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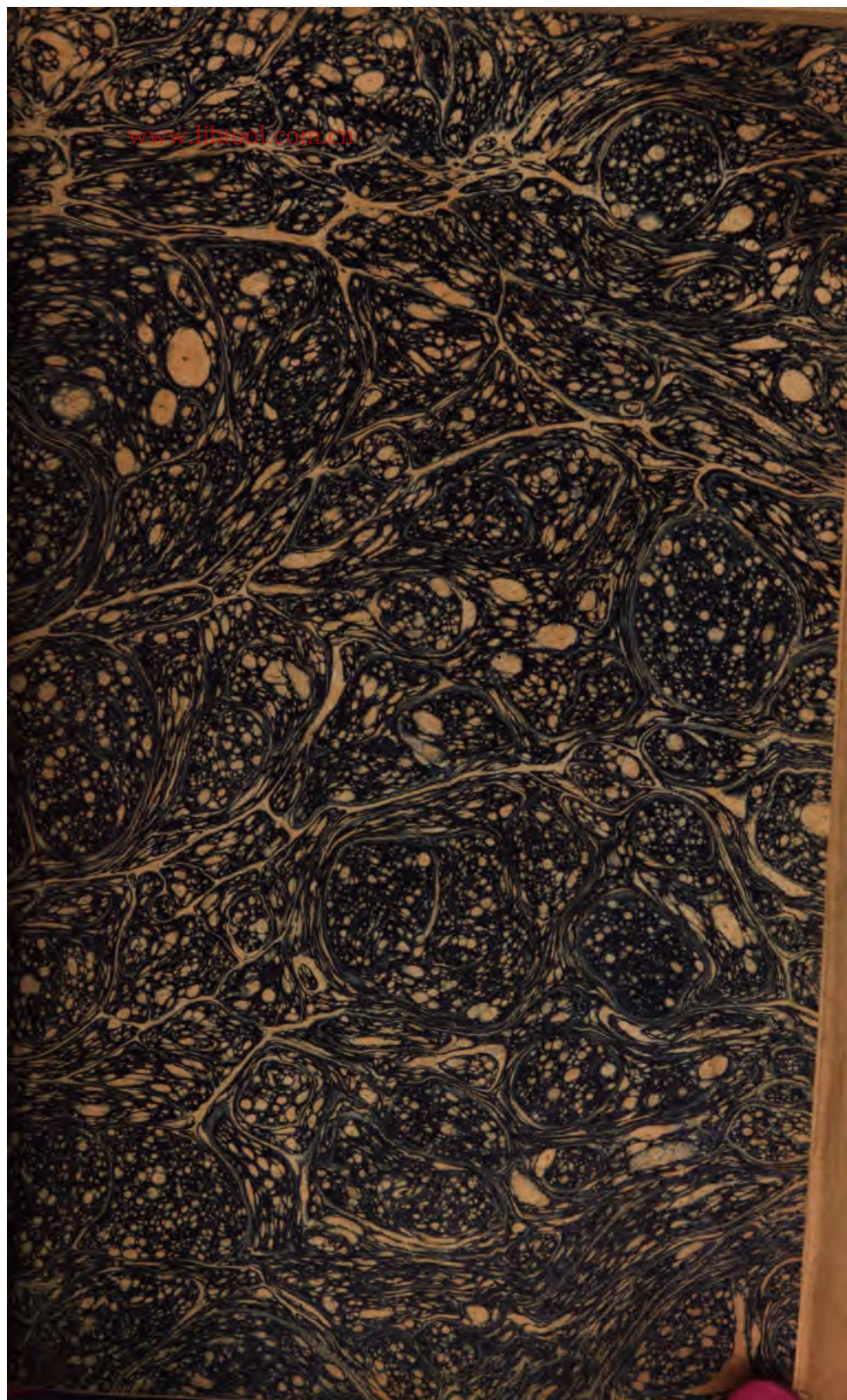
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PRACTICAL EDUCATION.

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BY

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PRACTICAL EDUCATION.

CHAPTER XX.

ON FEMALE ACCOMPLISHMENTS, MASTERS, AND GOVERNESSES.

SOME years ago an opera dancer at Lyons, whose charms were upon the wane, applied to an English gentleman for a recommendation to some of his friends in England, as a governess for young ladies. "Do you doubt," said the lady, (observing that the gentleman was somewhat confounded by the easy assurance of her request,) "do you doubt my capability? "Do I not speak good Parisian French? Have I "any provincial accent? I will undertake to "teach the language grammatically. And for "music and dancing, without vanity, may I not

“pretend to teach them to any young person?” The lady’s excellence in all these particulars was unquestionable. She was beyond dispute a highly accomplished woman. Pressed by her forcible interrogatories, the gentleman was compelled to hint, that an English mother of a family might be inconveniently inquisitive about the private history of a person who was to educate her daughters. “Oh,” said the lady, “I can change my name; and at my age nobody will make farther inquiries.”

Before we can determine how far this lady’s pretensions were ill founded, and before we can exactly decide what qualifications are most desirable in a governess, we must form some estimate of the positive and relative value of what are called accomplishments.

We are not going to attack any of them with cynical asperity, or with the ambition to establish any new dogmatical tenets in the place of old received opinions. It can, however, do no harm to discuss this important subject with proper reverence and humility. Without alarming those mothers, who declare themselves

above all things anxious for the rapid progress of their daughters in every fashionable accomplishment, it may be innocently asked, what price such mothers are willing to pay for these *advantages*. Any price within the limits of our fortune! they would probably exclaim.

There are other standards by which we can measure the value of objects, as well as by money. "Fond mother, would you, if it were in your power, accept of an opera-dancer for your daughter's governess, upon condition that you should live to see that daughter dance the best minuet at a birth-night ball?"

"Not for the world," replies the mother. "Do you think I would hazard my daughter's innocence and reputation, for the sake of seeing her dance a good minuet? Shocking! Absurd! What can you mean by such an outrageous question?"

"To fix your attention. Where the mind has not precisely ascertained its wishes, it is sometimes useful to consider extremes; by determining what price you will *not* pay, we shall at length ascertain the value which you

“ set upon the object. Reputation and innocence; you say, you will not, upon any account, hazard. But would you consent that your daughter should, by universal acclamation, be proclaimed the most accomplished woman in Europe, upon the simple condition, that she should pass her days in a nunnery ?”

“ I should have no right to make such a condition ; domestic happiness I ought certainly to prefer to public admiration, for my daughter. Her accomplishments would be of little use to her, if she were to be shut up from the world : who is to be the judge of them in a nunnery ?”

“ I will say no more about the nunnery. But would not you, as a good mother, consent to have your daughter turned into an automaton for eight hours in every day for fifteen years, for the promise of hearing her, at the end of that time, pronounced the first private performer at the most fashionable, and most crowded concert in London ?”

“ Eight hours a day for fifteen years are too much. No one need practise so much to become the first performer in England ?”

“ That is another question. You have not
“ told me whether you would sacrifice so much
“ of your daughter’s existence for such an ob-
“ ject, supposing that you could obtain it at no
“ other price.”

“ For *one* concert,” says the hesitating mo-
ther; “ I think it would be too high a price.
“ Yet I would give any thing to have my
“ daughter play better than any one in England.
“ What a distinction! She would be immedi-
“ ately taken notice of in all companies! She
“ might get into the first circles in London!
“ She would want neither beauty nor fortune
“ to recommend her! She would be a match
“ for any man, who has any taste for music!
“ And music is universally admired, even by
“ those who have the misfortune to have no
“ taste for it. Besides, it is such an elegant
“ accomplishment in itself! Such a constant
“ source of innocent amusement! Putting every
“ thing else out of the question, I should wish my
“ daughter to have every possible accomplish-
“ ment; because accomplishments are such
“ charming *resources* for young women, they

“ keep them out of harm’s way, they make a
“ vast deal of their idle time pass so pleasantly
“ to themselves and others ! This is my *chief*
“ reason for liking them.”

Here are so many reasons brought together at once, along with the chief reason, that they are altogether unanswerable ; we must separate, class, and consider them one at a time. Accomplishments, it seems, are valuable, as being the objects of universal admiration. Some accomplishments have another species of value, as they are tickets of admission to fashionable company. Accomplishments have another, and a higher species of value, as they are supposed to increase a young lady’s chance of a prize in the matrimonial lottery. Accomplishments have also a value as resources against ennui, as they afford continual amusement and innocent occupation. This is ostensibly their chief praise ; it deserves to be considered with respect. False and odious must be that philosophy which would destroy any one of the innocent pleasures of our existence. No reward was thought too high for the invention of a new pleasure ; no punishment would be thought too severe for those who would destroy

an old one. Women are peculiarly restrained in their situation, and in their employments, by the customs of society: to diminish the number of these employments, therefore, would be cruel; they should rather be encouraged, by all means, to cultivate those tastes which can attach them to their home, and which can preserve them from the miseries of dissipation. Every sedentary occupation must be valuable to those who are to lead sedentary lives; and every art, however trifling in itself, which tends to enliven and embellish domestic life, must be advantageous, not only to the female sex, but to society in general. As far as accomplishments can contribute to all or any of these excellent purposes, they must be just objects of attention in early education.

A number of experiments have already been tried; let us examine the result. Out of the prodigious number of young women who learn music and drawing, for instance, how many are there, who, after they become mistresses of their own time, and after they have the choice of their own amusements, continue to practise

these accomplishments for the pure pleasure of the occupation? As soon as a young lady is married, does not she frequently discover, that "she really has not *leisure* to cultivate talents " which take up so much time." Does not she complain of the labour of practising four or five hours a day to keep up her musical character? What motive has she for perseverance; she is, perhaps, already tired of playing to all her acquaintance. She may really take pleasure in hearing good music; but her own performance will not then please her ear so much as that of many others. She will prefer the more indolent pleasure of hearing the best music that can be heard for money at public concerts. She will then of course leave off playing, but continue very fond of music. How often is the labour of years thus lost for ever!

Those who have excelled in drawing do not appear to abandon the occupation so suddenly; it does not demand such an inordinate quantity of time to keep up the talent; the exertion of the imitative powers is agreeable; the employment is progressive, and therefore the mind is carried on to complete what has been begun.

Independently of all applause, which may be expected for the performance, there is a pleasure in going on with the work. But setting aside enthusiasm and habit, the probability that any sensible person will continue to pursue a given employment, must depend, in a great measure, upon their own conviction of its utility, or of its being agreeable to those whom they wish to please. The pleasure, which a lady's friends receive from her drawings, arises chiefly from the perception of their comparative excellence. Comparative excellence is all to which gentlewomen artists usually pretend, all to which they expect to attain; positive excellence is scarcely attained by one in a hundred. Compared with the performances of other young ladies of their acquaintance, the drawings of Miss X or Y may be justly considered as charming! admirable! and astonishing! But there are few drawings by young ladies which can be compared with those of a professed artist. The wishes of obliging friends are satisfied with a few drawings in handsome frames, to be hung up for the young lady's credit; and when it is

allowed amongst their acquaintance that she draws in a *superior* style, the purpose of this part of her education is satisfactorily answered. We do not here speak of those few individuals who really *excel* in drawing, who have learnt something more than the common routine which is usually learnt from a drawing-master, who have acquired an agreeable talent, not for the mere purpose of exhibiting themselves, but for the sake of the occupation it affords and the pleasure it may give to their *friends*. We have the pleasure of knowing some who exactly answer to this description, and who must feel themselves distinct and honourable exceptions to these general observations.

From whatever cause it arises, we may observe, that after young women are settled in life, their taste for drawing and music gradually declines. For this fact we can appeal only to the recollection of individuals. We may hence form some estimate of the real value which ought to be put upon what are called accomplishments, *considered as occupations*. Hence may we also conclude, that parents do not form

their judgments from the facts which they see every day in real life ; or else may we not infer that they deceive themselves as to their own motives ; and that amongst the reasons which make them so anxious about the accomplishments of their daughters, there are some secret motives more powerful than those which are usually openly acknowledged ?

It is admitted in the cabinet council of mothers, that some share of the value of accomplishments depends upon the demand for them in the fashionable world. "A young lady," they say, "is nobody, and nothing, without accomplishments ; they are as necessary to her as a fortune : they are indeed considered as part of her fortune, and sometimes are even found to supply the place of it. Next to beauty, they are the best tickets of admission into society which she can produce ; and every body knows, that on the company she keeps depends the chance of a young woman's settling advantageously in the world."

To judge of what will please and attach men of superior sense and characters—we are

not quite certain that these are the men who are to be considered first when we speak of a young lady's settling *advantageously* in the world; but we will take this for granted—to judge of what will please and attach men of superior sense and characters, we must observe their actual conduct in life, and listen to their speculative opinions. Superficial accomplishments do not appear to be the objects of their preference. In enumerating the perfections of his wife, or in retracing the progress of his love, does a man of sense dwell upon his mistress's skill in drawing, or dancing, or music? No. These he tells you, are extremely agreeable talents, but they could have never attached him; they are subordinate parts in her character; he is angry that you can rank them amongst her perfections; he knows that a thousand women possess these accomplishments, who have never touched his heart. He does not perhaps deny, that in Chloe, altogether, they have power to please, but he does not think them essential to her power.

The opinion of women, who have seen a

good deal of the world; is worth attending to upon this subject; especially if we can obtain it when their passions are wholly uninterested in their decision. Whatever may be the judgment of individuals concerning the character and politics of the celebrated Madame Roland, her opinion as a woman of abilities, and as a woman who had seen a variety of life, will be thought deserving of attention. Her book was written at a time when she was in daily expectation of death, when she could have no motive to conceal her real sentiments upon any subject. She gives an account of her employments in prison; and, amongst others, mentions music and drawing.

“I then employed myself in drawing till
“dinner time. I had so long been out of the
“habit of using a pencil, that I could not expect to be very dexterous; but we commonly retain the power of repeating with pleasure, or at least of attempting with ease,
“whatever we have successfully practised in
“our youth. Therefore the study of the fine
“arts, considered as a part of female education,

“ should be attended to, much less with a view
“ to the acquisition of superior talents, than
“ with a desire to give women a taste for in-
“ dustry, the habit of application, and a
“ greater variety of employments; for these
“ assist us to escape from *ennui*, the most cruel
“ disease of civilized society; by these we are
“ preserved from the dangers of vice, and even
“ from those seductions which are far more
“ likely to lead us astray.

“ I would not make my daughter a performer*.
“ I remember, that my mother was afraid that
“ I should become a great musician, or that I
“ should have devoted myself entirely to paint-
“ ing: she wished that I should, above all other
“ things, love the duties of my sex; that I
“ should be a good œconomist, a good mistress,
“ as well as a good mother of a family. I wish
“ my Eudora to be able to accompany her
“ voice agreeably on the harp. I wish that she
“ may play agreeably on the piano-forte; that
“ she may know enough of drawing to feel
“ pleasure from the sight and from the exami-

* Une virtuose.

“ nation of the finest pictures of the great painters ; that she may be able to draw a flower that happens to please her ; and that she may unite in her dress elegance and simplicity. I should wish that her talents might be such, that they should neither excite the admiration of others, nor inspire her with vanity ; I should wish that she should please by the general effect of her whole character, without ever striking any body with astonishment at first sight ; and that she should attach by her good qualities, rather than shine by her accomplishments.”

Women cannot foresee what may be the tastes of the individuals with whom they are to pass their lives. Their own tastes should not therefore be early decided ; they should, if possible, be so educated that they may attain any talent in perfection which they may desire, or which their circumstances may render necessary. If, for instance, a woman were to marry a man who was fond of music, or who admired painting, she should be able to cultivate these talents for his amusement and her own. If he be a man

of sense and feeling, he will be more pleased with the motive than with the thing that is actually done. But if it be urged, that all women cannot expect to marry men of sense and feeling; and if we are told, that nevertheless they must look to "an advantageous establishment," we must conclude, that men of rank and fortune are meant by that comprehensive phrase. Another set of arguments must be used to those, who speculate on their daughters' accomplishments in this line. They have, perhaps, seen some instances of what they call success; they have seen some young women of their acquaintance, whose accomplishments have attracted men of fortune superior to their own; consequently, maternal tenderness is awakened, and many mothers are sanguine in their expectations of the effect of their daughters' education. But they forget that every body now makes the same reflections, that parents are, and have been for some years, speculating in the same line; consequently, the market is likely to be overstocked, and, of course, the value of the commodities must fall. Every

young lady (and every young woman is now a young lady) has some pretensions to accomplishments. She draws a little; or she plays a little; or she speaks French a little. Even the blue-board boarding schools, ridiculed by Miss Allscrip in the Heiress, profess to perfect young ladies in some or all of these necessary parts of education. Stop at any good inn on the London roads, and you will probably find that the landlady's daughter can shew you some of her own framed drawings, can play a tune upon her spinnet, or support a dialogue in French of a reasonable length, in the customary questions and answers. Now it is the practice in high life to under-value, and avoid as much as possible, every thing which descends to the inferior classes of society. The dress of to-day is unfashionable to-morrow, because every body wears it. The dress is not preferred because it is pretty or useful, but because it is the distinction of well-bred people. In the same manner accomplishments have lost much of that value which they acquired from opinion, since they have become common. They are now so

common, that they cannot be considered as the distinguishing characteristics of even a gentlewoman's education. The higher classes in life, and those individuals who aim at distinction, now establish another species of monopoly, and secure to themselves a certain set of expensive masters in music, drawing, dancing, &c. They endeavour to believe, and to make others believe, that no one can be well educated without having served an apprenticeship of so many lessons under some of these privileged masters. But it is in vain that they intrench themselves, they are pursued by the intrusive vulgar. In a wealthy mercantile nation there is nothing which can be bought for money, that will long continue to be an envied distinction. The hope of attaining to that degree of eminence in the fine arts which really deserves celebrity, becomes every day more difficult to private practitioners, because the number of competitors daily increases: and it is the interest of masters to forward their pupils by every possible means. Both genius and perseverance must now be united to obtain the prize of distinction; and

how seldom are they found, or kept together, in the common course of education !

