. There are those who make efforts so strenuous, as to fall over upon the other side. I can scarcely suppose that my reader could so far mistake as to say "Charles and *me* went to New York;" yet I have heard even ladies and gentlemen uttering as great a solecism, by saying, "He gave the books to Charles and *I.*" Not quite so bad is the obsolete participle "*gotten*" for "*got;*" a nicety in going backwards which prevails chiefly among elderly ladies. Every one has heard physicians speak of "three *spoonsfull,*" instead of "three *spoonfuls;*" though the same persons would scruple to say "three *cartsload*" for "three *cartloads,*" or "three *mouthsfull*" for "three *mouthfuls.*" In fact, different ideas are conveyed by the two phrases. So, likewise, a certain class of affected smatterers use this form—"The house is *being built.*" In good English there is no such participle as *being built* in this sense. No example can be found in the British classics. A learned writer judiciously observes: "If the expression *is being built* be a correct form of the present indicative passive,

then it must be equally correct to say in the present-perfect, *has been being built;* in the past-perfect, *had been being built;* and in the present participle *being being built.*" Enough of this. I now close this dry communication, hoping, after one more essay, to recover a more sprightly strain.

XL.

THE MECHANIC'S STUDIES.

Arithmetic and Accounts.

If there is any part of science which is indispensable to mechanics in common with other men in business, it is that which forms the subject of this paper. Every tradesman is supposed to keep regular accounts, and as his affairs become more extended, these become more complicated. If we could look into the secret causes of the numerous bankruptcies which occur, we should find a large proportion of them to have their origin in a defect just here. The apprentice is left to grow up without adequate instruction. He learns his trade, it may be, but he learns nothing more. He becomes a journeyman, and finds here no inducement to supply his deficiencies. In due course of time he sets up for himself, and then discovers, much too late, that there are difficulties and perplexities, even in the most ordinary routine of business, for which he is altogether unprepared.

Men could be named who have to study an

hour before they can foot up the amount of a customer's bill for a few dollars; and the simplest questions in interest or discount, which have, unhappily, become every-day transactions among us, are to them mysteries altogether past comprehension. No person can be considered fit for the management of any lucrative and flourishing enterprise, who is not able, whenever it is necessary, to arrive at a clear view of his liabilities and resources, a fair balance per contra of his whole affairs. And, for safety and comfort, this is an operation which should frequently take place. Next to a good conscience, it is desirable for every mechanic to have a good leger. Now, if the very sight of his books gives him the horrors, and if he would rather work a week than spend half a day over his desk of accounts, it is very plain that he will be likely to neglect this irksome and distasteful business. Consequently, he will scarcely ever know where he stands; he will put off the evil day of balancing his accounts, until it is forced upon him by some unexpected entanglement; and then, perhaps, he will be astounded at the discovery that he is really worth less than nothing.

Under the old-time hard-money system, there was less danger of such an issue, and a small tradesman might balance accounts between his

right and left breeches-pockets. But the introduction of a more remote representative of value than coin, or even bank-notes, has totally changed the situation of the trader. He cannot, by a mere inventory of his stock, or a glance at his strong-box and his bank-book, determine how he stands related to the great system of credit. The only index of this is found in his *accounts*. It is only in his *accounts* that he can assure himself that his house and stock are not his neighbour's. And if the said accounts have been suffered to go at sixes and sevens, it is plain that his knowledge of his own condition is no more than a shrewd guess.

I seriously believe that this is the actual condition of more than half the mechanics in the land: and it is an evil daily increasing with the recklessness of our speculations. The poor man drives on through thick and thin. The American motto, *Go ahead*, is written on his equipage. He flies over plain and valley, till at last, discovering that he is going down hill with perilous speed, he begins to think of putting on the drag, and moderating his rate of travel, when, all at once, he is cast over the precipice and dashed to pieces.

I have endeavoured to pen all my advices to mechanics, in full view of the remarkable fact, that in America the way is open for the humblest

working-man, by industry and enterprise, to become the head of a large establishment. Our greatest manufacturers are those who began life by hammering at little jobs. But consider, I pray you, how intricate and extensive are the accounts of one of these great concerns. Is it possible for a man to conduct such a business with the ordinary amount of knowledge in figures and book-keeping? Can he safely rely on the aids of mere clerks or hired accountants? It is true that many men, under the strong incitements of expected gain, meet the demands of their circumstances, and even late in life make themselves thoroughly acquainted with every detail of business; and these are the men who become wealthy, and continue so. But there are many more who never comprehend the calculations upon which their very gains are hinged; and these are the men who fail by scores even in the best of times.

Prevention is better than cure: the twig is bent more easily than the tree. Begin to get the mastery of these things in your youth, and you will smooth your way for life. Labour, by constantly repeated practice, at the operations of common arithmetic. Repeat every sort of example in the four fundamental rules, and in proportion, until you not merely understand them, but are prompt and expert in them, and you will

find the advantage of it every day that you live. Besides this, take the pains, under some good accountant, to become familiar with book-keeping. The mechanic has to keep his books, as well as the merchant. However small your business, it is best to do it in the right way, for then you will have nothing to unlearn when it becomes large. I believe it will be found that nine men out of every ten go through life with the methods which they adopted at the start. In other words, most mechanics pursue a method of book-keeping invented by themselves. This is to reject all the lights derived from the mercantile experience of ages. Scientific book-keeping is a time-saving, labour-saving, and money-saving contrivance; and you will find a few dollars laid out in acquiring it, as little lost as the grain of corn which you drop in the earth.