Considering all these circumstances, is not there some reason to apprehend, that in a few years the taste for several fashionable appendages of female education may change, and that those will consequently be treated with neglect who have no other claim to public regard than their proficiency in what may, perhaps, then be thought vulgar or obsolete accomplishments? Our great grandmothers distinguished themselves by truly substantial tentitch chairs and carpets, by needle work pictures of Solomon and the queen of Sheba. These were admirable in their day, but their day is over ; and these useful, ingenious, and laborious specimens of female talents, are consigned to the garret, or they are produced but as curiosities, to excite wonder at the strange patience and miserable destiny of former generations: the taste for tapestry and embroidery are thus past ; the long labours of the loom have ceased. Cloth-work, crape-work, chenille-work, ribbon-work, wafer-work, with a

long train of etceteras, have all passed away in our own memory ; yet these conferred much evanescent fame, and a proportional quantity of vain emulation. A taste for drawing, or music, cannot be classed with any of these trifling performances ; but there are many faded drawings of the present generations, which cannot stand in competition with the glowing and faithful colours of the silk and worsted of former times ; and many of the hours spent at a *flammering* harpsichord might surely, with full as much domestic advantage, have been devoted to the embellishment of chairs and carpets. We hope that no one will so perversely misunderstand us, as to infer from these remarks, that we desire to see the revival of old tapestry work ; or that we condemn the elegant accomplishments of music and drawing. We condemn only the abuse of these accomplishments ; we wish that they should be considered as domestic occupations, not as matters of competition, or of exhibition, nor yet as the means of attracting temporary admiration. We are not afraid that any, who are really conscious of

having acquired accomplishments with these prudent and honourable views, should misapprehend what has been said. Mediocrity may, perhaps, attempt to misrepresent our remarks, and may endeavour to make it appear that we have attacked, and that we would discourage, every effort of female taste and ingenuity in the fine arts; we cannot therefore be too explicit in disclaiming such illiberal views.

We have not spoken of dancing, though it is one of the most admired of female accomplishments. This evidently is an amusement, not an occupation; it is an agreeable exercise, useful to the health, and advantageous, as it confers a certain degree of habitual ease and grace. Mr. Locke seems to think, that it gives young people confidence in themselves when they come into company, and that it is therefore expedient to teach children early to dance; but there are so many other methods of inspiring young people with this confidence in themselves, that it appears unnecessary to lay much stress upon this argument. If children live in good company, and see constantly people with

agreeable manners, they will acquire manners which the dancing-master does not always teach ; and they will easily vary their forms of politeness with the fashion of the day. Nobody comes into a room regularly as their dancing-master taught them to make their entrance ; we should think a strict adherence to his lesson ridiculous and awkward in well bred company ; therefore much must be left to the discretion and taste of the pupil, after the dancing master has made his last bow. Ease of manners is not always attained by those who have been strictly disciplined by a Vestris, because the lessons are not always practised in precisely the same circumstances in which they were learnt : this confuses and confounds the pupils, and they rather lose than gain confidence in themselves, from perceiving that they cannot immediately apply what they have been taught. But we need not expatiate upon this subject, because there are few parents of good sense, in any rank of life, who will not perceive that their daughters manners cannot be formed or polished by a dancing master. We are not to consider dancing in a grave and moral light ; it is an amuse-

ment much more agreeable to young people, and much better suited to them in every respect, than cards, or silent assemblies of formal visitors. It promotes cheerfulness, and prevents, in some measure, the habits of gossiping, and the love of scandal. So far we willingly agree with its most vivacious advocates, in its common eulogium. But this is not, we fear, saying enough. We see, or fancy that we see, the sober matron lay down her carefully sorted cards upon the card table, and with dictatorial solemnity she pronounces, "That dancing is something more than an amusement; that girls must learn to dance, because they must appear well in public; because the young ladies who dance the best are usually most *taken notice* of in public; most admired by the other sex; most likely, in short, not only to have their choice of the best partner in a ball room, but sometimes of the best partner for life."

With submission to maternal authority, these arguments do not seem to be justified of late years. Girls, who dance remarkably well, are, it is true, admired in a ball room, and followed,

perhaps, by those idle, thoughtless young men, who frequent public places merely for want of something else to do. This race of beings are not particularly calculated to make good husbands in any sense of the word; nor are they usually disposed to think of marriage in any other light than as the last desperate expedient to repair their injured fortunes. They set their wits against the sex in general, and consider themselves as in danger of being jockeyed into the matrimonial state. Some few, perhaps, who have not brought their imagination sufficiently under the command of the calculating faculty, are *caught* by beauty and accomplishments, and marry against the common rules of interest. These men are considered with pity, or with ridicule, by their companions, as dupes who have suffered themselves to be taken in; others are warned by their fate; and the future probability of similar *errors*, of course, must be diminished. The fashionable apathy, whether real or affected, with which young men lounge in public places, with scarcely the appearance of attention to the fair exhibitors be-

fore them, sufficiently marks the temper of the times; and if the female sex have lost any thing of the respect and esteem which ought to be paid to them in society, they can scarcely expect to regain their proper influence by concessions to the false and vitiated taste of those who combine to treat them with neglect bordering upon insolence. If the system of female education, if the system of female manners, conspire to shew in the fair sex a degrading anxiety to attract worthless admiration, wealthy, or titled homage, is it surprising that every young man, who has any pretensions to birth, fortune, or fashion, should consider himself as the arbiter of their fate, and the despotic judge of their merit? Women, who understand their real interests, perceive the causes of the contempt with which the sex is treated by fashionable coxcombs, and they feel some indignation at the meanness with which this contempt, tacitly or openly expressed, is endured. Women, who feel none of this indignation, and who, either from their education, or their circumstances, are solicitous to obtain only present

amusement, or what they think the permanent advantages of a fortunate alliance, will yet find themselves mistaken by persisting in their thoughtless career; they will not gain even the objects to which they aspire. How many accomplished belles run the usual round of dissipation in all public places of exhibition, tire the public eye, and after a season or two fade and are forgotten! How many accomplished belles are there, who, having gained the object of their own, or of their mother's ambition, find themselves doomed to misery for life! Those unequal marriages, which are sometimes called *excellent matches*, seldom produce much happiness. And where happiness is not, what is all the rest?

If all, or any of these reflections should strike the heart, and convince the understanding, of an anxious, but reasonable mother, she will, probably, immediately determine upon her own conduct in the education of her daughters: she will resolve to avoid the common errors of the frivolous or the interested; she will not be influenced by the importunity of every idle ac-

quaintance, who may talk to her of the necessity of her daughter's being taken notice of in public, of the chances of an *advantageous* establishment, of the good fortune of Miss Y—— or lady Angelina X——, in meeting with a coxcomb or a spendthrift for a husband; nor will she be moved with maternal emulation when she is further told, that these young ladies owed their *success* entirely to the superiority of their accomplishments: she will consider, for one moment, what is meant by the word success; she will, perhaps, not be of opinion that " 'tis best repenting in a coach and six;" she will, perhaps, reflect, that even the "soft sounds" of titled grandeur lose their power to please, and "salute the ear" almost unobserved. The happiness, the permanent happiness of her child, will be the first, the last object of the good and the enlightened mother: to this all her views and all her efforts will tend; and to this she will make every fashionable, every elegant accomplishment subservient.

As to the means of acquiring these accomplishments, it would be absurd, and presump-

tuous, to present here any vague precepts, or tedious details, upon the mode of learning drawing, dancing, and music. These can be best learned from the masters who profess to teach them, as far as the technical part is necessary. But success will not ultimately depend upon any technical instructions that a master can give: he may direct the efforts of industry so as to save much useless labour; he may prevent his pupils from acquiring bad practical habits; he may assist but he cannot inspire, the spirit of perseverance. A master who is not expected, or indeed allowed, to interfere in the general education of his pupils, can only diligently attend to them whilst he is giving his lessons; he has not any power, except that pernicious motive, competition, to excite them to excel; his instructions cannot be peculiarly adapted to their tempers or their understandings, because with these he is unacquainted. Now a sensible mother has it in her power to supply all these deficiencies; even if she does not herself excel in any of the accomplishments which her daughters are learning, her know-

ledge of their minds, her taste, her judgment, her affection, her superintending intelligence, will be of inestimable value to her children. If she has any skill in any accomplishment, she will, for the first years of her daughters' life, be undoubtedly the best person to instruct them. By skill, we do not mean superior talents, or proficiency in music or drawing; without these she may be able to teach all that is necessary in the early part of education. One of the best motives which a woman can have to cultivate her talents after she marries, is the hope and belief, that she may be essentially serviceable in the instruction of her family. And that she may be essentially serviceable, let no false humility lead her to doubt. She need not be anxious for the rapid progress of her little pupils; she need not be terrified if she see their equals in age surpass them under what she thinks more able tuition; she may securely satisfy herself, that if she but inspires her children with a desire to excel, with the habits of attention and industry, they will certainly succeed, sooner or later, in whatever it is de-

fixable that they should learn. The exact age at which the music, dancing, or drawing master, should begin their instructions need not be fixed. If a mother should not be so situated as to be able to procure the best masters for her daughters whilst they are yet children, she need not be in despair; a rapid progress is made in a short time by well educated young people; those who have not acquired any bad habits are easily taught: it therefore seems prudent, if the best masters cannot be procured at any given period of education, to wait patiently rather than hazard their first impressions, and the first habits which might be given by any inferior technical instruction. It is said, that the celebrated musician Timotheus, whose excellence in his art Alexander the conqueror of the world was forced to acknowledge, had the prudence to demand double *entrance money* from every scholar who had had any other music master.

Besides the advantage of being entirely free from other bad habits, children who are not taught by inferior masters, will not contract habits of listless application. Under the eye of

any indolent person children seldom give their entire attention to what they are about. They become mere machines, and without using their own understanding in the least, have recourse to the convenient master upon every occasion. The utmost that children in such circumstances can learn, is all the technical part of the art which the master can teach. When the master is at last dismissed, and her education completed, the pupil is left both fatigued and helpless. "Few have been taught to any purpose, " who have not been their own teachers," says Sir Joshua Reynolds. This reflection upon the art of teaching may perhaps be too general; but those persons, who look back upon their education, will in many respects allow it to be just. They will perceive that they have been too much taught, and that they have learned every thing which they knew as an art, and nothing as a science. Few people have sufficient courage to recommence their own education, and for this reason few people get beyond a certain point of mediocrity. It is easy to them to practise the lessons which they have

learned, if they practise them in intellectual darkness; but if you let in upon them one ray of philosophic light, you dazzle and confound them, so that they cannot even perform their customary feats. A young man*, who had been blind from his birth, and learned to draw a cross, a circle, and a square, with great accuracy; when he was twenty his eyes were couched, and when he could see perfectly well, he was desired to draw his circle and square. His new sense of seeing, so far from assisting him in this operation, was extremely troublesome to him; though he took more pains than usual, he performed very ill: confounded by the new difficulty, he concluded that sight was useless in all operations to be performed by the hand, and he thought his eyes would be of no use to him in future. How many people find their reason as useless and troublesome to them as this young man found his eye-sight!

Whilst we are learning any mechanical ope-

* V. Storia di quattro fratelli nati ciechi e guariti coll' estrazione delle cateratte.

ration, or whilst we are acquiring any technical art, the mind is commonly passive. In the first attempts, perhaps, we reason or invent ways of abridging our own labour, and the awkwardness of the unpractised hand is assisted by ingenuity and reflection; but as we improve in manual dexterity, attention and ingenuity are no longer exerted; we go on habitually without thought. Thought would probably interrupt the operation, and break the chain of associated actions. An artificer stops his hand the moment you ask him to explain what he is about: he can work and talk of indifferent objects; but if he reflects upon the manner in which he performs certain slight of hand parts of his business, it is ten to one but he cannot go on with them. A man, who writes a free running hand, goes on without thinking of the manner in which he writes; fix his attention upon the manner in which he holds his pen, or forms his letters, and he probably will not write quite so fast, or so well, as usual. When a girl first attempts to dress herself at a glass, the glass perplexes, instead of assisting her, because

she thinks, and reasons about every motion; but when by habit she has learned how to move her hands in obedience to the *flügel*-image*, which performs its exercise in the mirror, no farther thought is employed. . Make the child observe that she moves her left hand forward when the image in the glass moves in a contrary manner, turn the child's attention to any of her own motions, and she will make mistakes as she did before her habits were formed.

Many occupations, which are generally supposed to depend upon the understanding, and which do probably depend in the first instance upon the *understanding*, become by practice purely mechanical. This is the case in many of the imitative arts. A person unused to drawing exerts a great deal of attention in copying any new object; but custom soon supplies the place of thought. By custom †, as a great artist assures us, he will become able to draw the human figure tolerably well with as little effort

* This word is sometimes by mistake spelt *fugal*-man.

† Sir Joshua Reynolds.

of the mind, as to trace with a pen the letters of the alphabet.

We must further observe, that the habit of pursuing any occupation, which requires no mental exertion, induces an indolence or incapacity of intellect. Mere artists are commonly as stupid as mere artificers, and these are little more than machines.

The length of time which is required to obtain practical skill and dexterity in certain accomplishments is one reason, why there are so few people who obtain any thing more than mechanical excellence. They become the slaves of custom, and they become proud of their slavery. At first they might have considered custom as a tyrant; but when they have obeyed her for a certain time, they do her voluntary homage ever after, as to a sovereign by divine right. To prevent this species of intellectual degradation, we must in education be careful to rank mere mechanical talents below the exercise of the mental powers. Thus the ambition of young people will be directed to high objects; and all inferior qualifications may

be attained without contracting the understanding. Praise children for patience, for perseverance, for industry; encourage them to reason and to invent upon all subjects, and you may direct their attention afterwards as you think proper. But if you applaud children merely for drawing a flower neatly, or copying a landscape, without exciting their ambition to any thing higher, you will never create superior talents, or a superior character. The writing and drawing automaton performs its advertised wonders to the satisfaction of the spectators; but the machine is not "*instinct with spirit*," you cannot expect from it the design, the sketch of a Raphael, or from its pen the thoughts of a Shakspeare. It is easy to guide the hand, but who can transfuse a soul into the image?

It is not an uncommon thing to hear young people, who have been long under the tuition of masters, complain of their own want of genius. They are sensible that they have not made any great progress in any of the accomplishments, which they have endeavoured to learn; they see others, who have not perhaps

had what they call such *opportunities* and *advantages* in their education, suddenly surpass them; this they attribute to natural genius, and they say to themselves in despair, "Certainly I have no taste for drawing, I have no genius for music, I have learned so many years, I have had so many lessons from the best masters, and yet here is such and such a one, who has had no master, who has taught herself, and perhaps did not begin till late in life, has got before me, because she has a natural genius for these things. She must have a natural taste for them, because she can fit whole hours at these things for her own pleasure. Now I never would take a pencil in my hand for my own choice; and I am glad, at all events, that the time for lessons and masters is over. My education is finished, for I am of age."

The disgust and despair, which are thus induced by an injudicious education, absolutely defeat even its own trivial purposes. So that, whatever may be the views of parents, whether they consider ornamental accomplishments

as essential to their daughter's *success* in the world, or whether they value them rather as secondary objects, subordinate to her happiness; whether they wish their daughter actually to excel in any particular accomplishment, or to have the power of excelling in any to which circumstances may direct her, it is in all cases advisable to cultivate the general power of the pupil's understanding, instead of confining her to technical practices and precepts, under the eye of any master, who does not possess that which is the *soul* of every art.

We do not mean any illiberal attack upon masters, but in writing upon education it is necessary to examine the utility of different modes of instruction, without fear of offending any *class* of men. We acknowledge, that it is seldom found that those can communicate their knowledge the best, *who possess the most*, especially if this knowledge be that of an artist or a linguist. Before any person is properly qualified *to teach*, he must have the power of recollecting exactly how *he learned*; he must go back step by step to the point at which he

began, and he must be able to conduct his pupil through the same path without impatience or precipitation. He must not only have acquired a knowledge of the process by which his own ideas and habits were formed, but he must have extensive experience of the varieties of the human mind. He must not suppose, that the operations of intellect are carried on precisely in the same manner in all minds; he must not imagine, that there is but one method of teaching, which will suit all persons alike. The analogies which strike his own mind, the arrangement of ideas, which to him appears the most perspicuous, to his pupil may appear remote and confused. He must not attribute this to his pupil's inattention, stupidity, or obstinacy; but he must attribute it to the true causes; the different association of ideas in different minds, the different habits of thinking, which arise from their various tempers and previous education. He must be acquainted with the habits of all tempers; the slow, the quick, the inventive, the investigating; and he must adapt

his instructions accordingly. There is something more, requisite: a master must not only know what he professes to teach of his own peculiar art or science, but he ought to know all its bearings and dependences. He must be acquainted not only with the local topography of his own district, but he must have the whole map of human knowledge before him; and whilst he dwells most upon his own province, he must yet be free from local prejudices, and must consider himself as a citizen of the world. Children who study geography in small separate maps, understand, perhaps, the view of each country tolerably well; but we see them quite puzzled when they are to connect these maps in their idea of the world. They do not know the relative size or situation of England or France; they cannot find London or Paris when they look for the first time upon the globe, and every country seems to be turned upside down in their imagination. Young people who learn particular arts and sciences from masters who have confined their view to the boundary of each, without having given an enlarged idea

of the whole, are much in the same situation with these unfortunate geographers.

The persisting to teach things separately, which ought to be taught as a whole, must prevent the progress of mental cultivation*. The division and subdivision of different parts of education, which are monopolized as trades by the masters who profess to teach them, must tend to increase and perpetuate error. These intellectual *castles* are pernicious.

It is said, that the Persians had masters to teach their children each separate virtue: one master to teach justice, another fortitude, another temperance, and so on. How these masters could preserve the boundaries of their several moral territories, it is not easy to imagine, especially if they all insisted upon independent sovereignty. There must have been some danger, surely, of their disputing with one another concerning the importance of their respective professions, like the bourgeois' gentilhomme's dancing master, music master, master of morality, and master of philosophy, who all fell to

* Condillac.

blows to settle their pretensions, forgetful of the presence of their pupil. Masters, who are expected to teach only one thing, may be sincerely anxious for the improvement of their pupils in that particular, without being in the least interested for their general character or happiness. Thus the drawing master has done his part, and is satisfied if he teaches his pupil to draw well; it is no concern of his what her temper may be, any more than what sort of hand she writes, or how she dances. The dancing master, in his turn, is wholly indifferent about the young lady's progress in drawing; all he undertakes is, to teach her to dance.

We mention these circumstances to shew parents, that masters, even when they do the utmost that they engage to do, cannot educate their children; they can only partially instruct them in particular arts. Parents must themselves preside over the education of their children, or must entirely give them into the care of some person of an enlarged and philosophic mind, who can supply all the deficiencies of common masters, and who can take advantage

of all the positive good that can be obtained from existing institutions. Such a preceptor or governess must possess extensive knowledge, and that superiority of mind which sees the just proportion and value of every acquisition, which is not to be overawed by authority, or dazzled by fashion. Under the eye of such persons, masters will keep precisely their proper places; they will teach all they can teach, without instilling absurd prejudices, or inspiring a spirit of vain rivalry; nor will they be suffered to continue their lessons when they have nothing more to teach.

Parents, who do not think that they have leisure, or feel that they have capacity to take the entire direction of their children's education upon themselves, will trust this important office to a governess. The inquiry concerning the value of female accomplishments has been purposely entered into before we could speak of the choice of a governess, because the estimation in which these are held will very much determine parents in their choice.

If what has been said of the probability of a

decline in the public taste for what are usually called accomplishments: of their relative utility to the happiness of families and individuals; of the waste of time, and waste of the higher powers of the mind in acquiring them: if what has been observed on any of these points is allowed to be just, we shall have little difficulty in pursuing the same principles further. In the choice of a governess we should not consider her fashionable accomplishments as her best recommendations; these will be only secondary objects. We shall examine with more anxiety, whether she possess a sound, discriminating, and enlarged understanding. Whether her mind be free from prejudice; whether she has steadiness of temper to pursue her own plans; and, above all, whether she has that species of integrity which will justify a parent in trusting a child to her care. We shall attend to her conversation, and observe her manners, with scrupulous minuteness. Children are *imitative animals*, and they are peculiarly disposed to imitate the language, manners, and gestures, of those with whom they live, and to

whom they look up with admiration. In female education too much care cannot be taken to form all those habits in morals and in manners, which are distinguishing characteristics of amiable women. These habits must be acquired early, or they will never appear easy or graceful: they will necessarily be formed by those who see none but good models.

We have already pointed out the absolute necessity of union amongst all those who are concerned in a child's education. A governess must either rule, or obey, decidedly. If she do not agree with the child's parents in opinion, she must either know how to convince them by argument, or she must with strict integrity conform her practice to their theories. There are few parents, who will choose to give up the entire care of their children to any governess; therefore there will probably be some points in which a difference of opinion will arise. A sensible woman will never submit to be treated, as governesses are in some families, like the servant who was asked by his master what business he had to think; nor will a woman of sense

or temper insist upon her opinions without producing her reasons. She will thus ensure the respect and the confidence of enlightened parents.

It is the interest of parents to treat the person who educates their children with that perfect equality and kindness, which will conciliate her affection, and which will at the same time preserve her influence and authority over her pupils. And it is with pleasure we observe, that the style of behaviour to governesses, in well-bred families, is much changed within these few years. A governess is no longer treated as an upper servant; or as an intermediate being between a servant and a gentlewoman: she is now treated as the friend and companion of the family, and she must, consequently, have warm and permanent interest in its prosperity: she becomes attached to her pupils from gratitude to their parents, from sympathy, from generosity, as well as from the strict sense of duty.

In fashionable life there is, however, some danger, that parents should go into extremes in their behaviour towards their governesses.

Those who disdain the idea of assuming superiority of rank and fortune, and who desire to treat the person who educates their children as their equal, act with perfect propriety; but if they make her their companion in all their amusements they go a step too far, and they defeat their own purposes. If a governess attends the card table, and the assembly-room; if she is to visit, and be visited, what is to become of her pupils in her absence? They must be left to the care of servants. There are some ladies who will not accept of any invitation, in which the governess of their children is not included. This may be done from a good motive, but, surely, it is unreasonable; for the very use of a governess is to supply the mother's place in her absence. Cannot this be managed better? Cannot the mother and governess amuse themselves at different times? There would then be perfect equality; the governess would be in the same society, and would be treated with the same respect, without neglecting her duty. The reward which is given to women of abilities, and of unblemished reputa-

tion, who devote themselves to the superintendence of the education of young ladies in the higher ranks of life, the daughters of our affluent nobility, ought to be considerably greater than what it is at present: it ought to be such as to excite women to cultivate their talents, and their understandings, with a view to this profession. A profession we call it, for it should be considered as such, as an honourable profession, which a gentlewoman might follow without losing any degree of the estimation in which she is held by what is called *the world*. There is no employment, at present, by which a gentlewoman can maintain herself without losing something of that respect, something of that rank in society, which neither female fortitude nor male philosophy willingly foregoes. The liberal professions are open to men of small fortunes; by presenting one similar resource to women, we should give a strong motive for their moral and intellectual improvement.

Nor does it seem probable, that they should make a disgraceful or imprudent use of their increasing influence and liberty in this case, be-

cause their previous education must previously prepare them properly. The misfortune of women has usually been, to have power trusted to them before they were educated to use it prudently. To say that preceptresses in the higher ranks of life should be liberally rewarded, is but a vague expression; something specific should be mentioned, wherever general utility is the object. Let us observe; that many of the first dignities of the church are bestowed, and properly bestowed, upon men who have educated the highest ranks of our nobility. Those who look with an evil eye upon these promotions do not fairly estimate the *national* importance of education for the rich and powerful. No provision can be made for women, who direct the education of the daughters of our nobility, anyways equivalent to the provision made for preceptors by those who have influence in the state. A pecuniary compensation is in the power of opulent families. Three hundred a year, for twelve or fourteen years, the space of time which a preceptress must probably employ in the education of a young lady,

would be a suitable compensation for her care. With this provision she would be enabled, after her pupil's education was completed, either to settle in a family of her own, or she would in the decline of life be happily independent, secure from the temptation of marrying for money. If a few munificent and enlightened individuals set the example of liberally rewarding merit in this situation, many young women will probably appear with talents and good qualities suited to the views of the most sanguine parents. With good sense, and literary tastes, a young woman might instruct herself during the first years of her pupil's childhood, and might gradually prepare herself with all the necessary knowledge; according to the principles that have been suggested, there would be no necessity for her being a *mistress of arts*, a performer in music, a painteress, a linguist, or a poetess. A general knowledge of literature is indispensable; and yet farther, she must have sufficient taste and judgment to direct the literary talents of her pupils.

With respect to the literary education of the

female sex, the arguments on both sides of the question have already been stated, with all the impartiality in our power, in another place*: without obtruding a detail of the same arguments again upon the public, it will be sufficient to profess the distinct opinion, which a longer consideration of the subject has yet more fully confirmed. That it will tend to the happiness of society in general, that women should have their understandings cultivated and enlarged as much as possible; that the happiness of domestic life, the virtues and the powers of pleasing in the female sex, the yet more desirable power of attaching those worthy of their love and esteem, will be increased by the judicious cultivation of the female understanding, more than by all that modern gallantry or ancient chivalry could devise in favour of the sex. Much prudence and ability are requisite to conduct properly a young woman's literary education. Her imagination must not be raised above the taste for necessary occupations, or the numerous small, but not trifling pleasures of domestic

* Letters for Literary Ladies, second edition.

life : her mind must be enlarged, yet the delicacy of her manners must be preserved ; her knowledge must be various, and her powers of reasoning unawed by authority ; yet she must *habitually* feel that nice sense of propriety, which is at once the guard and the charm of every feminine virtue. By early caution, unremitting, scrupulous caution in the choice of the books which are put into the hands of girls, a mother, or a preceptress, may fully occupy, and entertain their pupils, and excite in their minds a *taste* for propriety, as well as a taste for literature. It cannot be necessary to add more than this general idea, that a mother ought to be answerable to her daughter's husband for the books her daughter reads, as well as for the company she keeps.

Those observations, which apply equally to the cultivation of the understanding both of men and of women, we do not here mean to point out ; we would speak only of what may be peculiar to female education. From the study of the learned languages women by custom, fortunately for them, are exempted : of ancient

literature they may in translations which are acknowledged to be excellent, obtain a sufficient knowledge, without paying too much time and labour for this classic pleasure. Confused notions from fashionable publications, from periodical papers, and comedies, have made their way into common conversation, and thence have assumed an appearance of authority, and have been extremely disadvantageous to female education. Sentiment and ridicule have conspired to represent reason, knowledge, and science, as unsuitable or dangerous to women; yet at the same time wit, and superficial acquirements in literature, have been the object of admiration in society; so that this dangerous inference has been drawn almost without our perceiving its fallacy, that superficial knowledge is more desirable in women than accurate knowledge. This principle must lead to innumerable errors; it must produce continual contradictions in the course of education; instead of making women more reasonable, and less presuming, it will render them at once arrogant and ignorant; full of pretensions, inca-

pable of application, and unfit to hear themselves convinced. Whatever young women learn, let them be taught accurately ; let them know ever so little apparently, they will know much if they have learnt that little *well*. A girl who runs through a course of natural history, hears something about chemistry, has been taught something of botany, and who knows but just enough of these to make her fancy that she is well informed, is in a miserable situation, in danger of becoming ridiculous, and insupportably tiresome to men of sense and science. But let a woman know any one thing completely, and she will have sufficient understanding to learn more, and to apply what she has been taught so as to interest men of generosity and genius in her favour. The knowledge of the general principles of any science is very different from superficial knowledge of the science ; perhaps, from not attending to this distinction, or from not understanding it, many have failed in female education. Some attempt will be made to mark this distinction practically, when we come to speak of the cultivation of the me-

memory, invention, and judgment. No intelligent preceptress will, it is hoped, find any difficulty in the application of the observations they may meet with in the chapters on imagination, sympathy and sensibility, vanity, and temper. The masculine pronoun *he*, has been used for grammatical convenience, not at all because we agree with the prejudiced, and uncourteous grammarian, who asserts "that the masculine is the " more worthy gender."

CHAPTER XXI.

MEMORY AND INVENTION.

BEFORE we bestow many years of time and pains upon any object, it may be prudent to afford a few minutes previously to ascertain its precise value. Many persons have a vague idea of the great value of memory, and, without analysing their opinion, they resolve to cultivate the memories of their children, as much, and as soon as possible. So far from having determined the value of this talent, we shall find that it will be difficult to give a popular definition of a good memory. Some people call that a good memory which retains the greatest number of ideas for the longest time. Others prefer

a recollective, to a retentive memory, and value not so much the number, as the selection of facts ; not so much the mass, or even the antiquity, of accumulated treasure, as the power of producing current specie for immediate use. Memory is sometimes spoken of as if it were a faculty admirable in itself, without any union with the other powers of the mind. Amongst those who allow that memory has no independent claim to regard, there are yet many who believe, that a superior degree of it is essential to the successful exercise of the higher faculties, such as judgment and invention. The degree in which it is useful to those powers, has not however been determined. Those who are governed in their opinions by precedent and authority can produce many learned names, to prove that memory was held in the highest estimation amongst the great men of antiquity ; it was cultivated with much anxiety in their public institutions, and in their private education. But there were many circumstances, which formerly contributed to make a great memory essential to a great man. In civil and military employments, amongst the ancients, it was in

a high degree requisite. Generals were expected to know by heart the names of the soldiers in their armies; demagogues, who hoped to please the people, were expected to know the names of all their fellow citizens*. Orators, who did not speak extempore, were obliged to get their long orations by rote. Those who studied science or philosophy were obliged to cultivate their memory with incessant care, because, if they frequented the schools for instruction, they treasured up the sayings of the masters of different sects, and learned their doctrines only by oral instruction. Manuscripts were frequently got by heart by those who were eager to secure the knowledge they contained, and who had not opportunities of recurring to the originals. It is not surprising, therefore, that memory, to which so much was trusted, should have been held in such high esteem.

At the revival of literature in Europe, before the discovery of the art of printing, it was scarcely possible to make any progress in the literature of the age, without possessing a retentive memory. A man who had read a few

* V. Plutarch. Quintilian.

manuscripts, and could repeat them, was a wonder, and a treasure : he could travel from place to place, and live by his learning ; he was a circulating library to a nation, and the more books he could carry in his head the better ; he was certain of an admiring audience if he could repeat what Aristotle or Saint Jerome had written ; and he had far more encouragement to engrave the words of others on his memory, than to invent or judge for himself.

In the twelfth century above six hundred scholars assembled in the forests of Champagne, to hear the lectures of the learned Abeillard ; they made themselves huts of the boughs of trees, and in this new academic grove were satisfied to go almost without the necessaries of life. In the specimens of Abeillard's composition, which are handed down to us, we may discover proofs of his having been vain of a surprising memory ; it seems to have been the superior faculty of his mind : his six hundred pupils could carry away with them only so much of his learning as they could get by heart during his course of lectures ; and he who had

the best memory must have been best paid for his journey*.

The art of printing, by multiplying copies so as to put them within the easy reference of all classes of people, has lowered the value of this species of retentive memory. It is better to refer to the book itself, than to the man who has read the book. Knowledge is now ready classed for use, and it is safely stored up in the great common-place books of public libraries. A man of literature need not encumber his memory with whole passages from the authors he wants to quote; he need only mark down the page, and the words are safe.

Mere erudition does not in these days ensure permanent fame. The names of the Abbé de Longuerue, and of the Florentine librarian Magliabechi, excite no vivid emotions in the minds of those who have heard of them before; and there are many, perhaps not illiterate persons, who would not be ashamed to own that they had never heard of them at all. Yet these

* Berington's History of the Lives of Abcillard and Heloisa, p. 173.

men were both of them, but a few years ago, remarkable for extraordinary memory and erudition. When M. de Longuerue was a child, he was such a prodigy of memory and knowledge, that Lewis the Fourteenth, passing through the Abbé's province, stopped to see and hear him. When he grew up, Paris consulted him as the oracle of learning. His erudition, says d'Alembert*, was not only prodigious, but actually terrible. Greek and Hebrew were more familiar to him than his native tongue. His memory was so well furnished with historic facts, with chronological and typographical knowledge, that upon hearing a person assert in conversation, that it would be a difficult task to write a good historical description of France †; he asserted that he could do it from memory, without consulting any books. All he asked was, to have some maps of France laid before him: these recalled to his mind the history of each province, of all the sieges of the crown of each city, and even of each distinguished noble-

* *Eloge de M. L'Abbé d'Alary.*

† *Marquis d'Argenson's Essays*, page 385.

man's feat in the kingdom. He wrote his folio history in a year. It was admired as a great curiosity in manuscript; but when it came to be printed, sundry gross errors appeared: he was obliged to take out several leaves in correcting the press. The edition was very expensive, and the work, at last, would have been rather more acceptable to the public, if the author had not written it from memory. Love of the wonderful must yield to esteem for the useful.

The effect which all this erudition had upon the Abbé de Longuerue's taste, judgment, and imagination, is worthy of our attention. Some of his opinions speak sufficiently for our purpose. He was of opinion that the English have never done any good*, since they renounced the study of Greek and Arabic, for Geometry and Physics. He was of opinion, that two antiquarian books upon Homer, viz. *Antiquitates Homericae* and *Homeri Gnomologia*, are preferable to Homer himself. He would rather have them, he declared, because

* D'Alembert's Eloge de M. d'Alary.

with these he had all that was useful in the poet, without being obliged to go through long stories, which put him to sleep. "As for that "madman Ariosto," said he, "I sometimes "divert myself with him." One odd volume of Racine was the only French book to be found in his library. His erudition died with him, and the world has not profited much by his surprising memory.

The librarian Magliabechi was no less famous than M. de Languerue for his memory, and he was yet more strongly affected by the mania for books. His appetite for them was so voracious, that he acquired the name of the glutton of literature*. Before he died he had *swallowed* six large rooms full of books. Whether he had time to digest any of them we do not know, but we are sure that he wished to have done so; for the only line of his own composition, which he has left for the instruction of posterity, is round a medal. The medal represents him sitting with a book in his hand, and with a great number of books scattered on the

* *Curiosities of Literature*, vol. ii. page 145.

floor round him. The candid inscription signifies, that to become learned it is not sufficient to read much, if we read without reflection. The names of Franklin and of Shakspeare are known wherever literature is cultivated, to all who have any pretensions to science or to genius; yet they were neither of them men of extraordinary erudition, nor from their works should we judge that memory was their predominant faculty. It may be said, that a superior degree of memory was essential to the exercise of their judgment and invention; that without having treasured up in his memory a variety of minute observations upon human nature, Shakspeare could never have painted the passions with so bold and just a hand, that if Franklin had not accurately remembered his own philosophical observations, and those of others, he never would have made those discoveries which have immortalized his name. Admitting the justice of these assertions, we see that memory to great men is but a subordinate servant, a treasurer who receives, and is expected to keep faithfully whatever is com-

mitted to his care ; and not only to preserve faithfully all deposits, but to produce them at the moment they are wanted. There are substances which are said to imbibe and retain the rays of light, and to emit them only in certain situations. As long as they retain the rays, no eye regards them.

It has often been observed, that a recollective and retentive memory are seldom found united. If this were true, and that we had our choice of either, which should we prefer ? For the purposes of ostentation, perhaps the one ; for utility the other. A person who could repeat from beginning to end the whole Economy of Human Life, which he had learned in his childhood, might, if we had time to sit still and listen to him, obtain our admiration for his extraordinarily retentive memory ; but the person who, in daily occurrences or interesting affairs, recollects at the proper time what is useful to us, obtains from our gratitude something more than vain admiration. To speak accurately, we must remark, that retentive and recollective memories are but relative terms ;

the recollective memory must be retentive of all that it recollects; the retentive memory cannot shew itself till the moment it becomes recollective. But we value either precisely in proportion as they are useful and agreeable.

Just at the time when philosophers were intent upon trying experiments in electricity, Dr. Heberden recollected to have seen, many years before, a small electrical stone called tourmalin*, in the possession of Dr. Sharpe at Cambridge. It was the only one known in England at that time. Dr. Heberden procured it; and several curious experiments were made and verified with it. In this instance it is obvious, that we admire the retentive local memory of Dr. Heberden, merely because it became recollective and useful. Had the tourmalin never been wanted, it would have been a matter of indifference, whether the direction for it at Dr. Sharpe's at Cambridge had been remembered or forgotten. There was a man † who under-

* Priestley on Electricity, page 317.

† Fuller, author of the Worthies of England. See *Curiosities of Literature*, vol. i.

took in going from Temple Bar to the farthest part of Cheapside and back again, to enumerate at his return every sign on each side of the way in its order, and to repeat them, if it should be required, either backwards or forwards. This he exactly accomplished. As a playful trial of memory, this affords us a moment's entertainment; but if we were to be serious upon the subject, we should say it was a pity that the man did not use his extraordinary memory for some better purpose. The late king of Prussia, when he intended to advance Trenck in the army, upon his first introduction gave him a list of the strangest names which could be picked out, to learn by rote. Trenck learned them quickly, and the king was much pleased with this instance of his memory; but Frederick would certainly never have made such a trial of the abilities of Voltaire.