Let me close with a single question: *At what period of life do our mechanics learn the keeping of accounts?* Is it when they are apprentices? I have never known a master-workman to give any lessons of this kind. Is it when they are journeymen? Our journeymen are glad to earn and to spend money, but they keep few accounts. No: the little they half learn is taught them by the sad experience of actual business

XLI.

THE MECHANIC'S STUDIES.

History.

THE study of history has commended itself to considerate men of all ages, perhaps more generally than any branch of intellectual pursuit. Holding a middle place between mere entertainment and abstruse research, it has allured into its wide and variegated fields the curious and the reflecting of every different walk in life. And this is reasonable and easy of explanation. Often has it been said, till the sentence has grown into a proverb, that "history is philosophy teaching by example." Often have the words of the Roman orator been reiterated, that "not to know what happened before one was born, is to be always a child." If our great statesmen could be fairly questioned, it would be found that they have gained more concerning the principles of government from the story of former times, than from all their perusal of abstract treatises.

The American mechanic is a freeman; he is one of that people to whom we ascribe sove-

reignty. If independent in his way of thinking, he must needs be, to a certain extent, a politician. In point of fact, all men, of all vocations, in this country, undertake to talk about the measures of government, and to give some reason for their party-attachments and their votes. Here we find a good argument for the study of history by working-men.

But to this we must add other signal and acknowledged benefits, which flow from historical reading, whenever and by whomsoever pursued. It enlarges our knowledge of the world, and gives new views of human manners; it lifts us above the petty circle of our city or our state, and brings us into a felt relation to the great system of events; it affords a lively commentary on the happy or baneful tendencies of virtue and vice; and it displays in the most striking manner the wise and wonderful plans of Divine Providence.

Before the unhappy multiplication of novels and romances, young men sought their chief mental refreshment in historical reading; and there is cause for believing that by reason of this difference, the rising race is likely to be less acquainted with past events than their fathers were. A morbid taste for the excitements of romantic fiction has depraved many a mind, and in some measure placed history nearer than it once stood

to what are considered severe studies. Nevertheless, after having dreamed away golden hours over scores of novels, I am confident in saying, that, in the long run, history is more entertaining than romance. Truth, it has been said, is more interesting than fiction; and the more a man extends his reading, the deeper will be his conviction of this truth. Few men could spend a week in reading novels, and nothing else; but many men spend delightful months upon the annals of great events. It is an unconscious homage to this quality of authentic narrative, that some of our greatest novelists have chosen to interweave the events of true history in their most successful romances.

No patriotic American would willingly confess that he does not feel his soul more stirred by the unvarnished tale of revolutionary conflict, than by the exciting scenes of any fiction whatever; and the wonderful, unexpected, and rapid changes and convulsions of the French revolution, reach the passions with a mightier influence than all the feigned terrors of the tragic muse.

As we extend our reading of history, this interest, far from decreasing, grows exceedingly in strength; so that there is no branch of study which so uniformly gains upon the affections of its votaries In the field of romance, the facti-

tious emotion becomes dull and dies away; but in historical researches, the studies of our youth continue to be the solace even of our old age.

It will be suitable for me to add a few suggestions as to the method in which history may be advantageously studied; and these shall be adapted to the case of such as are not surrounded by copious libraries.

First, Let it be observed, that no man in one lifetime can read all history; and that it is altogether undesirable to attempt any thing like this. Consequently, every thing depends upon wise selection, both as to subjects and authors. All history is not equally valuable to all; and time may be deplorably wasted over an annalist who is inaccurate, prolix, or obscure.

Secondly, Method is as important here as anywhere. By method in history, I simply mean "beginning at the beginning." Experience assures me that half our labour would be saved, if we would cross the stream nearer to its source, or assault the tree nearer to its root. My grand counsel, then, is this: *Begin with generals, and from these descend to particulars.* Proceed as the draughtsman does; first sketch a rapid outline, then fill in the minuter touches, and at length, if time permit, add the more delicate lights and shades. Or, in still plainer terms.

begin with some very brief and compendious, but clear and masterly view of general history; such an aid we have in two invaluable and well-known works of Tytler. A good chronological chart would afford an outline still more general. Then proceed to gain a more familiar acquaintance, first with ancient, and afterwards with modern history.

Thirdly, Beware of the false supposition, that every part of your picture is to be filled up with equal care and minuteness. Where the plantation is vast, the wise planter cultivates in well-chosen spots. Be thankful that you are not called upon to know every thing. For example, the history of Carthage is less important than that of Rome; the former, to most men, only as subsidiary to the latter: the one you will cursorily peruse; to the other you will repeatedly resort through life. Again, the history of the German States may be adequately learned in an epitome: the history of England and America you will study in some detail. So again, in the case of a single country, you may very soon gain all you need about the British Heptarchy; but you will dwell with assiduity and delight on the annals of the Reformation, the Civil Wars, and Revolution. And, above all, you will naturally, and with eagerness, peruse almost every book within your

reach, upon the subject of our own free institutions, and the struggles in which they had their birth.