We cannot always foresee what facts may be useful, and what may be useless to us, otherwise the cultivation of the memory might be conducted by unerring rules. In the common business of life people regulate their memories by

the circumstances in which they happen to be placed. A clerk in a counting house by practice learns to remember the circumstances, affairs, and names of numerous merchants, of his master's customers, the places of their abode, and perhaps, something of their peculiar humours and manners. A fine lady remembers her visiting list, and perhaps the dresses and partners of every couple at a crowded ball; she finds all these particulars a useful supply for daily conversation, she therefore remembers them with care. An amateur, who is ambitious to shine in the society of literary men, collects literary anecdotes, and retails them whenever occasion permits. Men of sense, who cultivate their memories for useful purposes, are not obliged to treasure up heterogeneous facts: by reducing particulars to general principles, and by connecting them with proper associations, they enjoy all the real advantages, whilst they are exempt from the labour of accumulation.

Mr. Stewart has with so much ability pointed out the effects of systematic arrangement, of

writing, reading, and the use of technical contrivances in the cultivation of the memory, that it would be a presumptuous and unnecessary attempt to expatiate in other words upon the same subject. It may not be useless, however, to repeat a few of his observations, because in considering what farther improvement may be made, it is always essential to have fully in our view what is already known.

Philosophic arrangement assists the memory by classing, under a few general principles, a number of apparently dissimilar and unconnected particulars. The habit, for instance, of attending to the connexion of cause and effect, presents a multitude of interesting analogies to the minds of men of science, which escape other persons; the vulgar feel no pleasure in contemplating objects that appear remote from common life; and they find it extremely difficult to remember observations and reasonings, which are foreign to their customary course of associated ideas. Even literary and ingenious people, when they begin to learn any art or science, usually complain that their memory is not able

to retain all the terms and ideas which pour in upon them with perplexing rapidity. In time this difficulty is conquered, not so much by the strength of the memory as by the exercise of judgment: they learn to distinguish, and select the material terms, facts, and arguments, from those that are subordinate, and they class them under general heads, to relieve the memory from all superfluous labour.

In all studies there is some prevalent associating principle, which gradually becomes familiar to our minds, but which we do not immediately discover in our first attempts. In poetry, resemblance; in philosophy, cause and effect; in mathematics, demonstrations continually recur; and, therefore, each is expected by persons who have been used to these respective studies.

The habit of committing our knowledge to writing assists the memory, because in writing we detain certain ideas long enough in our view to perceive all their relations; we use fixed and abbreviated signs for all our thoughts, with the assistance of these we can prevent confusion

in our reasonings. We can without fatigue, by the help of words, letters, figures, or algebraic signs, go through a variety of mental processes, and solve many difficult problems, which, without such assistance, must have been too extensive for our capacities.

If our books be well chosen, and if we read with discrimination and attention, reading will improve the memory, because as it increases our knowledge, it increases our interest in every new discovery, and in every new combination of ideas.

We agree entirely with Mr. Stewart in his observations upon technical helps to the memory; they are hurtful to the understanding, because they break the general habits of philosophic order in the mind. There is no connexion of ideas between the memorial lines, for instance, in Grey's *Memoria Technica*, the history of the Kings, or Emperors, and the dates that we wish to remember. However it may be advantageous in education to use such contrivances, to assist our pupils in remembering

those technical parts of knowledge, which are sometimes valued above their worth in society.

The facts upon which the principles of any science are founded should never be learnt by rote in a technical manner. But the names and the dates of the reigns of a number of kings and emperors, if they must be remembered by children, should be learnt in the manner which may give them the least trouble.*

It is commonly asserted that our memory is to be improved by exercise: exercise may be of different kinds, and we must determine what sort is best. Repetition is found to fix words, and sometimes ideas, strongly in the mind: the words of the burthen of a song, which we have frequently heard, are easily and long remembered. When we want to get any thing by rote, we repeat it over and over again, till the sounds seem to follow one another habitually, and then we say we have them perfectly by rote †. The regular recurrence of sounds, at stated intervals, much aids us. In poetry the

* V. Chapter on Books, and on Geography.

† Dr. Darwin. Zoonomia.

rhymes, the cadence, the alliteration, the peculiar structure or the poet's lines, assist us. All these are mechanical helps to the memory. To some people repetition seems much more agreeable than to others; but it may be doubted whether a facility and propensity to repetition be favourable to rational memory. Whilst we repeat, we exclude all thought from the mind, we form a habit of saying certain sounds in a certain order; but if this habit be afterwards broken by any trifling external circumstances, we lose all our labour. We have no means of recollecting what we have learned in this manner. Once gone it is gone for ever. It depends but upon one principle of association. Those who exert ingenuity as well as memory in learning by heart, may not perhaps associate sounds with so much expedition, but they will have the power of recollection in a greater degree; they will have more chances in their favour, besides the great power of voluntary exertion: a power which few passive repeaters ever possess. The following lines are easily learned.

“Haste, then, ye spirits; to your charge repair,
“The fluttering fan be Zephyretta's care;

“ The drops to thee, Brillante, we consign,
“ And, Momentilla, let the watch be thine ;
“ Do thou, Crispissa, tend her favourite lock,
“ Ariel himself shall be the guard of Shock.”

To a person who merely learned the sounds in these lines by rote, without knowing the sense of the words, all the advantage of the appropriated names and offices of the sylphs would be lost. No one, who has any sense of propriety, can call these sylphs by wrong names, or put them out of their places. Momentilla and the watch, Zephyretta and the fan, Crispissa and the lock of hair, Brillante and the diamond drops, are so intimately associated, that they necessarily recur together in the memory. The following celebrated lines on envy, some people will find easy, and others difficult to learn by heart.

“ Envy will merit, as its shade, pursue ;
“ But, like a shadow, proves the substance true :
“ For envy'd wit, like Sol eclips'd, makes known
“ Th' opposing body's grossness not its own.
“ When first that sun too pow'ful beams displays,
“ It draws up vapour, which obscures its rays ;
“ But ev'n those clouds at last adorn its way,
“ Reflect new glories, and augment the day.”

The flow of these lines is not particularly easy ; those who trust merely to the power of reiteration in getting them by rote will find the task difficult ; those who seize the ideas will necessarily recollect their order, and the sense will conduct them to their proper places with certainty : they cannot, for instance, make the clouds adorn the sun's rays before the sun's powerful beams have drawn up the vapours. This fixes the place of the four last lines. The simile of merit and the sun, and envy and the clouds, keeps each idea in its order ; if any one escapes, it is easily missed, and easily recalled.

We seldom meet with those who can give us an accurate account of their own thoughts ; it is, therefore, difficult to tell the different ways in which different people manage their memory. We judge by the effects frequently, that causes are the same, which sometimes are entirely different. Thus, we, in common conversation, should say, that two people had an equally good memory, who could repeat with equal exactness any thing which they had heard or read. But in their methods of remember-

ing these persons might differ essentially ; the one might have exerted much more judgment and ingenuity in the conduct of his memory than the other, and might thus have not only fatigued himself less, but might have improved his understanding, whilst the other learned merely by rote. When Dr. Johnson reported the parliamentary debates for the Gentleman's Magazine, his judgment, his habit of attending to the order in which ideas follow one another in reasoning, his previous knowledge of the characters and style of the different speakers, must considerably have assisted his memory. His taste for literary composition must have shewn him instantly where any argument or allusion was misplaced. A connecting phrase, or a link in a chain of reasoning, is missed as readily, by a person used to writing and argument, as a word in a line of poetry is missed by a poetic ear. If any thing has escaped the memory of persons who remember by general classification, they are not only by their art able to discover that something is missing, but they have a general direction where to find it ; they know to

what class of ideas it must belong; they can hunt from generals to particulars, till they are sure at last of tracing and detecting the deserter; they have certain signs by which they know the object of which they are in search, and they trust with more certainty to these characteristics, than to the mere vague recollection of having seen it before. We feel disposed to trust the memory of those who can give us some reason for what they remember. If they can prove to us that their assertion could not, consistently with other facts, be false, we admit the assertion into the rank of facts, and their judgment thus goes surety for their memory.

In the common mode of education great exactness of repetition is required from pupils. This seems to be made a matter of too much importance. There are circumstances in life, in which this talent is useful, but its utility perhaps we shall find, upon examination, is overrated.

In giving evidence of words, dates, and facts, in a court of justice, the utmost precision is requisite. The property, lives, and characters, of individuals, depend upon this precision.

But we must observe, that after long detailed evidence has been given by a number of witnesses, an advocate separates the material from the immaterial circumstances, and the judge in his charge again compresses the arguments of the counsel, so that much of what has been said during the trial might as well have been omitted. All these superfluous ideas were *remembered* to no purpose. An evidence sometimes, if he be permitted, would tell not only all that he remembers of the circumstances about which he is examined, but also a number of other circumstances, which are casually associated with these in his memory. An able advocate rejects, by a quickness of judgment which appears like intuition, all that is irrelevant to his argument and his cause; and it is by this selection that *his* memory, in the evidence perhaps of twenty different people, is able to retain all that is useful. When this heterogeneous mass of evidence is classed by his perspicuous arrangement, his audience feel no difficulty either in understanding or recollecting all which had before appeared confused. Thus the exercise of the judgment saves much of the labour of

memory ; labour which is not merely unnecessary, but hurtful, to our understanding.

In making observations upon subjects which are new to us, we must be content to use our memory unassisted at first by our reason ; we must treasure up the good and rubbish together, because we cannot immediately distinguish them from each other. But the sooner we can separate them the better. In the beginning of all experimental sciences, a number of useless particulars are recorded, because they are not known to be useless ; when from comparing these a few general principles are discovered, the memory is immediately relieved, the judgment and inventive faculty have power and liberty to work, and then a rapid progress and great discoveries are made. It is the misfortune of those who first cultivate new sciences, that their memory is overloaded ; but if those who succeed to them submit to the same senseless drudgery, it is not their misfortune, but their fault. Let us look over the history of those who have made discoveries and inventions, we shall perceive, that it has been by

rejecting useless ideas that they have first cleared their way to truth. Dr. Priestley's Histories of Vision and of Electricity are as useful when we consider them as histories of the human mind, as when we read them as histories of science. Dr. P. has published a catalogue of books*, from which he gathered his materials. The pains, he tells us, that it cost him to compress and abridge the accounts which ingenious men have given of their own experiments, teach us how much our progress in real knowledge depends upon rejecting all that is superfluous. When Simonides offered to teach Themistocles the art of memory, Themistocles answered, "Rather teach me the art of forgetting; for I find that I remember much that "I had better forget, and forget" (*consequently*) "some things which I wish to remember."

When any discovery or invention is completed, we are frequently astonished at its obvious simplicity. The ideas necessary to the discovery are seldom so numerous as to fatigue our memory. Memory seems to have been useful to

* At the end of the history of Vision.

inventors only as it presented a few ideas in a certain happy connexion, as it presented them faithfully and distinctly to view in the proper moment. If we wish for examples of the *conduct* of the understanding, we need only look into Dr. Franklin's works. He is so free from all affectation, he lays his mind so fairly before us, that he is perhaps the best example we can select. Those who are used to look at objects in a microscope say, that full as much depends upon the objects being well prepared for inspection, as upon the attention of the observer, or the excellence of the glass.

The first thing that strikes us, in looking over Doctor Franklin's works, is the variety of his observations upon different subjects. We might imagine, that a very tenacious and powerful memory was necessary to register all these: but Dr. Franklin informs us, that it was his constant practice to note down every hint as it occurred to him: he urges his friends to do the same; he observes, that there is scarcely a day passes without our hearing or seeing something which, if properly attended to, might lead to useful

discoveries. By thus committing his ideas to writing, his mind was left at liberty *to think*. No extraordinary effort of memory was, even upon the greatest occasions, requisite. A friend wrote to him to inquire how he was led to his great discovery of the identity of lightning and electricity; and how he first came to think of drawing down lightning from the clouds. Dr. Franklin replies, that he could not answer better than by giving an extract from the minutes he used to keep of the experiments he made, with memorandums of such as he purposed to make, the reasons for making them, and the observations that rose upon them. By this extract, says Dr. Franklin, you will see that the thought was not so much *an out of the way one*, but that it might have occurred to any electrician*.

* " Nov. 7, 1749. Electrical fluid agrees with lightning in these particulars. 1. Giving light. 2. Colour of the light. 3. Crooked direction. 4. Swift motion. 5. Being conducted by metals. 6. Crack or noise in exploding. 7. Subsisting in water or ice. 8. Rending bodies it passes through. 9. Destroying animals. 10. Melting metals. 11. Firing inflammable substances.

When the ideas are arranged in clear order, as we see them in this note, the analogy or induction to which Dr. Franklin was led appears easy. Why then had it never been made by any other person? Numbers of ingenious men were at this time intent upon electricity. The ideas which were necessary to this discovery were not numerous or complicated. We may remark, that one analogy connecting these observations together, they are more easily recollected; and their being written down for a particular purpose, on which Dr. Franklin's mind was intent, must have made it still easier to him to retain them.

The degree of memory he was forced to employ is thus reduced to a portion in which few people are defective. Now, let us suppose, that Dr. Franklin, at the time he wrote his me-

" 12. Sulphurous smell. The electric fluid is attracted
" by points. We do not know whether this property is
" in lightning. But since they agree in all the particulars
" wherein we can already compare them, is it not proba-
" ble, they agree likewise in this? Let the experi-
" ment be made."

Dr. Franklin's Letters, page 322.

morandum, had fully in his recollection every previous experiment that had ever been tried on electricity; and not only these, but the theories, names, ages, and private history, of all the men who had tried these experiments; of what advantage would this have been to him? He must have excluded all these impertinent ideas successively as they rose before him, and he must have selected the fifteen useful observations, which we have mentioned, from this troublesome multitude. The chance in such a selection would have been against him; the time employed in the examination and rejection of all the unnecessary recollections would have been absolutely wasted.

We must wish that it were in our power, when we make observations upon nature, or when we read the reflections of others, to arrange our thoughts so as to be ready when we want to reason or invent. When cards are dealt to us, we can fort our hand according to the known probabilities of the game, and a new arrangement is easily made when we hear what is trumps.

In collecting and sorting observations Dr. Franklin particularly excelled, therefore we may safely continue to take him for our example. Wherever he happened to be, in a boat, in a mine, in a printer's shop, in a crowded city or in the country, in Europe or America, he displays the same activity of observation. When any thing, however trifling, struck him which he could not account for, he never rested till he had traced the effect to its cause. Thus, after having made one remark, he had fresh motive to collect facts, either to confirm or refute an hypothesis; his observations tending consequently to some determinate purpose, they were arranged in the moment they were made in the most commodious manner, both for his memory and invention; they were arranged either according to their obvious analogies, or their relation to each other as cause and effect. He had two useful methods of judging of the value of his own ideas; he either considered how they could be immediately applied to practical improvements in

the arts, or how they could lead to the solution of any of the great problems in science. Here we must again observe, that judgment saved the labour of memory. A person, who sets about to collect facts at random, is little better than a magpie, who picks up and lays by any odd bits of money he can light upon without knowing their use.

Miscellaneous observations which are made by those who have no philosophy may accidentally lead to something useful; but here we admire the good fortune, and not the genius, of the individuals who make such discoveries; these are prizes drawn from the lottery of science, which ought not to seduce us from the paths of sober industry. How long may an observation fortunately made continue to be useless to mankind, merely because it has not been reasoned upon! The trifling observation, that a straight stick appears bent in water, was made many hundred years before the reason of that appearance was discovered! The invention of the telescope might have been made by any

person who could have pursued this slight observation through all its consequences.

Having now defined, or rather described, what we mean by a *good memory*, we may consider how the memory should be cultivated. In children, as well as in men, the strength of that habit, or perhaps of that power of the mind which associates ideas together, varies considerably. It is probable, that this difference may depend sometimes upon organization. A child who is born with any defect in his eyes cannot possibly have the same pleasure in objects of sight, which those enjoy who have strong eyes: ideas associated with these external objects are therefore not associated with pleasure, and, consequently, they are not recollected with any sensations of pleasure. An ingenious writer * supposes, that all the difference of capacity amongst men ultimately depends on their original power of feeling pleasure or pain, and their consequent different habits of attention.

When there is any defect in a child's organization, we must have recourse to physics, and

* Helvetius, " Sur l'Esprit."

not to metaphysics; but even amongst children, who are apparently in the full possession of all their senses, we see very different degrees of vivacity: those who have most vivacity seldom take delight in repeating their ideas; they are more pleased with novelty than prone to habit. Those on the contrary who are deficient in vivacity are much disposed to the easy indolent pleasure of repetition; it costs them less exertion to say or do the same thing over again, than to attempt any thing new; they are uniformly good subjects to habit, because novelty has no charms to seduce their attention.

The education of the memory in these two classes of children ought not to be the same. Those who are disposed to repetition should not be indulged in it, because it will increase their indolence; they should be excited by praise, by example, by sympathy, and by all the strongest motives that we can employ. Their interest in every thing around them must by all means be increased: when they show eagerness about any thing, no matter what it is, we may then exercise their memory upon that subject with some

hopes of success. It is of importance that they should succeed in their first trials, otherwise they will be discouraged from repeating their attempts, and they will distrust their own memory in future. The fear of not remembering will occupy, and agitate and weaken their minds; they should, therefore, be animated by hope. If they fail, at all events, let them not be reproached; the mortification they naturally feel is sufficient: nor should they be left to dwell upon their disappointment; they should have a fresh and easier trial given to them, that they may recover their own self-complacency as expeditiously as possible. It may be said, that there are children of such a sluggish temperament, that they feel no pleasure in success, and no mortification in perceiving their own mental deficiencies. There are few children of this description, scarcely any, perhaps, whose defects have not been increased by education. Exertion has been made so painful to them, that at length they have sunk into apathy, or submitted in despair to the eternal punishment of shame,

The mistaken notion, that the memory must be exercised only in books, has been often fatal to the pupils of literary people. We remember best those things which interest us most ; which are useful to us in conversation ; in our daily business or amusement. So do children. On these things we should exercise their memory. Tell a boy who has lost his top, to remember at such a particular time to put you in mind of it, and if he does, that you will give him another ; he will probably remember your requests after this, better than you will yourself. Affectionate children will easily extend their recollective memories in the service of their friends and companions. “ Put me in mind to give your friend what he asked for, and I will give it to him if you remember it at the right time.” It will be best to manage these affairs so that convenience, and not caprice, shall appear to be your motive for the requests. The time and place should be precisely fixed, and something should be chosen which is likely to recall your request at the appointed time. If you say, put me in mind of

such a thing the moment the cloth is taken away after dinner ; or as soon as candles are brought into the room ; or when I go by such a shop in our walk this evening ; here are things mentioned which will much assist the young remembrancer : the moment the cloth is taken away, or the candles come, he will recollect, from association, that something is to be done, that *he* has something to do ; and presently he will make out what that something is.