Fourthly, With the cautions and provisions given above, after having mastered your outline of general history, you may safely consult your own pleasure, and read wherever you have a mind. When the canvass is once prepared and the great lines chalked out, it matters little whether the painter works upon the head of an Achilles, or the buckle of his armour—provided he keeps on working. Never did old Shakspeare speak more pregnant truth than when he said, "No profit grows where is no pleasure taken." What we learn by snatches, in moments when the mind is warm and ductile, is most apt to leave abiding traces.

Lastly, Be not unduly perplexed with the vain effort to charge your memory with mere dates. One hour over a good chronological table will in this respect do more for you than months of study. Often recur to such a table or chart, and you will soon discover that the great cardinal and leading dates will fix themselves, without a separate endeavour.

XLII.

THE MECHANIC'S STUDIES.

Chronology and Geography.

No man can be said to know any event, unless he knows *when* it happened and *where* it happened. The former he learns from chronology, the latter from geography; and thus it at once appears how truly these two sciences were called by an ancient, "the two eyes of history."

Chronology is one of those things which is exceedingly dry by itself, and which cannot be got by wholesale. A little familiarity with a chronological chart, table, or atlas, will be sufficient to give a general idea of the succession of great periods: particular dates are best learned by actual reference at the time of reading about the event to which they relate. In perusing history, take care to have by you a good collection of dates, and refer to these with regard to every important occurrence.* The more signal epochs

* Those who have money to spend, may purchase the valuable but expensive works of Blair, Le Sage, or Lavoisne. But I will name two books, which together will cost two dollars, and which contain all that a common reader will

will fix themselves in your minds without a separate effort; and it would be a waste of time and a burden on the mind, to set about the task of committing to memory lists of mere figures. It will of course happen, that the most important events will oftenest be referred to: and this repeated reference to the time of their occurrence will secure your recollection of the date. Thus, I remember that the deluge was about 2348 years before Christ; the Norman conquest, A. D. 1066, the Revolution, 1688; the Declaration of American Independence, July 4, 1776; and this without having set myself down to learn these as a lesson. By using a few such points of departure, one may, at any time, go a little back or a little forwards, and fix with sufficient approach to accuracy, the date of other events in the same period.

It is necessary to say something more about the other eye of history—that is, Geography—as being both more important and far more interesting. The man who reads history without geographical information, may be compared to a blind man playing chess. No wonder so many of our reading men have an obscure and con-

desire: first, an *Historical Atlas*, by J. E. Worcester, (containing twelve charts;) second, *Chronology*, or an Introduction and Index to Universal History, Biography, and Useful Knowledge. New-York, J. Leavitt, 1833, 12mo.

fused recollection of recorded events, when they hastened through the several narratives without ever discovering in what corner of the earth they took place. On the other hand, when you present to your imagination the exact scene of great exploits, following your hero on the map from country to country, and from town to town, you not only furnish a new association, as a crutch to memory, but you add life, interest, and reality to the transactions, and remember them more as one who has beheld than as one who has learned by hearsay.

Our schoolboy recollections of geography are odious. Such has been the absurd method of teaching it, that it is hard for many persons to overcome their disgust, or regard it as deserving the name of a science. The poor child was made to take an unintelligible book, full of technical terms, and, with little or no aid of map or globe, to get this by heart. Odd as this may seem to such of my young readers as live under a better dispensation, this is the way in which many of our old-fashioned hedge-schoolmasters used to teach geography. And the man who has learned it in no other way knows nothing about it.

In directing the mechanic how to acquire geographical information, perhaps my simplest

method will be to ask how one should endeavour to give this same information to a child or very ignorant person. It would be the best and shortest way, if it were practicable, to take the pupil some thousands of miles above our earth, and there to show him the countries and the seas, as the planet revolves upon its axis. But as it may be long before science can afford us such a facility, the next best course is to show the pupil the same thing in an humble imitation. Let the very first conceptions of geography be derived from the terrestrial globe. Here you will learn in such a manner that you need not unlearn; whereas there is a never-failing confusion in the mind which, after having conceived of the earth as depicted on a plane surface, vainly endeavours in after years to correct this false impression, and to imagine this parallelogram transmuted into a sphere. What I said of history I now say of geography: *Begin with generals, and from these descend to specifications and particulars.* Gain a comprehensive view, first of the grand divisions of the globe, and then of the principal countries; and do this from inspection of a globe, or, where this is wanting, of a good map; and, in the first instance, with little or no reference to the artificial lines of latitude and longi-

tude, or the numerical dimensions. You may proceed to fill up this outline from time to time.

It is impossible to recommend too strongly the practice of actually drawing rough maps. By this I do not mean copying from a map, but drafting from memory the outlines of any region which you may be studying. There is no other absolute test of accurate knowledge. Compare this with a correct map, and you will at a glance see where you are in error. Even those who have no experience in drawing may do this; and no instruments are needed but a slate or a black-board.

Still it must be remembered, that in a subject so boundless as this, we must expect to be learners all our life. The true maxim is—a little at a time, and often repeated. The grand secret for making a geographer is *perpetual reference.* When you read history or travels, never be without your map; and never pass any important name without seeking it out: the search will make you acquainted with many particulars besides that of which you are in quest, and the necessity for such reference will become less and less every day you live. If, on the other hand, you endeavour to store your mind with many geographical items at once, from lists of

uncouth names, without any interesting associations, you will be wearied and disgusted; one thing will jostle out another; and you will infallibly forget nine out of every ten. You must learn the situation and distances of places, just as a young salesman learns the prices of articles in a great assortment: not all at once, but as they come to hand. I would not forbid the perusal of geographical books; indeed, it is from these only that you can derive the facts of statistical and political geography; but the great matter is to know *where the spot is*, and this can be gained only from the map or globe.

The geography of our own extensive and growing country is of unspeakable importance to men in every line of business; ignorance here is really disgraceful. You will not, therefore, grudge the expense of a complete American Atlas; and after the labours of our distinguished countryman, Tanner, you need not be at a loss where to look.

Many persons are in the habit of denominating geography a dry study. When pursued after the ordinary method, it is such indeed; but when learned in connexion with interesting narrative and eventful travel, it becomes truly fascinating. This is so much the case, that to a man of va-

ried knowledge and lively imagination, there is scarcely any visible object which awakens more pleasing associations than a satisfactory map. The lines and points of the engraving are connected in his mind with a thousand stirring events, and the motley sheet spreads itself into a picture, variegated and enlivened with the achievements of ancient and modern story. Make but a fair trial, and you will arrive at the agreeable discovery, here as elsewhere, that all knowledge is sweet, and that within a prickly husk and a hard shell there lies a delicious kernel.

XLIII.

THE MECHANIC'S STUDIES.

Natural Philosophy and Chemistry.

The man who lives in such a world of wonders as that which we inhabit, and in an age teeming with discoveries and inventions, especially if he is one who is daily called to the performance of those experiments which we call *working at a trade*, must be singularly incurious, if he can fail to inquire into the properties of matter, the relations of different substances, and the laws of motion and rest. All this is nothing else than physics, or natural philosophy. Of this, every man, whether he tries or not, knows something, and no man knows every thing. Here it is that we get into the regions of actual observation and experiment; which are always delightful to the inquisitive mind. Even without books, and without a teacher, many a man, like Franklin or Ferguson, has arrived at valuable discoveries by mere examination and random attempts. But it is a great advantage to begin with principles, to learn the laws which regulate all the changes in nature, and

to master in a brief and comprehensive manner, the discoveries of past ages. To make use of these scientific systems, is to avail ourselves of the ladder prepared to our hand, instead of trying to scale the almost impracticable crag by hands and feet alone.

The very name, *mechanics* ought to have a charm for working-men. How is it possible for them to ply their tools, or even use their balance, without asking to know something about the laws of motion? Especially, how can they continue supine and blind, when they are told that the same great fundamental law brings the steel-yard to a poise, and whirls the planets in their orbits? The use of a common crow-bar brings into play the doctrine of the lever; the same is true of the sledge, forceps, and windlass-bar. But it is needless to particularize, where every thing is an illustration. No mechanic can apply himself to any act of his trade without exemplifying the laws of motion; and if men engaged in labour would but keep in mind those doctrines respecting forces which relate to the processes in which they are necessarily engaged, they would soon and pleasantly arrive at a competent knowledge of mechanics.

The direct and immediate value of natural philosophy, to those employed in mechanical labour,

is so obvious as almost to forbid further remark. In a great number of trades, the workman is actually engaged in making machines. The worth of these is precisely measured by their conformity to philosophical laws. Unless then the workman knows something about these laws, he must be a mere copyist, or at best a random experimenter. Any wheelwright or carriage-maker may indeed imitate a given model, and construct one vehicle exactly like another; but it is only the artificer who has studied principles, or gained some science, that can arrive at inventions, and suit his structure to emergencies, and meet the condition of new roads, new modes of draught, and peculiar dangers. The common builder needs an accurate acquaintance with all the topics concerning strength of materials, lateral pressure, the combination of forces at angular junctures, and the strain and support of arches. The clock or watch-maker, if more than a mere tinker, must add a little mathematics, and calculate the effects of complicated wheel-work, and the transmission of motion. The millwright and machinist must not be content to make his shafts and cogs and pinions, or to copy the gearing of those who lived before he was born; but he must know how and why all these changes are effected, and what alterations are rendered necessary by a change of

circumstances. The business of block-making, viewed in its principles, is almost a science by itself, involving whatever relates to pulleys, fixed and movable, the friction of cords, the operation of wheels, shafts, and rollers.

In every large factory, the mind of the inquiring lad will be attracted by the daily sight of the fly-wheel or the governor, to examine into the causes of unsteady motion, and the means of remedying it; the interference of power and resistance, where one is constant and the other variable; and the doctrine of virtual velocities; all which he will find to his heart's content, in the simplest treatise on mechanics. In every sort of employment which concerns damps, currents, aqueducts, pipes, pumps, or water in general, nothing can be done intelligently without some insight into hydrostatics and hydraulics. As to those numerous and important trades where the application of fire takes place in conducting processes, the philosophy of heat will render the most valuable aids: such is the case in all that concern the manufacture of metals and glass. And indeed there is scarcely a branch of human labour, even in those pursuits which seem farthest removed from scientific research, where we do not observe the direct increase of power derived from philosophical information.