A good memory for business depends upon local, well arranged associations. The man of business makes an artificial memory for himself out of the trivial occurrences of the day, and the hours as they pass recall their respective occupations. Children can acquire these habits very early in their education ; they are eager to give their companions an account of any thing they have seen or heard ; their tutors should become their companions, and encourage them by sympathy to address these narrations to them. Children who forget their lessons in chronology, and their pence tables, can relate

with perfect accuracy any circumstances which have interested themselves. This shews that there is no deficiency in their capacity. Every one, who has had any experience of the pleasure of talking, knows how intimately it is connected with the pleasure of being listened to. The auditors, consequently, possess supreme power over narrative childhood, without using any artifice, by simply shewing attention to well arranged, and well recollected narratives, and ceasing to attend when the young orator's memory and story become confused, he will naturally be excited to arrange his ideas. The order of *time* is the first and easiest principle of association to help the memory. This, till young people acquire the ideas of cause and effect, will be their favourite mode of arrangement. Things that happen at the same time; things that are said, thoughts that have occurred, at the same time, will recur to the mind together. We may observe, that ill educated people continue through life to remember things by this single association; and consequently, there is an heterogeneous collection of ideas in their

mind, which have no rational connexion with each other; crowds which have accidentally met, and are forced to live for ever together.

A vulgar evidence, when he is examined about his memory of a particular fact, gives as a reason for his remembering it a relation of a number of other circumstances, which he tells you happened at the same time; or he calls to witness any animate or inanimate objects, which he happened to see at the same time. All these things are so joined with the principal fact in his mind, that his remembering them distinctly, seems to him, and he expects will seem to others, demonstration of the truth and accuracy of his principal assertion. When a lawyer tells him he has nothing to do with these ideas, he is immediately at a stand in his narrative, he can recollect nothing, he is sure of nothing; he has no reason to give for his belief, unless he may say that it was Michaelmas-day when such a thing happened, that he had a goose for dinner that day, or that he had a new wig. Those who have more enlarged minds, seldom produce these strange reasons for remembering

facts. Indeed, no one can reason clearly, whose memory has these foolish habits; the ill matched ideas are inseparably joined, and they imagine there is some natural connexion between them. Hence arise those obstinate prejudices, which no arguments can vanquish.

To prevent children from arguing ill, we must, therefore, take care, in exercising their memory, to discourage them in this method of proving, that they remember one thing by telling us a number of others which happened at the same time; rather let them be excited to bring their reasoning faculty into play in support of their memory. Suppose, for instance, that a child has mislaid his hat, and was trying to recollect where he had put it. He first may recollect, from the association of time, that he had the hat the last time he went out; but when he wants to recollect when that time was, he had better go back, if he can, to his motive for going out: this one idea will bring a number of others in right order into his mind. He went out, suppose, to fetch his kite, which he was afraid would be wetted by a shower of

rain; then the boy recollects that his hat must have been wetted by the same rain, and that when he came in, instead of hanging it up in its usual place, it was put before the fire to be dried. What fire is the next question, &c.

Such an instance as this may appear very trivial; but children whose minds are well managed about trifles, will retain good habits when they are to think about matters of consequence. By exercising the memory in this manner about things, instead of about books and lessons, we shall not disgust and tire our pupils, nor shall we give the false notion, that all knowledge is acquired by reading.

Long before children read fluently for their own amusement, they like to hear others read aloud to them, because they have then the entertainment without the labour. We may exercise their memory by asking for an account of what they have heard. But let them never be required to repeat in the words of the book, or even to preserve the same arrangement; let them speak in words of their own, and arrange their ideas to their own plan; this will

exercise at once their judgment, invention, and memory.

“Try if you can explain to me what I have just been explaining to you,” a sensible tutor will frequently say to his pupils; and he will suffer them to explain in a different manner from himself, he will only require them to remember what is essential to the explanation. In such repetitions as these the mind is active, therefore it will strengthen and improve.

Children are all, more or less, pleased with the perception of resemblances and of analogy. This propensity assists us much in the cultivation of the memory; but it must be managed with discretion, or it will injure the other powers of the understanding. There is in some minds a futile love of tracing analogies, which leads to superstition, to false reasoning, and false taste. The quick perception of resemblances is in other minds productive of wit, poetic genius, and scientific invention. The difference between these two classes depends upon this, the one has more judgment, and

more the habit of using it than the other. Children who are pleased by trifling coincidences, by allusions, and similitudes, should be taught with great care to reason ; when once they perceive the pleasure of demonstration, they will not be contented with the inaccuracy of common analogies. A tutor is often tempted to teach pupils who are fond of allusions by means of them, because he finds that they remember well whatever suits their taste for resemblances. By following the real analogies between different arts and sciences, and making use of the knowledge children have on one subject to illustrate another, we may at once amuse their fancy, and cultivate their memory with advantage. Ideas laid up in this manner will recur in the same order, and will be ready for further use. When two ideas are remembered by their mutual connexion, surely it is best that they should both of them be substantially useful ; and not that one should attend merely to answer for the appearance of the other.

As men readily remember those things which are every day useful to them in business, what

relates to their amusements, or to their favourite tastes in arts, sciences, or in literature ; so children find no difficulty in remembering every thing which mixes daily with their little pleasures. They value knowledge, which is *useful* and *agreeable* to them, as highly as we do ; but they consider only the present, and we take the future into our estimate. Children feel no interest in half the things that are committed, with the most solemn recommendations, to the care of their memory. It is in vain to tell them, “ You must remember *such a thing*, because it “ will be useful to you when you grow up to “ be a man.” The child feels like a child, and has no idea of what he may feel when he grows up to be a man. He tries to remember what he is desired, perhaps, because he wishes to please his wiser friends ; but if the ideas are remote from his every day business, if nothing recall them but voluntary exertion, and if he be obliged to abstract his little soul from every thing it holds dear before he can recollect his lessons, they will have no hold upon his memory ; he will feel that recollection is too ope-

rose, and he will enjoy none of the "pleasures
" of memory."

To induce children to exercise their memory we must put them in situations where they may be immediately rewarded for their exertion. We must create an interest in their minds; nothing uninteresting is long remembered. In a large and literary family, it will not be difficult to invent occupations for children, which may exercise all their faculties. Even the conversation of such a family will create in their minds a desire for knowledge; what they hear will recall to their memory what they read, and if they are encouraged to take a reasonable share in conversation, they will acquire the habit of listening to every thing that others say. By permitting children to talk freely of what they read, we are more likely to improve their memory for books, than by exacting from them formal repetitions of lessons.

Dr. Johnson, who is said to have had an uncommonly good memory, tells us, that when he was a boy, he used, after he had acquired any fresh knowledge from his books, to run and tell it to an old woman of whom he was

very fond. This exercise was so agreeable to him, that it imprinted what he read upon his memory.

La Gaucherie, one of the preceptors of Henry IV, having found that he had to do with a young prince of an impatient mind, and active genius, little suited to sedentary studies, instead of compelling his pupil to read, taught him by means of conversation; anecdotes of heroes and the wise sayings of ancient philosophers were thus imprinted upon the mind of this prince. It is said, that Henry IV. applied in his subsequent life all the knowledge he had acquired in this manner so happily, that learned men were surprised at his memory*.

By these observations we by no means would insinuate, that application to books is unnecessary. We are sensible that accurate knowledge upon any subject cannot be acquired by superficial conversation, that it can be obtained only by patient application. But we mean to point out, that an early taste for literature may be excited in children by conversation, and that

* See Preface to *L'Esprit des Romains considéré*.

their memory should be first cultivated in the manner which will give them the least pain. When there is motive for application, and when habits of industry have been gradually acquired, we may securely trust, that our pupils will complete their own education. Nor should we have reason to fear, that those who have a good memory for all other things, should not be able to retain all that is worth remembering in books. Children should never be praised for merely remembering exactly what they read, they should be praised for selecting with good sense what is worth their attention, and for applying what they remember to useful purposes.

We have observed how much the habit of inventing increases the wish for knowledge, and increases the interest men take in a number of ideas, which are indifferent to uncultivated and indolent people. It is the same with children. Children who invent exercise their memory with pleasure, from the immediate sense of utility and success. A piece of knowledge, which they lay by in their minds with the hopes of making use of it in some future invention,

they have more motives for remembering, than what they merely learn by rote, because they are commanded to do so by the voice of authority.

A recollective memory of books appears early in children who are not overwhelmed with them ; if the impressions made upon their minds be distinct, they will recur with pleasure to the memory when similar ideas are presented.

July 1796. S—— heard his father read Sir Brook Boothby's excellent epitaph upon Algernon Sidney ; the following lines pleased the boy particularly :

“ Approach, contemplate this immortal name,
“ Swear on this shrine to emulate his fame ;
“ To dare, like him, e'en to thy latest breath,
“ Contemning chains, and poverty, and death.”

S——'s father asked him why he liked these lines, and whether they put him in mind of any thing that he had heard before. S—— said,
“ It puts me in mind of Hamilcar's making his
“ son Hannibal swear to hate the Romans, and
“ love his countrymen eternally. But I like

“ *this* much better. I think it was exceedingly
“ foolish and wrong of Hamilcar to make his
“ son swear always to hate the Romans.”

Latin lessons are usually so very disagreeable to boys, that they seldom are pleased with any allusions to them ; but by good management in a tutor, even these lessons may be associated with agreeable ideas. Boys should be encouraged to talk and think about what they learn in Latin, as well as what they read in English ; they should be allowed to judge of the characters described in ancient authors, to compare them with our present ideas of excellence, and thus to make some use of their learning. It will then be not merely engraved upon their memory in the form of lessons, it will be mingled with their notions of life and manners ; it will occur to them when they converse, and when they act ; they will possess the admired talent for classical allusion, as well as all the solid advantages of an unprejudiced judgment. It is not enough that gentlemen should be masters of the learned languages, they must know how to produce their knowledge without pe-

dantry or affectation. The memory may in vain be stored with classical precedents, unless these can be brought into use in speaking or writing without the parade of dull citation, or formal introduction. "Sir," said Dr. Johnson, to some profling tormentor, "I would rather a man " would knock me down than begin to talk to " me of the Punic wars." A public speaker, who rises in the House of Commons, with pedantry prepossessed to quote Latin or Greek, is coughed or laughed down; but the beautiful unpremeditated classical allusions of Burke or Sheridan, sometimes conveyed in a single word, seize the imagination irresistibly.

Since we perceive, that memory is chiefly useful as it furnishes materials for invention, and that invention can greatly abridge the mere labour of accumulation, we must examine how the inventive faculty can be properly exercised. The vague precept, of cultivating the memory and invention of young people at the same time, will not inform parents how this is to be accomplished; we trust therefore, that we may be permitted, contrary to the cus-

tom of didactic writers, to illustrate a general precept by a few examples; and we take these examples from real life, because we apprehend, that fictions, however ingenious, will never advance the science of education so much as simple experiments.

No elaborate theory of invention shall here alarm parents. It is a mistake, to suppose that the inventive faculty can be employed only on important subjects, it can be exercised in the most trifling circumstances of domestic life. Scarcely any family can be so unfortunately situated, that they may not employ the ingenuity of their children without violent exertion, or any grand apparatus. Let us only make use of the circumstances which happen every hour. Children are interested in every thing that is going forward. Building, or planting, or conversation, or reading; they attend to every thing, and from every thing might they, with a little assistance, obtain instruction. Let their useful curiosity be encouraged; let them make a part of the general society of the family, instead of being treated as if they had neither

dantry or affectation. The memory may in be stored with classical precedents, unless can be brought into use in speaking without the parade of dull citation introduction. "Sir," said Dr. Johnson, "I would not knock me down the me of the Punic wars." who rises in the House of Commons, and says, "I would not knock me down the me of the Punic wars." dantry prepense to coughed or laughed, music books, unpremeditated a time; and it was Sheridan, from when rake could not be seize the in sheet of paper at once.

Since said, that he thought such a pen- useful could not rule well; and he called to S—, and the same boy we mentioned before) and asked him if he could invent any method of doing the business better. S— took about a quarter of an hour to consider; and he then described a little machine for ruling a sheet of paper at a single stroke, which his father executed for him. It succeeded well, and this success was the best reward he could have.

Another day Mr. ——— observed, that the maid, whose business it was to empty a bucket of ashes into an ash hole, never could be persuaded to do it, because the ashes were blown against her face by the wind; and he determined to invent a method which should make it convenient to her to do as she was desired. The maid usually threw the ashes into a heap on the sheltered side of a wall; the thing to be done was, to make her put the bucket through a hole in this wall, and empty the ashes on the other side. This problem was given to all the children and grown up persons in the family. One of the children invented the shelf, which, they said, should be like part of the vane of a winnowing machine which they had lately seen; the manner of placing this vane another of the children suggested: both these ideas joined together produced the contrivance which was wanted.

A little model was made in wood of this bucket, which was a pretty toy. The thing itself was executed, and was found useful.
(V. Plate 1.)

June 8th. 1796. Mr. ——— was balancing a pair of scales very exactly, in which he was going to weigh some opium ; this led to a conversation upon scales and weighing. Some one said, that the dealers in diamonds must have very exact scales, as the difference of a grain makes such a great difference in their value. S—— was very attentive to this conversation. M—— told him, that jewellers always, if they can, buy diamonds when the air is light, and sell them when it is heavy. S—— did not understand the reason of this, till his father explained to him the general principles of hydrostatics, and shewed him a few experiments with bodies of different specific gravity : these experiments were distinctly understood by every body present. The boy then observed, that it was not fair of the jewellers to buy and sell in this manner ; they should not, said he, use *these* weights. Diamonds should be the weights. Diamonds should be weighed against diamonds.

November 1795. One day after dinner, the candles had been left for some time with-

out being snuffed ; and Mr. ——— said he wished candles could be made which would not require snuffing.

Mrs. ***** thought of cutting the wick into several pieces before it was put into the candle, that so, when it burned down to the divisions, the wick might fall off. M—— thought that the wick might be tied tight round at intervals, before it was put into the candle ; that when it burned down to the places where it was tied, it would snap off ; but Mr. ——— objected, that the candle would most likely go out when it had burned down to her knots. It was then proposed, to send a stream of oxygen through the candle instead of a wick. M—— asked if some substance might not be used for wicks which should burn into powder and fly off or sublime. Mr. ——— smiled at this, and said, “ *Some substance ; some kind of air ; some chemical mixture !* A person ignorant of chemistry always talks of, as an ignorant person in mechanics always says, “ Oh, “ you can do it somehow with *a spring*.”

As the company could not immediately dis-

cover any way of making candles which should not require to be snuffed, they proceeded to invent ways of putting out a candle at a certain time without hands. The younger part of the company had hopes of solving this problem, and every eye was attentively fixed upon the candle.

“How would you put it out S——?” said Mr. ——. S—— said, that if a weight, a very little lighter than the extinguisher, were tied to a string, and if the string were put over a pulley, and if *the* extinguisher were tied to the other end of the string, and the candle put exactly under the extinguisher; the extinguisher would move very, very gently down, and at last put out the candle.

Mr. —— observed, that whilst it was putting out the candle there would be a disagreeable smell, because the extinguisher would be a considerable time moving *very, very gently down* over the candle after the candle had begun to go out.

C—— (a girl of twelve years old) spoke next. “I would tie an extinguisher to one

“end of a thread. I would put this string
“through a pulley fastened to the ceiling; the
“other end of this string should be fastened to
“the middle of another thread, which should
“be strained between two posts set upright on
“each side of the candle, so as that the latter
“string may lean against the candle at any dis-
“tance *you want* below the flame. When the
“candle burns down to this string, it will burn
“it in two, and the extinguisher will drop
“upon the candle.”

This is the exact description of *the weaver's alarm*, mentioned in the Philosophical Transactions, which C—— had never seen or heard of.

Mr. —— now showed us the patent extinguisher, which was much approved of by all the rival inventors.

It is very useful to give children problems which have already been solved, because they can immediately compare their own imperfect ideas with successful inventions, which have actually been brought into real use. We know beforehand what ideas are necessary to complete the invention, and whether the pupil has all the necessary knowledge. Though by the cour-

tefy of poetry, a creative power is ascribed to inventive genius, yet we must be convinced, that no genius can invent without materials. Nothing can come of nothing. Invention is the new combination of materials. We must judge in general of the ease or difficulty of any invention, either by the number of ideas necessary to be combined, or by the dissimilarity or analogy of those ideas. In giving any problem to children, we should not only consider whether they know all that is necessary upon the subject, but also, whether that knowledge is sufficiently *familiar* to their minds, whether circumstances are likely to recall it, and whether they have a perfectly clear idea, of the thing to be done. By considering all these particulars, we may pretty nearly proportion our questions to the capacity of the pupil; and we may lead his mind on step by step from obvious to intricate inventions.

July 30th. 1796. L——, who was just returned from Edinburgh, and had taken down in two large volumes Dr. Black's lectures, used to read to us part of them, for about a quarter of an hour, every morning after breakfast. He

was frequently interrupted (which interruptions he bore with heroic patience) by Mr. ———'s explanations and comments. When he came to the expansive power of steam, and to the description of the different steam engines which have been invented, Mr. ——— stopped to ask B, C——, and S, to describe the steam engine in their own words. They all described it in such manner as to shew, that they clearly understood the principle of the machine. Only the general principle had been explained to them. L——, after having read the description of Savary's and Newcomen's steam engines, was beginning to read the description of that invented by Mr. Watt; but Mr. — stopped him, that he might try whether any person present could invent it. Mr. E—— thus stated the difficulty.

“ In the old steam engine cold water, you know,
“ is thrown into the cylinder to condense the
“ steam; but in condensing the steam the cold
“ water at the same time cools the cylinder.
“ Now the cylinder must be heated again be-
“ fore it can be filled with steam; for till it is
“ heated it will condense the steam. There is,

"consequently, a great waste of heat and fuel.

"How can you condense the steam without

"cooling the cylinder?"