But leaving out of view the mere profit of such knowledge, natural philosophy recommends itself to working-men as a cheap and accessible source of endless entertainment. No department of study affords such ample variety, and none awakens more enthusiasm. When we read the lives of great self-taught discoverers and inventers, we find that it was while in chase of amusement that they alighted on their highest attainments; zeal for the pursuit itself conducted them to their greatest gains. Consider the fervid perseverance of Ferguson and Franklin. Call to mind the barber's boy, *Richard Arkwright*, whose name is now associated with the boundless ramifications of the cotton manufacture. He began, it should seem, by amusing himself about the chimera of the perpetual motion; he next sought recreation in the shop of a clock-maker; he then entertained himself with constructing spinning-machines; he ended by becoming the acknowledged founder of a new fabric of national industry, at this time second to no other in the British empire. It was the entertaining character of mechanical experiment which beguiled the tedium of the way, and conducted Sir Richard Arkwright to wealth and honour. There is no part of science which recommends itself so strongly to mechanics of every sort, as natural philoso-

phy. Nearly allied to their daily pursuits, it offers a delightful refuge from the wearings of the burdened hours, and casts an elevating influence over the severest or dullest toil.

Mechanics of the more active classes enjoy one signal advantage over other men, in prosecuting the study of natural philosophy. Let me ask special attention to this remark. Their common employments make it easy for them to institute experiments, because, from their possession of materials, and their dexterity with tools, they are able, at once, to construct every kind of apparatus. The student at college, or even the professor, desires (we shall suppose) to put together a series of lences or tooth-wheels, or to erect the model of some mill or other engine. This is necessary for his experiments. But he is a bungler at mechanical labour, and could scarcely build a decent wren-box: the carpenter, the joiner, the smith, the wheelwright, the turner, the watchmaker, on the contrary, can knock up such a contrivance in a few hours, without even thinking of it as a task. The same observation applies to chemical inquiries. There is no active mechanic, (of those strictly so called,) who might not with his own hands, with little expense, fit up in a shed or garret, a laboratory with apparatus sufficient for all the leading experiments in physics

and chemistry. And if two or three, of different trades, would combine, this might be accomplished with completeness and elegance. Will not some half dozen of my young mechanical readers take the hint?

All that has been said about natural philosophy is equally true, with a trifling change of terms, in relation to chemistry. This science regards not the general, but the particular properties of bodies; with respect to their mixture with one another, mutual influence, temperature, weight, and minor peculiarities. The truths of chemistry are involved in every operation of the painter, the dyer, the tanner, the druggist, the distiller, the baker, the confectioner, and in innumerable others Indeed there is no trade, not even that of the tailor or the shoemaker, in which chemistry does not play a part. Its revelations are at once charming and stupendous, and the science is in its full career of discovery at this moment. The great majority of experiments in chemistry may be performed with apparatus which any joiner is competent to put together. With such inducements, it is really wonderful that young working-men are not more generally attached to this subject. The young apothecary, *Humphrey Davy*, began his brilliant course with perhaps as little external in-

dication of success as that which is offered to the humblest reader of these lines.

In regard to the studies of working-men, I was recently much instructed by some hints from one of the most distinguished natural philosophers of our country. He gave it as the result of his observation, that self-taught and aspiring mechanics often fail from the neglect of a single caution. The caution is simply this, that they should not attempt premature discoveries or inventions in general science, or in departments remote from their own trades, but should sedulously cultivate such branches of science as facilitate their particular handicraft. Very important discoveries have been made by mechanics, but these have not been so much in general science as in the proper field of the discoverer's own pursuit. By a wise application of philosophy, the artisan may alight upon valuable and labour-saving processes in his own business. On the other hand, some working-men have exposed themselves to ridicule or commiseration, by vaunting as discoveries those things which are absurd, exploded, or long since recorded in scientific works.

With these remarks, I earnestly recommend to mechanics that source of enjoyment which they will find in the natural sciences.

XLIV.

THE MECHANIC'S LIBRARY.

Almost every mechanic who can read at all, has some books; in other words, possesses a library. In going from house to house, I have frequently amused myself with taking a brief inventory of these little collections. In many houses, pretty well furnished as to other things, one will find on a shelf, sideboard, or mantel, some such collection as the following: The Almanac, The New and Complete Dream-Book, The Universal Songster, Life of George Burrowes, Gray's Complete Farrier, half a spelling-book, and a dusty, incomplete New Testament, together with a dozen worn-out and odd volumes of other works.

When there are two ways of doing a thing, and the right way is as cheap and easy as the wrong, why should men be left to go astray? Let me get the attention of the apprentice or young tradesman on this point. I can, perhaps, save him much expense, and the still greater evil of having a worthless article. He will, perhaps,

be ready to complain that books are dear, that he is poor, and that many books only confuse him. Observe, therefore, I do not recommend many books, nor costly books, nor a number at once. All I want is, that you should lay out wisely the very sum, or a mere trifle above the sum, which you would otherwise lay out foolishly. Pray be not too proud to learn of one who has already made mistakes, and got a little experience.

One great mistake of young working-men in the purchase of their books is, that they get them by chance. They take no advice, and use no foresight. The book they buy is not so much the one they need, as the one that offers at the stall, auction, or pedler's basket. Another mistake is, the purchase of certain books merely because they are low-priced. This is an error which you would laugh at in a schoolboy, if he were buying wares in your shop: take care lest he have cause to laugh at you in return. The cheap books are in the long run far the dearest. They are usually on poor paper, in poor type, and poor binding, and too often are but poor stuff through and through. Instead of following mere hazard, lay it down as your maxim, to know beforehand what particular books you need, and to buy just these in preference to any others. What should you think of a carpenter who should purchase

any tool or material which he might fall in with, while the indispensable utensils and staple articles of his bench were wanting? Books are to the reading man both tools and material. If you say that you cannot indulge in many, I reply, very true, and, for that very reason, see to it that they be the best. In order to prevent error, proceed as you would do if you were purchasing some new material with which you had not been very familiar. You are, I will suppose, a coach-maker in the country. You are desirous of introducing a variety of gum-elastic fabric for tops, which you have never used yourself. When you go to New-York, or Philadelphia, or Boston, for your materials, you naturally walk round to the manufactory of Messrs. A, or B, and make inquiries, and, perhaps, ask the aid of their more practised eye in choosing. Do the same in the book-line. Seek the advice of some bookish man; and however little he may know about your business, trust him in his own.

Another mistake of young book-buyers is, the supposition that they must fill their book-shelf at one stroke. He who does this will almost always buy some trash. It takes time to read books; it take time to find out what books to read. Lay aside a certain portion of earnings for books; let it be sacredly set apart for this

object. Next keep a list of such books as you think you need: examine this from time to time; add to it and take from it. Then seek good advice of a friend, as to the best place to buy the book you most need, the best edition for your purpose, and the fair price. I have bought and sold books, and have seen many buy and sell them, and I am convinced that working-men lose a greater proportion of what they lay out on cheap books than of any other disbursement they make.

Perhaps there are readers of these counsels, who are ready to ask for a list of books proper to constitute a mechanic's library. There are people, perhaps, who would freely draught you such a catalogue at a sitting: but it is a responsibility which I dare not assume. To make out such a list for every one, would be almost as quack-like as to prescribe the same pills for every disease. I know what would suit me, and what would suit this or that neighbour; but to recommend for any given individual, one should know his age, his temper, his talents, his tastes, his acquirements, and even his trade. I prefer, therefore, the method of naming a few books and classes of books, which may be got from time to time with advantage, adding some running comments.

The Bible should stand first in every list: not a heavy, square volume, on the parlour table, too pretty to use, too heavy to carry, and chiefly valuable as a register of the births and deaths; but a real book for use, of large print, and solid materials. But I have spoken elsewhere of this. A good English dictionary, of large size, is indispensable. Wiser men may do without this; but there is scarcely a day in which I do not look for the meaning of some word. And until I see a better, I shall use Walker's Critical Pronouncing Dictionary. The laws of your State, and the necessary forms of common legal processes, and the Constitution of the United States, should be in your shelves. Bayard on the Constitution of the United States is an admirable little book. In your own particular trade, you should have one or two of the best treatises.

For pleasant historical reading, all your life long, you cannot go amiss among such works as these, viz: Tytler's Universal History, Josephus, Plutarch's Lives, Goldsmith's England, Sir Walter Scott's little histories of France and Scotland, Ramsay's History of the American Revolution. To these may be added some history of the church, and good biographies of Penn, Washington, and Franklin.

For poetry, which is quite as necessary and as lovely as prose, buy Milton, Pope, Young, Thomson, Cowper, Campbell, Bloomfield, Montgomery, Hemans, and Wordsworth; and take care to procure large, fair copies, in good condition, even if they cost you twice as much. A poem is a piece of furniture for life, and you will wish to take it on jaunts with you, to read it out of doors, and to refresh yourself with it in old age.

The publications of the Society in England for the Diffusion of Useful Knowledge, so far as I can judge, are the best and the cheapest books for working-men that the world has ever seen. Their "Library of Useful Knowledge" gives you the whole round of science; and you may get any particular part by itself. Their "Library of Entertaining Knowledge" is a most instructive as well as most amusing series. Their "Penny Cyclopedia," and especially their "Penny Magazine," are incomparable family books. I hope nothing may ever occur to change my opinion, as at present I regard the mere pictures of these works as fully worth the whole cost, and cordially recommend them to the shelves of every mechanic. With the exception of moral and religious reading, and purely American subjects, there is

scarcely any topic excluded from these works. In religion, it is scarcely necessary to name the following works, which Christians of almost every persuasion have approved: The Imitation of Christ, by Thomas à Kempis; Bunyan's Pilgrim's Progress, Baxter's Saint's Rest, Mason on Self-Knowledge, and Watts on the Improvement of the Mind, which is as good in directing the morals as the studies of the youthful reader. I cannot dwell on books of mere entertainment. Biography, and voyages and travels, have worn the best with me.