S——. "Let down a cold tin tube into the

"cylinder when you want to condense the steam,

"and draw it up again as soon as the steam is

"condensed; or, if you could, put a *cylinder*

"of ice up the great tube."

Some of the company asked, if an hori-

zontal plate of cold metal, made to slide up the

inside of the cylinder, would condense the

steam. The edges of the plate only would

touch the cylinder; the surface of the plate

might condense the steam.

"But," said Mr. E——, "how can you in-

"troduce and withdraw it?"

C—— (a girl of 12) then said, "I would

"put a cold vessel to condense the steam at the

"top of the cylinder."

Mr. E——. "So as to touch the cylinder,

"do you mean?"

C——. "No, not so as to touch the cylin-

"der, but at some distance from it."

Mr. E——. "Then the cold air would rush

“into the cylinder whilst the steam was passing
“from the cylinder to your condenser.”

C——. “But I would cover in the cold
“vessel, and I would cover in the passage to
“it.”

Mr. E——. “I have the pleasure of in-
“forming you, that you have reinvented part
“of the great Mr. Watt’s improvement on the
“steam engine. You see how it facilitates in-
“vention, to begin by stating the difficulty
“clearly to the mind. This is what every prac-
“tical inventor does when he invents in me-
“chanics.”

To the good natured reader we need offer
no apology, to the ill natured we dare attempt
none, for introducing these detailed views of
the first attempts of young invention. They are
not exhibited as models, either to do honour to
the tutor or his pupils; but simply to shew,
how the mind may be led from the easiest steps,
to what are supposed to be difficult in educa-
tion. By imagining ourselves to be in the same
situation with children, we may guess what
things are difficult to them; and if we can re-

collect the course of our own minds in acquiring knowledge, or in inventing, we may by retracing the same steps instruct others. The order that is frequently followed by authors, in the division and subdivision of their elementary treatises, is not always the best for those who are to learn. Such authors are usually more intent upon proving to the learned that they understand their subject, than upon communicating their knowledge to the ignorant. Parents and tutors must, therefore, supply familiar oral instruction, and those simple, but essential explanations, which books disdain, or neglect to give. And there is this advantage in all instruction given in conversation, that it can be made interesting by a thousand little circumstances, which are below the dignity of didactic writers. Gradually we may proceed from simple to more complicated contrivances. The invention of experiments to determine a theory, or to ascertain the truth of an assertion, must be particularly useful to the understanding. Any person, who has attended to experiments in chemistry and natural philosophy,

must know that invention can be as fully and elegantly displayed upon these subjects as upon any in the fine arts or literature. There is one great advantage in scientific invention, it is not dependent upon capricious taste for its reward. The beauty and elegance of a poem may be disputed by a thousand amateurs; there can be but one opinion about the truth of a discovery in science.

Independently of all ambition, there is considerable pleasure in the pursuit of experimental knowledge. Children, before they are yet fools to fame, enjoy this substantial pleasure. Nor are we to suppose that children have not capacities for such pursuits: they are peculiarly suited to their capacity. They love to see experiments tried and to try them. They shew this disposition not only wherever they are encouraged, but wherever they are permitted to shew it: and if we compare their method of reasoning with the reasonings of the learned, we shall sometimes be surpris'd. They have no prejudices, therefore they have the complete use of all their senses; they have few ideas,

but those few are distinct ; they can be analysed and compared with ease ; children, therefore, judge and invent better *in proportion to their knowledge* than most grown up people.

Doctor Hooke observes, that a sensible man, in solving any philosophical problem, should always lean to that side which is opposite to his favourite taste. A chemist is disposed to account for every thing by chemical means ; a geometrician is inclined to solve every problem geometrically ; and a mechanic accounts for all the phænomena of nature by the laws of mechanism. This undue bias upon the minds of ingenious people has frequently rendered their talents less useful to mankind. It is the duty of those who educate ingenious children, to guard against this species of scientific insanity.

There are prejudices of another description, which are fatal to inventive genius ; some of these are usually found to attend ignorance, and others sometimes adhere to the learned. Ignorant people, if they possess any degree of invention, are so confident in their own abilities, that they will not take the pains to inquire

what others have thought or done; they disdain all general principles, and will, rather scramble through some bye path of their own, striking out, than condescend to be shewn the best road by the most enlightened guide. For this reason self-taught geniuses, as they are called, seldom go beyond a certain point in their own education, and the praise we bestow upon their ingenuity is always accompanied with expressions of regret: "It is a pity that such a genius had not the advantages of a good education."

The learned on the contrary, who have been bred up in reverence for established opinions, and who have felt in many instances the advantage of general principles, are apt to adhere too pertinaciously to their theories, and hence they neglect or despise new observations. How long did the maxim, that nature abhors a vacuum, content the learned! And how many discoveries were retarded by this single false principle! For a great number of years it was affirmed and believed, that all objects were seen by the intervention of visual rays, proceed-

ing from the eye much in the same manner as we feel any object at a distance from us by the help of a stick*. Whilst this absurd analogy satisfied the mind, no discoveries were made in vision, none were attempted. A prepossession often misleads the industry of active genius. Doctor Hooke, in spite of the ridicule which he met with, was firm in his belief, that mankind would discover some method of sailing in the air. Balloons have justified his prediction; but all his own industry in trying experiments upon flying was wasted, because he persisted in following a false analogy to the wings of birds. He made wings of various sorts; still he took it for granted that he *must* learn to fly by mechanical means: had he applied to chemistry he might have succeeded. It is curious to observe, how nearly he once touched upon the discovery, and yet, misled by his prepossession, quitted his hold. He observed, that the air cells† of fishes are filled with air which buoys them up in the water, and he supposes that this air is

* Priestley on Vision, vol. i. page 23.

† V. Hooke's Posthumous Works.

lighter than *common* air. Had he pursued this idea, he might have invented balloons: but he returned with fatal perseverance to his old theory of wings. From such facts we may learn the power and danger of prejudice in the most ingenious minds, and we shall be careful to preserve our pupils early from its blind dominion.

The best preservation against the presumption to which ignorance is liable, and the best preservative against the self-sufficiency to which the learned are subject, is the habit of varying our studies and occupations. Those who have a general view of the whole map of human knowledge, perceive how many unexplored regions are yet to be cultivated by future industry; nor will they implicitly submit to the reports of ignorant voyagers. No imaginary pillars of Hercules will bound their enterprizes. There is no presumption in believing, that much more is possible to science than ever human ingenuity has executed; therefore young people should not be ridiculed for that sanguine temper, which excites to great inventions. They should be

ridiculed only when they imagine, that they possess the means of doing things to which they are unequal. The fear of this deserved ridicule will stimulate them to acquire knowledge, and will induce them to estimate cautiously their own powers before they hazard their reputation. We need not fear that this caution should repress their activity of mind ; ambition will secure their perseverance, if they are taught that every acquisition is within the reach of unremitting industry. This is not an opinion to be artfully inculcated to serve a *particular* purpose, but it is an opinion drawn from experience ; an opinion which men of the highest abilities and integrity, of talents and habits the most dissimilar, have confirmed by their united testimony. Helvetius maintained, that no great man ever formed a great design, which he was not also capable of executing.

Even where perseverance is exercised, the choice of the subjects on which the inventive powers are employed determines in a great measure their value : therefore, in the education of ingenious children, we should gradually

turn their attention from curious trifles to important objects. Boverick*, who made chains "to yoke a flea," must have possessed exquisite patience; besides his chain of two hundred links, with its padlock and key, all weighing together less than the third part of a grain, this indefatigable *minute artificer* was the maker of a landau, which opened and shut by springs; this equipage, with six horses harnessed to it, a coachman sitting on the box, with a dog between his legs, four inside and two outside passengers, besides a postillion riding one of the fore horses, was drawn with all the ease and safety imaginable by a well trained flea! The inventor and executor of this puerile machine bestowed on it, probably, as much time as would have sufficed to produce Watt's fire engine, or Montgolfier's balloon. It did not, perhaps, cost the marquis of Worcester more exertion to draw out his celebrated century of inventions; it did not, perhaps, cost Newton more to write those queries, which Maclaurin

* Hooke's *Micrographia*, page 62.

faid he could never read without feeling his hair stand an end with admiration.

Brebeuf, a French wit, wrote a hundred and fifty epigrams upon a painted lady : a brother wit, fired with emulation, wrote upon the same subject three hundred more, making in all four hundred and fifty epigrams, each with appropriate turns of their own. Probably, Pope and Parnell did not rack their invention so much, or exercise more industry in completing "The Rape of the Lock," or "The Rife of Wo-man." These will live for ever : who will read the four hundred and fifty epigrams ?

The most effectual methods to discourage in young people the taste for frivolous ingenuity will be, never to admire these "laborious nothings," to compare them with useful and elegant inventions, and to show that vain curiosities can be but the wonder and amusement of a moment. Children who begin with trifling inventions may be led from these to general principles, and with their knowledge their ambition will necessarily increase. It cannot be expected, that the most enlarged

plan of education could early give an intimate acquaintance with all the sciences; but with their leading principles, their general history, their present state, and their immediate desiderata*, young people may and ought to be made acquainted. Their own industry will afterwards collect more precise information, and they will never waste their time in vain studies and fruitless inventions. Even if the cultivation of the memory were our grand object, this plan of education will succeed.—When the Abbé de Longuerue, whose prodigious memory we have formerly mentioned, was asked by the Marquis d'Argenson, how he managed to arrange and retain in his head every thing that entered it, and to recollect every thing when wanted, the Abbé answered,

“ Sir, the elements of every science must
“ be learned whilst we are very young; the
“ first principles of every language, the a b c,
“ as I may say, of every kind of knowledge :
“ this is not difficult in youth, especially as

* Priestley has ably given the desiderata of electricity,
vision, &c.

“ it is not necessary to penetrate far ; simple
“ notions are sufficient ; when once these are
“ acquired, - every thing we read afterwards
“ finds its proper place.”

CHAPTER XXII.

TASTE AND IMAGINATION.

FIGURATIVE language seems to have confounded the ideas of most writers upon metaphysics. Imagination, Memory, and Reason, have been long introduced to our acquaintance as allegorical personages, and we have insensibly learned to consider them as real beings. The “viewless regions” of the soul have been portioned out amongst these ideal sovereigns, but disputes have, nevertheless, sometimes arisen concerning the boundaries of intellectual provinces. Amongst the disputed territories, those of Imagination have been most frequently the seat of war; her empire has

been subject to continual revolution, her dominions have been by potent invaders divided and subdivided. Fancy*, Memory†, Ideal preference‡, and Conception§, have shared her spoils.

By poets imagination has been addressed as the great parent of genius, as the arbiter, if not the creator, of our pleasures; by philosophers her name has been sometimes pronounced with horror; to her fatal delusions they have ascribed all the crimes and miseries of mankind. Yet, even philosophers have not always agreed in their opinions: whilst some have treated Imagination with contempt, as the irreconcilable enemy of Reason, by others || she has been considered, with more respect, as Reason's inseparable friend, as the friend who collects and prepares all the arguments upon which Reason decides, as the injured, misrepresented power, who is often forced to supply

* Warton's ode to Fancy. † Gerard. ‡ Lord Kames.

§ Professor Stewart.

|| V. An excellent essay of Mr. Barnes's on Imagination.
Manchester Society, Vol. i.

her adversaries with eloquence, who is often called upon to preside at her own trial, and to pronounce her own condemnation.

Imagination is "*the power*," we are told, of "*forming images*;" the word image, however, does not, strictly speaking, express any thing more than a representation of an object of sight; but the power of imagination extends to objects of all the senses.

" I hear a voice you cannot hear,

" Which says I must not stay.

" I see a hand you cannot see,

" Which beckons me away."

Imagination hears the voice, as well as sees the hand; by an easy licence of metaphor, what was originally used to express the operation of one of our senses, is extended to them all. We do not precisely say, that imagination forms *images* of past sounds, or tastes, or smells; but we say, that she forms ideas of them; and ideas, we are told, are mental images. It has been suggested by Dr. Darwin, that all these analogies between images and thoughts have probably originated in our observing the

little pictures painted on the retina of the eye.

It is difficult certainly, if not impossible, to speak of the invisible operations of the mind or body, without expressing ourselves in metaphor of some kind or other; and we are easily misled by allusions to sensible objects, because when we comprehend the allusion, we flatter ourselves that we understand the theory which it is designed to illustrate. Whether we call ideas images in popular language, or vibrations, according to Dr. Heartley's system, or modes of sensation with Condillac, or motions of the sensorium, in the language of Dr. Darwin, may seem a matter of indifference. But even the choice of names is not a matter of indifference to those who wish to argue accurately; when they are obliged to describe their feelings or thoughts by metaphoric expressions, they will prefer the simplest; those with which the fewest extraneous associations are connected. Words which call up a variety of heterogeneous ideas to our minds, are unfit for the purposes of sober reasoning; our attention is

distracted by them and we cannot restrain it to the accurate comparison of simple proportions. We yield to pleasing reverie, instead of exerting painful voluntary attention. Hence it is probably useful in our attempts to reason, especially upon metaphysical subjects, to change from time to time our nomenclature, and to substitute terms which have no relation to our old associations, and which do not affect the prejudices of our education. We are obliged to define with some degree of accuracy the sense of new terms, and we are thus led to compare our old notions with more severity. Our superstitious reverence for mere symbols is also dissipated; symbols are apt to impose even upon those who acknowledge their vanity, and who profess to consider them merely as objects of vulgar worship.

When we call a class of our ideas, *images* and pictures, a tribe of associations with painting comes into our mind, and we argue about Imagination as if she were actually a paintress, who has colours at her command, and who, upon some invisible canvass in the soul, pour-

trays the likeness of all earthly and celestial objects. When we continue to pursue the same metaphor in speaking of the moral influence of Imagination, we say that her *colouring* deceives us, that her *pictures* are flattering and false, that she draws objects out of proportion; &c. To what do all these metaphors lead? We make no new discoveries by talking in this manner; we do not learn the cause or the cure of any of the diseases of the mind, we only persuade ourselves that we know something, when we are really ignorant.

We have sedulously avoided entering into any metaphysical disquisitions; but we have examined with care the systems of theoretic writers, that we may be able to avail ourselves of such of their observations as can be reduced to practice in education. With respect to the arts, imagination may be considered practically in two points of view, as it relates to our taste, and as it relates to our talents for the arts. Without being a poet, or an orator, a man may have a sufficient degree of imagination to receive pleasure from the talents of others; he

may be a critical judge of the respective merits of orators, poets, and artists. This sensibility to the pleasures of the imagination, when judiciously managed, adds much to the happiness of life, and it must be peculiarly advantageous to those who are precluded by their station in society from the necessity of manual labour. Mental exercise, and mental amusements, are essential to all persons in the higher ranks of life, who would escape from the fever of dissipation, or from the lethargy of ennui. The mere physical advantages which wealth can procure are reducible to the short sum of "*meat, fire, and clothes.*" A nobleman of the highest birth, and with the longest line of ancestry, inherits no intuitive taste, nor can he purchase it from the artist, the painter, or the poet; the possession of the whole Pinelli library could not infuse the slightest portion of literature. Education can alone give the full power to enjoy the real advantages of fortune. To educate the taste and the imagination, it is not necessary to surround the heir of an opulent family with masters and connoisseurs. Let him never hear

the jargon of amateurs, let him learn the art "not to admire." But in his earliest childhood cultivate his senses with care, that he may be able to see and hear, to feel and understand, for himself. Visible images he will rapidly collect in his memory; but these must be selected, and his first associations must not be trusted to accident. Encourage him to observe with attention all the works of nature, but shew him only the best imitations of art; the first objects that he contemplates with delight will remain long associated with pleasure in his imagination; you must, therefore, be careful, that these early associations accord with the decisions of those who have determined the national standard of taste. In many instances taste is governed by arbitrary and variable laws; the fashions of dress, of decoration, of manner, change from day to day; therefore no exclusive prejudices should confine your pupil's understanding. Let him know, as far as we know them, the general principles which govern mankind in their admiration of the sublime and beautiful; but at the same time give him that

enlarged toleration of mind, which comprehends the possibility of a taste different from our own. Shew him, and you need not go farther than the Indian screen, or the Chinese paper in your drawing-room, for the illustration, that the sublime and beautiful vary at Pekin, at London, on Westminster bridge, and on the banks of the Ganges. Let your young pupil look over a collection of gems or of ancient medals; it is necessary that his eye should be early accustomed to Grecian beauty, and to all the classic forms of grace. But do not suffer him to become a bigot, though he may be an enthusiast in his admiration of the antique. Short lessons upon this subject may be conveyed in a few words. If a child sees you look at the bottom of a print for the name of the artist, before you will venture to pronounce upon its merits, he will follow your example, and he will judge by the authority of others, and not by his own taste. If he hears you ask, who wrote this poem? Who built this palace? Is this a genuine antique? he will ask the same questions before he ventures to be pleased. If

he hears you pronounce with emphasis, that such a thing comes from Italy, and therefore must be in good taste, he will take the same compendious method of decision upon the first convenient occasion. He will not trouble himself to examine why utility pleases, nor will he analyse his taste, to discover why one proportion or one design pleases him better than another ; he will, if by example you teach him prejudice, content himself with repeating the words, proportion, antique, picturesque, &c. without annexing any precise ideas to these words.

Parents, who have not turned their attention to metaphysics, may, perhaps, apprehend, that they have something very abstruse or intricate to learn, before they can instruct their pupils in the principles of taste : but these principles are simple, and two or three entertaining books, of no very alarming size, comprise all that has yet been ascertained upon this subject. Vernet's *Théorie des Sentimens Agréables* ; Hogarth's *Analysis of Beauty* ; an *Essay of Hume's on the Standard of Taste* ; Burke's *Sublime and*

Beautiful ; Lord Kaimes's Elements of Criticism ; Sir Joshua Reynolds's Discourses ; and Alison on Taste ; contain so much instruction, mixed with so much amusement, that we cannot think that it will be a *terrible task* to any parent to peruse them.

These books are above the comprehension of children ; but the principles which they contain can be early illustrated in conversation. It will be easy in familiar instances to shew children that the fitness, propriety, or utility, of certain forms recommends them to our approbation : that uniformity, an appearance of order and regularity, are, in some cases, agreeable to us ; contrast, in others : that one class of objects pleases us from habit, another from novelty ; &c. The general principle that governs taste, in the greatest variety of instances, is the association of ideas, and this fortunately can be most easily illustrated.

“ I like such a person because her voice puts
“ me in mind of my mother's. I like this
“ walk, because I was very happy the last time
“ I was here with my sister. I think green is

“ the prettiest of all colours ; my father’s room
“ is painted green, and it is very cheerful, and
“ I have been very happy in that room : and,
“ besides, the grass is green in spring.” Such
simple observations as these come naturally
from children ; they take notice of the influence
of association upon their taste, though, perhaps,
they may not extend their observations so as to
deduce the general principle according to philo-
sophical forms. We should not lay down for
them this or any other principle of taste, as a
rule which they are to take for granted ; but we
should lead them to class their own desultory
remarks, and we should excite them to attend
to their own feelings, and to ascertain the truth
by experiments upon themselves. We have
often observed, that children have been much
entertained with comparing the accidental cir-
cumstances they have met with, and the un-
premeditated expressions used in conversation,
with any general maxim. In this point of
view, we may render even general maxims ser-
viceable to children, because they will excite
to experiment : our pupils will detect their

falsehood, or, after sufficient reflection, acknowledge their truth.

Perhaps it may be thought, that this mode of instruction will tend rather to improve the judgment than the taste ; but every person of good taste must have also a good judgment in matters of taste ; sometimes the judgment may have been partially exercised upon a particular class of objects, and its accuracy of discrimination may be confined to this one subject ; therefore we hastily decide, that, because men of taste may not always be men of universally good judgment, these two powers of the mind are unnecessary to one another. By teaching the philosophy at the same time that we cultivate the pleasures of taste, we shall open to our pupils a new world, we shall give them a new sense. The pleasure of every effect will be increased by the perception of its cause : the magic of the scenery will not lose its power to charm, though we are aware of the secret of the enchantment.

We have hitherto spoken of the taste for what is beautiful, a taste for the sublime we should

be cautious in cultivating. Obscurity and terror are two of the grand sources of the sublime; analyse the feeling, examine accurately the object which creates the emotion, and you dissipate the illusion, you annihilate the pleasure.

“What seemed its head the likeness of a kingly crown had on.”

The indistinctness of the head and of the kingly crown makes this a sublime image. Upon the same principle,

“Danger, whose limbs, of giant mould,
“No mortal eye can fix’d behold,”

always must appear sublime as long as the passion of fear operates. Would it not, however, be imprudent in education to permit that early propensity to superstitious terrors, and that temporary suspension of the reasoning faculties, which are often essential to our taste for the sublime? When we hear of “Margaret’s grimly “ghost,” or of the “dead still hour of night,” a sort of awful trembling seizes us, partly from the effect of early associations, and partly from the solemn tone of the reader. The early asso-

cations which we perhaps have formed of terror, with the ideas of apparitions, and winding sheets, and fable shrowds, should be unknown to children. The silent solemn hour of midnight should not to them be an hour of terror. In the following poetic description of the beldame telling dreadful stories to her infant audience, we hear only of the pleasures of the imagination; we do not recollect how dearly these pleasures must be purchased by their votaries :

“ * * * * * finally by night
 “ The village matron, round the blazing hearth,
 “ Suspends the infant audience with her tales,
 “ Breathing astonishment ! of witching rhymes,
 “ And evil spirits ; of the deathbed call
 “ Of him who robbed the widow, and devoured
 “ The orphan’s portion ; of the unquiet souls
 “ Ris’n from the grave to ease the heavy guilt
 “ Of deeds in life concealed ; of shapes that walk
 “ At dead of night, and clank their chains, and wave
 “ The torch of hell around the murd’rer’s bed.
 “ At every solemn pause the crowd recoil,
 “ Gazing each other speechless, and congeal’d
 “ With shiv’ring sighs ; till, eager for th’ event,
 “ Around the beldame all erect they hang,
 “ Each trembling heart with grateful terrors quell’d*.”

* Akenfide,

No prudent mother will ever imitate this eloquent village matron, nor will she permit any beldame in the nursery to conjure up these sublime shapes, and to quell the hearts of her children with these grateful terrors. We were once present when a group of speechless children sat listening to the story of Blue-beard, "breathing astonishment." A gentleman who saw the charm beginning to operate, resolved to counteract its dangerous influence. Just at the critical moment, when the fatal key drops from the trembling hands of the imprudent wife, the gentleman interrupted the awful pause of silence that ensued, and requested permission to relate the remainder of the story. Tragicomedy does not offend the taste of young, so much as of old critics; the transition from grave to gay was happily managed. Blue-beard's wife afforded much diversion, and lost all sympathy, the moment she was represented as a curious, tattling, timid, ridiculous woman. The terrors of Blue-beard himself subsided when he was properly introduced to the company; and the denouement of the piece was

managed much to the entertainment of the audience; the catastrophe, instead of freezing their young blood, produced general laughter. Ludicrous images, thus presented to the mind which has been prepared for horror, have an instantaneous effect upon the risible muscles: it seems better to use these means of counteracting the terrors of the imagination, than to reason upon the subject whilst the fit is on; reason should be used between the fits*. Those who study the minds of children know the nice touches which affect their imagination, and they can by a few words change their feelings by the power of association,

Ferdinand Duke of Tuscany was once struck with the picture of a child crying: the painter, who was at work upon the head, wished to give the duke a proof of his skill; by a few judicious strokes he converted the crying into a laughing face. The duke, when he looked at,

* "Know there are words and spells which can control,"

"Between the fits, the fever of the soul." POPE,

† Peter of Cortona.

the child again, was in astonishment: the painter, to show himself master of the human countenance, restored his first touches; and the duke, in a few moments, saw the child weeping again. A preceptor may acquire similar power over the countenance of his pupil if he has studied the oratorical art: by the art of oratory, we do not mean the art of misrepresentation, the art of deception, we mean the art of shewing the truth in the strongest light, of exciting virtuous enthusiasm and generous indignation. Warm, glowing eloquence is not inconsistent with accuracy of reasoning and judgment. When we have expressed our admiration or abhorrence of any action or character, we should afterwards be ready coolly to explain to our pupils the justice of our sentiments: by this due mixture and alternation of eloquence and reasoning, we may cultivate a taste for the moral sublime, and yet preserve the character from any tincture of extravagant enthusiasm. We cannot expect, that the torrent of passion should never sweep away the landmarks of exact morality; but after its over-

flowing impetuosity abates, we should take a calm survey of its effects, and we should be able to ascertain the boundaries of right and wrong with geometrical precision:

There is a style of bombast morality affected by some authors, which must be hurtful to young readers; generosity and honour, courage and sentiment, are the striking qualities which seize and enchant the imagination in romance: these qualities must be joined with justice, prudence, economy, patience, and many humble virtues, to make a character really estimable; but these would spoil the effect perhaps of dramatic exhibition.

Children may with much greater safety see hideous than gigantic representations of the passions. Richard the third excites abhorrence; but young Charles De Moor, in "The Robbers," commands our sympathy; even the enormity of his guilt exempts him from all ordinary modes of trial; we forget the murderer, and see something like a hero. It is curious to observe, that the legislature in Germany, and in England, have found it necessary to interfere as to

the representation of Captain Mac Heath and the Robbers*; two characters in which the tragic and the comic muse have had powerful effects in exciting imitation. George Barnwell is a hideous representation of the passions, and therefore beneficial.

There are many sublime objects which do not depend upon terror, or at least upon false associations of terror, for their effect; and there are many sublime thoughts, which have no connection with violent passions or false ideas of morality. These are what we should select, if possible, to raise, without inflating the imagination. The view of the ocean, of the setting or the rising sun, the great and bold scenes of nature, affect the mind with sublime pleasure. All the objects which suggest ideas of vast space, or power, of the infinite duration of time, of the decay of the monuments of ancient grandeur, or of the master-pieces of human art and industry, have power to rise sublime sensations: but we should consider, that they raise this pleasure only by suggesting certain ideas;

* V. Preface to The Robbers.

those, who have not the previous ideas, will not feel the pleasure. We should not therefore expect, that children should admire objects which do not excite any ideas in their minds; we should wait till they have acquired the necessary knowledge, and we should not injudiciously familiarise them with these objects.

Simplicity is a source of the sublime peculiarly suited to children; accuracy of observation and distinctness of perception are essential to this species of the sublime. In Percy's collection of ancient ballads, and in the modern poems of the Ayresshire ploughman, we may see many instances of the effect of simplicity. To preserve our pupil's taste from a false love of ornament, he must avoid, both in books or in conversation, all verbose and turgid descriptions, the use of words and epithets which only fill up the measure of a line.

When a child sees any new object, or feels any new sensation, we should assist him with appropriate words to express his thoughts and feelings; when the impression is fresh in his mind, the association with the precise descrip-

tive epithets can be made with most certainty. As soon as a child has acquired a sufficient stock of words and ideas, he should be from time to time exercised in description; we should encourage him to give an exact account of his own feelings in his own words. Those parents who have been used to elegant, will not perhaps be satisfied with the plain descriptions of unpractised pupils; but they should not be fastidious, they should rather be content with an epithet too little, than with an epithet too much, and they should compare the child's description with the objects actually described, and not with the poems of Thompson or Gray, or Milton or Shakspeare. If we excite our pupils to copy from the writings of others, they never can have any originality of thought. To shew parents what sort of simple descriptions they may reasonably expect from children, we venture to produce the following extempore descriptions of a summer's evening, given by three children of different ages.

July 12th, 1796. Mr. ——— was walking out with his family, and he asked his children

to describe the evening just as it appeared to them. "There were three bards in Ossian's poems," said he, "who were sent out to see what sort of a night it was; they all gave different descriptions upon their return; you have never any of you read Ossian, but you can give us some description of this evening; try."

B—— (a girl of 14). "The clouds in the west are bright with the light of the sun which has just set; a thick mist is seen in the east, and the smoke which had been *heaped up* in the day time is now spread, and mixes with the mist all round us; the noises are heard more plainly (though there are but few) than in the day-time; and those which are at a distance sound almost as near as those which are close to us; there is a red mist round the moon."

C—— (a girl of eleven years old). "The western clouds are pink with the light of the sun which has just set. The moon shines red through the mist. The smoke and mist makes it look dark at a distance, but the few objects

“near us appear plainer. If it was not for the
“light of the moon they would not be seen, but
“the moon is exceedingly bright, it shines upon
“the house and the windows. Every thing
“sounds busy at a distance, but what is near
“us is still.”

S—— (a boy between nine and ten years old),
“The sun has set behind the hill, and the west-
“ern clouds are tinged with light. The mist
“mixes with the smoke, which rises from the
“heaps of weeds which some poor man is
“burning to earn bread for his family. The
“moon through the mist peeps her head, and
“sometimes she *goes back*, retires into her bower
“of clouds. The few noises that are heard are
“heard very plain—very plainly.”

We should observe, that the children who attempted these little descriptions had not been habituated to the *poetic trade*; these were the only descriptions of an evening which they ever made. It would be hurtful to exercise children frequently in descriptive composition; it would give them the habit of exact observation, it is true, but something more is necessary to

the higher species of poetry. Words must be selected which do not only represent, but which suggest ideas. Minute accuracy is essential to some sorts of description ; but in a higher style of poetry, only the large features characteristic of the scene must be produced, and all that is subordinate must be suppressed. Sir Joshua Reynolds justly observes, that painters who aim merely at deception of the eye by exact imitation, are not likely, even in their most successful imitations, to rouse the imagination. The man who mistook the painted fly for a real fly, only brushed, or attempted to brush it away ; the exact representation of such a common object could not raise any sublime ideas in his mind, and when he perceived the deception, the wonder which he felt at the painter's art was a sensation different from poetic enthusiasm.

As soon as young people have collected a variety of ideas, we can proceed a step in the education of their fancy. We should sometimes in conversation, sometimes in writing or in drawing, show them how a few strokes, or a few words can suggest or combine various ideas.

A single expression from Cæsar charmed a mutinous army to instant submission. Unless the words "*Roman Citizens!*" had suggested more than meets the ear, how could they have produced this wonderful effect? The works of Voltaire and Sterne abound with examples of the skilful use of the language of suggestion; on this the wit of Voltaire, and the humour and pathos of Sterne, securely depend for their success. Thus, corporal Trim's eloquence on the death of his young master owed its effect upon the whole kitchen, including "the fat scullion, "who was scouring a fish-kettle upon her "knees," to the well-timed use of the mixed language of action and suggestion.

"Are we not here now?" continued the corporal (striking the end of his stick perpendicularly upon the floor, so as to give an idea "of health and stability), 'and are we not' " (dropping his hat upon the ground) 'gone in 'a moment?'"

"Are we not here now? and gone in a moment?" continues Sterne, who, in this instance, reveals the secret of his own art. "There

“ was nothing in the sentence ; it was one of
“ your self-evident truths we have the advan-
“ tage of hearing every day ; and if Trim had
“ not trusted more to his hat than his head, he
“ had made nothing at all of it.”

When we point out to our pupils such exam-
ples in Sterne, we hope it will not be under-
stood, that we point them out to induce servile
imitation. We apprehend, that the imitators
of Sterne have failed, from not having disco-
vered that the interjections and —— dashes
of this author, are not in themselves beauties,
but that they affect us by suggesting ideas. To
prevent any young writers from the intemperate
or absurd use of interjections, we should shew
them Mr. Horne Tooke's acute remarks upon
this mode of embellishment. We do not, how-
ever, entirely agree with this author in his ab-
horrence of interjections. We do not believe
that “ where speech can be employed they are
“ totally useless ; and are always insufficient
“ for the purpose of communicating our
“ thoughts *.” Even if we class them, as Mr.

* V. Epea Pteroenta, p. 88.

Tooke himself does*, amongst "involuntary convulsions with oral sound," such as groaning, shrieking, &c. yet they may suggest ideas, as well as express animal feelings. Sighing, according to Mr. Tooke, is in the class of interjections, yet the poet acknowledges the superior eloquence of sighs:

"Persuasive words, and *more persuasive sighs.*"

"I wish," said Uncle Toby, with a deep sigh (after hearing the story of Le Fevre), "I wish, 'Trim, I was asleep.'" The sigh here adds great force to the wish, and it does not mark that Uncle Toby, from vehemence of passion, had returned to the brutal state of a savage who has not learnt the use of speech: but, on the contrary, it suggests to the reader, that Uncle Toby was a man of civilized humanity; not one whose compassion was to be excited merely as an animal feeling by the actual *sight* of a fellow-creature in pain, but rather by the description of the sufferer's situation.

In painting, as well as in writing, the lan-

* Chapter on Grammar.

guage of suggestion affects the mind, and if any of our pupils should wish to excel in this art, they must early attend to this principle. The picture of Agamemnon hiding his face at the sacrifice of his daughter expresses little to the eye, but much to the imagination. The usual signs of grief and joy make but slight impression ; to laugh and to weep are such common expressions of delight or anguish, that they cannot be mistaken, even by the illiterate ; but the imagination must be cultivated to enlarge the sphere of sympathy, and to render a more refined language intelligible. It is said that a Milanese artist painted two peasants, and two country-girls, who laughed so heartily, that *no one* could look at them without laughing*. This is an instance of sympathy unconnected with imagination. The following is an instance of sympathy excited by imagination. When Porcia was to part from Brutus, just before the breaking out of the civil war, " she endeavoured," says Plutarch, " as well as possible, " to conceal the sorrow that oppressed her ; but,

* V. Camper's Works, p. 125.

“ notwithstanding her magnanimity, a picture
“ betrayed her distress. The subject was the
“ parting of Hector and Andromache. He was
“ represented delivering his son Astyanax into
“ her arms, and the eyes of Andromache were
“ fixed upon him. The resemblance that this
“ picture bore to her own distress made *Porcia*
“ burst into tears the moment she beheld it.”
If *Porcia* had never read Homer, Andromache
would not have had this power over her imagination and her sympathy.

The imagination not only heightens the power of sympathy with the emotions of all the passions which a painter would excite, but it is likewise essential to our taste for another class of pleasures. Artists, who like Hogarth would please by humour, wit, and ridicule, must depend upon the imagination of the spectators to supply all the intermediate ideas which they would suggest. The cobweb over the poor box, one of the happiest strokes of satire that Hogarth ever invented, would probably say nothing to the inattentive eye, or the dull imagination. A young person must acquire the

language before he can understand the ideas of superior minds.

The taste for poetry must be prepared by the culture of the imagination. The united powers of music and poetry could not have triumphed over Alexander, unless his imagination had assisted "the mighty master."

"With downcast looks the joyless victor sat,
"Revolving in his altered soul
"The various turns of chance below ;
"And now and then a sigh he stole,
"And tears began to flow."

The sigh and the tears were the consequences of Alexander's own thoughts, which were only recalled by kindred sounds. We are well aware, that savage nations, or those that are imperfectly civilized, are subject to enthusiasm ; but we are inclined to think that the barbarous clamour, with which they proclaim their delight in music and poetry, may deceive us as to the degree in which it is felt : the sensations of cultivated minds may be more exquisite, though they are felt in silence. It has been supposed, that ignorance is extremely suscep-

tible of the pleasures of wonder; but wonder and admiration are different feelings: the admiration which a cultivated mind feels for excellence, of which it can fully judge, is surely a higher species of pleasure, than the brute wonder expressed by "a foolish face of praise." Madame Roland tells us, that once, at a sermon preached by a celebrated Frenchman, she was struck with the earnest attention painted in the countenance of a young woman who was looking up at the preacher. At length the fair enthusiast exclaimed, "My God, how he per-spikes!" A different sort of admiration was felt by Cæsar, when the scroll dropped from his hand whilst he listened to an oration of Cicero's.