Let me close these desultory hints by declaring my belief, that, for the youth and children of a family, it would not be possible to lay out the sum of thirty-three dollars to greater advantage, than by purchasing the Library prepared and for sale by the American Sunday-school Union. It contains one hundred and twenty-one volumes. These are uniformly bound, and all ready for use, in a neat and convenient book-case, which forms a striking ornament in the houses of many economical book-buyers. The reader needs only to see it to be convinced.

In all that precedes, I have written with reference to young men just entering on a course of improvement, and somewhat straitened in their

means. More learned and more wealthy persons will smile at the simplicity and scantiness of my recommendations; but even these books, well pondered, and often re-perused, may lay the foundation of great and accurate erudition.

XLV.

THE STUDY OF THE BIBLE.

It will be readily believed by my readers, that I am not disposed to undervalue any kind of real knowledge, or any description of books. Much of my labour has been intended to awaken in the apprentice and the journeyman a desire for varied information. I have recommended philosophy; I have recommended history; I have recommended books of entertainment. For this reason I trust I shall be credited, when I further say, that there is no philosophy, no history, no entertainment, equal to that of the Bible. This is not only my own opinion, after reading for many years, and in several languages, but it is the deliberate opinion of many of the greatest scholars and wisest philosophers that ever lived.

Some forty or fifty years ago, another sentiment prevailed among many people. It became fashionable to ridicule the Scriptures, to represent them as exploded old-wives'-fables. This was chiefly owing to the spread of French opinions, which gained ground among us in consequence

of our sympathy with an oppressed people, who were supposed to be in search of rational liberty. The writings of Voltaire, Rousseau, Volney, and Paine propagated these ignorant, false, and malicious objections against the Bible, and long after the atheism and bloodshed of the French revolution revealed the true tendency of these opinions, there were some even among our leading politicians, who upheld and preached them.

The case is happily altered. Here and there we may meet with some gray-headed and perhaps doting old man, who, parrot-like, rehearses the absurd chimeras of Volney, or the ribaldry of Paine; or some young mechanic, who, despairing of any virtuous notoriety, tries to distinguish himself by railing at religion. But these cases are rare. Deism and atheism are no longer the mode, even among wicked men.

It is undoubtedly true, that we occasionally find in our cities an infidel club, or an infidel book-shop. If the reader will take the pains to observe these closely for a series of months, he will find the following statements to be true. First, these clubs are composed of men who have little stake in society, and little permanent interest in the place where they live, being sometimes foreigners, often strangers or new-comers, and always persons of low character and bad habits. Secondly,

the members of these associations, and the keepers of these shops, it will be observed, change very often. You will not see many of the same faces where you saw them a twelvemonth ago. They are short-lived lights, like those of brimstone matches. Thirdly, if you trace these people to their homes, you will find them discontented and wretched, and you will learn that they almost invariably come to some bad end.

Let the Holy Scriptures have more of your time than all other books. It is the oldest book in the world: surely you would like to know what is recorded of the early ages of our race. It is the most entertaining book in the world. Even Voltaire confessed that there was nothing equal for pathos to the story of Joseph. Of like interest are the histories of Abraham, of David, and especially of our Lord Jesus Christ. The Bible is the book of greatest wisdom; even if by the term be understood worldly-prudence. It is the only book which gives us any certain knowledge of the future. Is it possible for a man to be so sunk in sensuality, or so brutalized, as not to care to know what shall happen to his immortal part after death? The Bible will give you this knowledge. Moreover, it is the only work which can authoritatively teach you how to escape the punish-

ment of sin, and how to attain the perfection of your nature.

Take pains to have in your possession a good copy of the whole Bible, in a fair large type, and in a convenient form. I lay stress on these last particulars, because many people, for the sake of saving a few shillings, purchase Bibles of cheap and inferior execution. If the book is unwieldy, you will seldom open it: if it is in small print, you will instinctively avoid it, when the light is imperfect, or when your eyesight fails. The best and cheapest editions are in large octavo, and are published by the American Bible Society, and also by the Friends' Bible Association. At the same time, every one should have a Bible sufficiently portable to be carried on journeys; and every member of a family should possess his own.

The following rules may be useful in the study of the Scriptures:

1. *Read the Bible as the word of God.* Never forget whence it comes. Endeavour to feel that it is a message from heaven, and that your Creator is speaking to you. And, as you read, implore the help of its divine Author, to open your understanding, and keep you from error.

2. *Read the Bible diligently; attentively; with faith and obedience.* Perhaps you read the Scriptures. But in what way? Much depends on this. Some people read them more carelessly and with less pleasure than the morning's paper.

3. *Read the Bible every day.* However much pressed you may be for time, you may snatch from sleep or labour time enough for a chapter in the Old and a chapter in the New Testament.

4. *Read the Bible in regular course.* By doing this, you will not be in danger of remaining entirely ignorant of certain parts. The portions skipped by people who open anywhere and read at random, are often the most important parts.

5. *Employ every means within your reach to get the true and full meaning of what you read.* If you have learned and wise and religious friends, ask their aid. If you have a good commentary, make occasional use of it; if you have not, lay aside a few cents a week until you get one. Especially use the Bible itself as a commentary; make one place explain another. The Jews have a saying, that there is no obscure text in the Bible which has not some light thrown on it from some other text. In order to get this light, take care to have a Bible with the marginal notes and

references, which were made by the translators.

6. *Make the Bible your study for life.* The ancient Romans used to say, proverbially, "Beware of a man of one book:" that is, such a man will be too wise for you. The meaning was, that the perpetual re-perusal and meditation of a single work gave a special exercise and vigour to the human powers. This is true of the one book I am commending. I am persuaded, that if a man in trade were to read every day in every month one of the thirty-one chapters into which the Book of Proverbs is divided, he would never find one day in which some saying of the wisest of kings would not prove useful to him, even in his worldly business.*

* The reader is informed that several thoughts in this essay will be found more fully explained and illustrated, in a cheap little volume, published in Philadelphia, under the title, THE SCRIPTURE GUIDE; *a familiar introduction to the study of the Bible.*

XLVI.

THE MECHANIC'S RELIGION.

So large a part of the American nation is made up of mechanics, that the opinions, feelings, and lives of this one class will give character to the whole people of the land. If our working-men are virtuous and religious, we shall be a happy country. I have taken some pains, in the preceding essays, to set before my friends of the labouring classes, the unspeakable value of sound education. I now have to add a qualifying remark of very great importance. Mere knowledge, without morality, will never make a nation prosperous. Science and literature may be possessed, and have been possessed, by some of the worst men that ever lived. Knowledge is power; but in the hands of the wicked it is power to do evil. We may multiply books, and multiply schools, and pass laws for education, until there shall not be an uninstructed child in all the land; but unless we also provide for the moral culture of the rising race, these means will be the instruments of our destruction. The horrors of the

French revolution, which have put back the course of free principles a hundred years, took place in no rude or ignorant corner of the earth; and some of the incarnate demons who presided at the guillotine and the drownings, were among the most intelligent and learned of their day. No, let the truth sink deeply, education to be a blessing, must be education for the future—for the immortal state—for eternity.

To leave generals, and come down to individual cases, the American mechanic should be a virtuous, upright, and benevolent man. I know nothing but true Christianity which will ensure this. Infidels have tried their hand at meliorating the condition of the labouring class; they have had no effect but to make them conceited, radical, violent, discontented, factious, and idle. I could wish that every mechanic had a copy of the "Radical's Saturday Night," by Professor Wilson. The doctrines, precepts, and examples of the Bible afford the only available rules for happiness. These it is which have thrown so holy a light over the cottage of the Swiss, the Scot, and the New-Englander of former days.

In recommending religion, let me not be understood as recommending this or that sect. The Christian army is divided into many battalions, differing in their name, uniform, colours, watch-

words, and tactics: while they agree in recognising the same master, and fighting for the same cause, against the same foe, and with the same arms. The reader of these pages, with the Bible in his hand, has already chosen for himself, or ought to do so without delay. In regard to this choice I would not interfere. Not that I am indifferent; on the contrary, my own convictions are strong; but it is no part of my plan to make proselytes, or even to betray my partialities. The grand object of this paper will be attained, if I can persuade the reader to join himself to the number of true Christians. And I am willing to describe the true Christian in the words of Chief Justice Hale, that ornament as well of the bench as of the church of England.

"He who fears the God of heaven and earth," such is Judge Hale's description of the good man, "walks humbly before him, thankfully lays hold of the message of redemption by Jesus Christ, and strives to express his thankfulness by the sincerity of his obedience. He is sorry with all his soul when he comes short of his duty. He walks watchfully in the denial of himself, and holds no confederacy with any lust or known sin. If he falls in the least measure, he is restless till he has made his peace by true repent-

ance. He is true to his promises, just in his dealings, charitable to the poor, sincere in his devotion. He will not deliberately dishonour God, although secure of impunity; he hath his hopes and his conversation in heaven, and dares not do any thing unjustly, be it ever so much to his advantage; and all this because he loves him, and fears him, as well for his goodness as his greatness.

"Such a man," continues Hale, "whether he be an Episcopalian or a Presbyterian, an Independent, or an Anabaptist; whether he wears a surplice or wears none; whether he hears organs or hears none; whether he kneels at the communion, or for conscience sake stands or sits; he has the life of religion in him; and that life acts in him, and will conform his soul to the image of his Saviour, and go along with him to eternity, notwithstanding his practice or non-practice of things indifferent.

"On the other hand, if a man fears not the eternal God; if he can commit sin with presumption, drink excessively, swear vainly or falsely, cozen, lie, cheat, break his promises, live loosely; though at the same time he may be studious to practise every ceremony with a scrupulous exactness, or may, perhaps, as stubbornly oppose

them; though he should cry down bishops or cry down presbytery; though he fasts all Lent, or feasts out of pretence of avoiding superstition; yet, notwithstanding these and a thousand more external conformities, or zealous opposition of them—he wants the life of religion."

It is impossible to conceive of greater folly than that of the man who pleads want of time, or hurry of business, in justification of his neglect of religion. It is bartering the greatest interest away for nothing; losing eternity for the chances of a moment.

THE END.