There are an infinite variety of associations, by which the orator has power to rouse the imagination of a person of cultivated understanding; there are comparatively few, by which he can amuse the fancy of illiterate auditors. It is not that they have less imagination than others, they have equally the power of raising vivid images, but there are few images which can be recalled to them; the combina-

tions of their ideas are confined to a small number, and words have no poetic or literary associations in their minds : even amongst children this difference between the power we have over the cultivated and uncultivated mind early appears. A laurel leaf is to the eye of an illiterate boy nothing more than a shrub with a shining, green, pointed leaf : recal the idea of that shrub by the most exact description, it will affect him with no peculiar pleasure : but associate early in a boy's mind the ideas of glory, of poetry, of Olympic crowns, of Daphne and Apollo ; by some of these latent associations the orator may afterwards raise his enthusiasm. We shall not here repeat what has been said upon the choice of literature for young people, but shall once more warn parents to let their pupils read only the best authors, if they wish them to have a fine imagination, or a delicate taste. When their minds are awake and warm, shew them excellence : let them hear oratory only when they can feel it ; if the impression be vivid, no matter how transient the touch. Ideas which have once struck the imagination can be

recalled by the magic of a word, with all their original, all their associated force. Do not fatigue the eye and ear of your vivacious pupil with the monotonous sounds and confused images of vulgar poetry. Do not make him repeat the finest passages of Shakspeare and Milton ; the effect is lost by repetition ; the words, the ideas are profaned. Let your pupils hear eloquence from eloquent lips, and they will own its power. But let a drawling, unimpassioned reader, read a play of Shakspeare's, or an oration of Demosthenes, and if your pupil is not out of patience, he will never taste the charms of eloquence. If he feels a fine sentiment, or a sublime idea, pause, leave his mind full, leave his imagination elevated. Five minutes afterwards, perhaps, your pupil's attention is turned to something else, and the sublime idea seems to be forgotten : but do not fear ; the idea is not obliterated ; it is latent in his memory ; it will appear at a proper time, perhaps a month, perhaps twenty years afterwards. Ideas may remain long useless, and almost forgotten in the mind, and may be called forth by some corresponding association from their torpid state.

Young people, who wish to make themselves orators or eloquent writers, should acquire the habit of attending first to the general impression made upon their own minds by oratory, and afterwards to the cause which produced the effect; hence they will obtain command over the minds of others, by using the knowledge they have acquired of their own. The habit of considering every new idea, or new fact, as a subject for allusion, may also be useful to the young orator. A change from time to time in the nature of his studies will enlarge and invigorate his imagination. Gibbon says, that, after the publication of his first volume of the Roman history, he gave himself a short holiday. "I indulged my curiosity in some studies of a
"very different nature: a course of anatomy,
"which was demonstrated by Dr. Hunter, and
"some lessons of chymistry, which were deliver-
"ed by Dr. Higgins. The principles of these
"sciences, and a taste for books of natural his-
"tory, contributed to multiply my ideas and
"images; and the anatomist and chymist may
"sometimes track me in their own snow."

Different degrees of enthusiasm are requisite in different professions; but we are inclined to think that the imagination might with advantage be cultivated to a much higher degree than is commonly allowed in young men intended for public advocates. We have seen several examples of the advantage of a general taste for the belles lettres in eminent lawyers*; and we have lately seen an ingenious treatise called *Deinology, or Instructions for a Young Barrister*, which confirms our opinion upon this subject. An orator, by the judicious preparation of the minds of his audience, may increase the effect of his best arguments. A Grecian painter†, before he would produce a picture which he had finished, representing a martial enterprize, ordered martial music to be played, to raise the enthusiasm of the assembled spectators; when their imagination was sufficiently elevated, he uncovered the picture, and it was beheld with sympathetic transports of applause.

* Lord Mansfield, Hufsey Burgh, &c.

† Theon.

It is usually thought that persons of extraordinary imagination are deficient in judgment; by proper education this evil might be prevented. We may observe that persons, who have acquired particular facility in certain exercises of the imagination, can by voluntary exertion either excite or suppress certain trains of ideas on which their enthusiasm depends. An actor, who storms and raves whilst he is upon the stage, appears with a mild and peaceable demeanour a moment afterwards behind the scenes. A poet, in his inspired moments, repeats his own verses in his garret with all the emphasis and fervor of enthusiasm; but when he comes down to dine with a mixed convivial company, his poetic fury subsides, a new train of ideas takes place in his imagination. As long as he has sufficient command over himself to lay aside his enthusiasm in company, he is considered as a reasonable, sensible man, and the more imagination he displays in his poems the better. The same exercise of fancy, which we admire in one case, we ridicule in another. The enthu-

fiasm which characterises the man of genius borders upon insanity.

When Voltaire was teaching mademoiselle Clairon, the celebrated actrefs, to perform an impassioned part in one of his tragedies, she objected to the violence of his enthusiasm. "Mais, monsieur, on me prendroit pour une possédée*!"—"Eh mademoiselle," replied the philosophic bard, "il faut être un possédé pour réussir en aucun art."

The degree of enthusiasm, which makes the painter and poet set a value which to more idle, or more busy mortals, appears imaginary upon their respective arts, supports the artist under the pressure of disappointment and neglect, stimulates his exertions, and renders him almost insensible to labour and fatigue. Military heroes, or those who are "*insane with ambition*†," endure all the real miseries of life, and brave the terrors of death, under the invigorating in-

* "But, Sir, I shall be taken for one possessed!"

"Well, Ma'am, you must be *like one possessed*, if you would succeed in any art."

† Dr. Darwin.

fluence of an extravagant imagination. Cure them of their enthusiasm, and they are no longer heroes. We must therefore decide in education what species of characters we would produce, before we can determine what degree, or what habits of imagination, are desirable.

“ Je suis le Dieu de la danse* !” exclaimed Vestris ; and probably Alexander the Great did not feel more pride in his Apotheosis. Had any cynical philosopher undertaken to cure Vestris of his vanity, it would not have been a charitable action. Vestris might, perhaps, by force of reasoning, have been brought to acknowledge that a dancing master was not a divinity, but this conviction would not have increased his felicity ; on the contrary, he would have become wretched in proportion as he became rational. The felicity of enthusiasts depends upon their being absolutely incapable of reasoning, or of listening to reason upon certain subjects ; provided they are resolute in repeating their own train of thoughts without com-

* “ I am the God of dancing !”

paring them with that of others, they may defy the malice of wisdom, and in happy ignorance may enjoy perpetual delirium.

Parents, who value the happiness of their children, will consider exactly what chance there is of their enjoying unmolested any partial enthusiasm; they will consider, that by early excitations it is very easy to raise any species of ambition in the minds of their pupils. The various species of enthusiasm necessary to make a poet, a painter, an orator, or a military hero, may be inspired, without doubt, by education. How far these are connected with happiness is another question. Whatever be the object which he pursues, we must as much as possible enforce our pupil's success. Those who have been excited to exertion by enthusiasm, if they do not obtain the reward or admiration which they had been taught to expect, sink into helpless despondency. Whether their object has been great or small, if it has been their favourite object, and they fail of its attainment, their mortification and subsequent languor are unavoidable. The wisest of monarchs exclaimed,

that all was vanity and vexation of spirit; he did not, perhaps, feel more weary of the world than the poor juggler felt, who, after educating his hands to the astonishing dexterity of throwing up into the air, and catching as they fell, six eggs successively, without breaking them, received from the emperor, before whom he performed, six eggs to reward the labour of his life! This poor man's ambition appears obviously absurd, and we are under no immediate apprehension, that parents should inspire their children with the enthusiasm necessary to the profession of a juggler: but unless some precautions are taken, the objects which excite the ambition of numbers may be placed so as to deceive the eye and imagination of children; and they may labour through life in pursuit of phantoms. If children early hear their parents express violent admiration for riches, rank, power, or fame, they catch a species of enthusiasm for these things, before they can estimate justly their value; from the countenance and manner they draw very important conclusions. "Felicity is painted on your counte-

“ nance,” is a polite phrase of salutation in China. The taste for looking happy is not confined to the Chinese : the rich and great*, by every artifice of luxury, endeavour to impress the spectator with the idea of their superior felicity. From experience we know, that the external signs of delight are not always sincere, and that the apparatus of luxury is not necessary to happiness. Children who live with persons of good sense learn to separate the ideas of happiness and a coach and fix; but young people who see their fathers, mothers, and preceptors, all smitten with sudden admiration at the sight of a fine phaeton, or a fine gentleman, are immediately infected with the same absurd enthusiasm. These parents do not suspect, that they are perverting the imagination of their children, when they call them with foolish eagerness to the windows to look at a fine equipage, a splendid cavalcade, or a military procession; they perhaps summon a boy, who is intended for a merchant, or a lawyer, to hear “ the spirit stirring drum;” and they are afterwards surprised,

* V. Smith's Moral Theory.

if he says, when he is fifteen or sixteen, that, “*if his father pleases*, he had rather go into “the army than go to the bar.” The mother is alarmed, perhaps, about the same time by an unaccountable predilection in her daughter’s fancy for a red coat, and totally forgets having called the child to the window to look at the smart cockades, and to hear the tune of “See the conqu’ring hero comes.”

“Hear you me, Jessica,” says Shylock to his daughter, “lock up my doors; and when “you hear the drum, and the vile squeaking “of the wry-necked fife, clamber not you up “into the casements then.”

Shylock’s exhortations were vain; Jessica had arrived at years of discretion, and it was too late to forbid her clambering up to the casements; the precautions should have been taken sooner; the epithets vile squeaking and wry-necked fife could not alter the lady’s taste: and Shylock should have known how peremptory prohibitions and exaggerated expressions of aversion operate upon the female imagination; he was imprudent in the extreme of his caution.

We should let children see things as they really are, and we should not prejudice them either by our exclamations of rapture, or by our affected disgust. If they are familiarised with show they will not be caught by it; if they see the whole of whatever is to be seen, their imagination will not paint things more delightful than they really are. For these reasons we think that young people should not be restrained, though they may be guided in their tastes; we should supply them with all the information in which they are deficient, and leave them to form their own judgments.

Without making it a matter of favour, or of extraordinary consequence, parents can take their children to see public exhibitions, or to partake of any amusements which are really agreeable; they can at the same time avoid mixing factitious with real pleasure. If, for instance, we have an opportunity of taking a boy to a good play, or a girl to a ball, let them enjoy the full pleasure of the amusement, but do not let us excite their imagination by great preparations, or by anticipating remarks: "Oh,

“you’ll be very happy to-morrow, for you’re
“to go to the play. You must look well to-
“night, for you are going to the ball! Were
“you never at a ball? Did you never see a play
“before? Oh, *then* you’ll be delighted, I’m
“sure!” The children often look much more
sensible, and sometimes more composed, in
the midst of these foolish exclamations, than
their parents. “*Estce que je m’amuse, ma-*
“*man?*” said a little girl of six years old, the
first time she was taken to the playhouse.

Besides the influence of opinion, there are a
number of other circumstances to be considered
in cultivating the imagination. The disposition
to associate ideas varies in strength and quick-
ness in opposite temperaments; the natural
vivacity or dullness of the senses, the habit of
observing external objects, the power of volun-
tary exertion, the propensity to reverie, must
all be considered before we can adapt a plan of
education exactly to the pupil’s advantage. A
wise preceptor will counteract as much as pos-
sible all those defects, to which a child may
appear most liable, and will cultivate his ima-

gination so as to prevent the errors, to which he is most exposed by natural, or what we call, natural disposition.

Some children appear to feel sensations of pleasure or pain with more energy than others ; they take more delight in feeling than in reflection ; they have neither much leisure nor much inclination for the intellectual exertions of comparison or deliberation. Great care should be taken to encourage children of this temper to describe and to compare their sensations. By their descriptions we may discover what motives we ought to employ to govern them, and if we can teach them to compare their feelings, we shall induce that voluntary exertion of mind in which they are naturally defective. We cannot compare or judge of our sensations without voluntary exertion. When we deliberate we repeat our ideas slowly, and this is an exercise peculiarly useful to those who feel quickly.

When any pleasure makes too great an impression upon children of vivid sensations, we should repeat it frequently till it begins to fatigue ; or we should contrast it, and bring it

into direct comparison with some other species of pleasure. For instance, suppose a boy had appeared highly delighted with seeing a game at cards, and that we were apprehensive he might from this early association acquire a taste for gaming; we might either repeat the amusement till the playing at cards began to weary the boy, or we might take him immediately after playing at cards to an interesting comedy; probably, the amusement he would receive at the playhouse would be greater than that which he had enjoyed at the card-table; and as these two species of pleasure would immediately succeed to each other, the child could scarcely avoid comparing them. Is it necessary to repeat, that all this should be done without any artifice? The child should know the meaning of our conduct, and then he will never set himself in opposition to our management.

If it is not convenient, or possible, to dull the charm of novelty by repetition, or to contrast a new pleasure with some other superior amusement, there is another expedient which may be useful; we may call the power of asso-

ciation to our assistance: this power is sometimes a full match for the most lively sensations. For instance, suppose a boy of strong feelings had been offended by some trifle, and expressed sensations of hatred against the offender obviously too violent for the occasion; to bring the angry boy's imagination to a temperate state, we might recall some circumstance of his former affection for the offender; or the general idea, that it is amiable and noble to command our passion, and to forgive those who have injured us. At the sight of his mother, with whom he had many agreeable associations, the imagination of Coriolanus raised up instantly a train of ideas connected with the love of his family, and of his country, and immediately the violence of his sensations of anger were subdued.

Brutus, after his friend Cassius has apologised to him for his "rash humour," by saying, "that it was hereditary from his mother," promises that the next time Cassius is over-earnest with "his Brutus, he will think his mother chides, and leave him so;" that is to say, Brutus promises to recollect an association of ideas,

which shall enable him to bear with his friend's ill humour.

Children, who associate ideas very strongly and with rapidity, must be educated with continual attention. With children of this class the slightest circumstances are of consequence; they may at first appear to be easily managed, because they will remember pertinaciously any reproof, any reward or punishment, and from association they will scrupulously avoid or follow what has, in any one instance, been joined with pain or pleasure in their imagination: but unfortunately accidental events will influence them, as well as the rewards and punishments of their preceptors. We shall be surprised to find, that even where there is apparently no hope, or fear, or passion, to disturb their judgment, they cannot reason, or understand reasoning. On studying them more closely, we shall discover the cause of this seeming imbecility. A multitude of associated ideas occur to them upon whatever subject we attempt to reason, which distract their attention, and make them change the terms of every pro-

position with incessant variety. Their pleasures are chiefly secondary reflected pleasures, and they do not judge by their actual sensations so much as by their associations. They like and dislike without being able to assign any sufficient cause for their preference or aversion. They make a choice frequently without appearing to deliberate, and if you, by persuading them to a more detailed examination of the objects, convince them, that according to the common standard of good and evil, they have made a foolish choice, they will still seem puzzled and uncertain; and, if you leave them at liberty, will persist in their original determination. By this criterion we may decide, that they are influenced by some secret false association of ideas; and, instead of arguing with them upon the obvious folly of their present choice, we should endeavour to make them trace back their ideas, and discover the association by which they are governed. In some cases this may be out of their power, because the original association may have been totally forgotten, and yet those connected with it may continue to act; but

even when we cannot succeed in any particular instance in detecting the cause of the error, we shall do the pupils material service by exciting them to observe their own minds. A tutor, who carefully remarks the circumstances in which a child expresses uncommon grief or joy, hope or fear, may obtain complete knowledge of his associations, and may accurately distinguish the proximate and remote causes of all his pupil's desires and aversions. He will then have absolute command over the child's mind, and he should upon no account trust his pupil to the direction of any other person. Another tutor, though perhaps of equal ability, could not be equally secure of success; the child would probably be suspected of cunning, caprice, or obstinacy, because the causes of his tastes and judgments could not be discovered by his new preceptor.

It often happens, that those who feel pleasure and pain most strongly, are likewise most disposed to form strong associations of ideas. Children of this character are never stupid, but often prejudiced and passionate; they can readily

assign a reason for their preference or aversion ; they recollect distinctly the original sensations of pleasure or pain, on which their associations depend ; they do not, like Mr. Transfer in Zeluco, like or dislike persons and things, because they have *been used to them*, but because they have received some injury or benefit from them. Such children are apt to make great mistakes in reasoning, from their registering of coincidences hastily ; they do not wait to repeat their experiments, but if they have in one instance observed two things to happen at the same time, they expect that they will always recur together. If one event precedes or follows another accidentally, they believe it to be the cause or effect of its concomitant, and this belief is not to be shaken in their minds by ridicule or argument. They are, consequently, inclined both to superstition and enthusiasm, according as their hopes and fears predominate. They are likewise subject to absurd antipathies — antipathies which verge towards insanity.

Dr. Darwin relates a strong instance of antipathy in a child from association. The child,

on tasting the gristle of sturgeon, asked what gristle was? and was answered, that gristle was like the division of a man's nose. The child, disgusted at this idea, for twenty years afterwards could never be persuaded to taste sturgeon*.

Zimmermann assures us, that he was an eye-witness of a singular antipathy, which we may be permitted to describe in his own words.

“ Happening to be in company with some
 “ English gentlemen, all of them men of distinction, the conversation fell upon antipathies.
 “ Many of the company denied their reality, and
 “ considered them as idle stories, but I assured
 “ them that they were truly a disease. Mr.
 “ William Matthews, son to the governor of
 “ Barbadoes, was of my opinion, because he
 “ himself had an antipathy to spiders. The
 “ rest of the company laughed at him. I undertook to prove to them that this antipathy
 “ *was really an impression on his soul, resulting*
 “ *from the determination of a mechanical effect.*
 “ (We do not pretend to know what Dr. Zim-

* Zoonomia, vol. ii.

" mermann means by this.) Lord John Mar-
 " ray undertook to shape some black wax into
 " the appearance of a spider, with a view to
 " observe whether the antipathy would take
 " place at the simple figure of the insect? He
 " then withdrew for a moment, and came in
 " again with the wax in his hand, which he
 " kept shut. Mr. Matthews, who in other
 " respects was a very amiable and moderate
 " man, immediately conceiving that his friend
 " really had a spider in his hand, clapped his
 " hand to his sword with extreme fury, and
 " running back towards the partition, cried
 " out most horribly. All the muscles of his face
 " were swelled, his eyes were rolling in their
 " sockets, and his body was immovable. We
 " were all exceedingly alarmed, and immedi-
 " ately ran to his assistance, took his sword from
 " him, and assured him that what he conceived
 " to be a spider was nothing more than a bit of
 " wax, which he might see upon the table.

" He remained some time in this spasmodic
 " state; but at length he began to recover, and
 " to deplore the horrible passion from which he

“ still suffered. His pulse was very strong and
“ quick, and his whole body was covered with
“ a cold perspiration. After taking an anodyne
“ draft, he resumed his usual tranquillity.”

“ We are not to wonder at this antipathy,”
continues Zimmermann; “ the spiders at Bar-
“ badoes are very large, and of an hideous
“ figure. Mr. Matthews was born there, and
“ his antipathy was therefore to be accounted
“ for. Some of the company undertook to
“ make a little waxen spider in his presence.
“ He saw this done with great tranquillity, but
“ he could not be persuaded to touch it, though
“ he was by no means a timorous man in other
“ respects. Nor would he follow my advice to
“ endeavour to conquer this antipathy by first
“ drawing parts of spiders of different sorts, and
“ after a time whole spiders, till at length he
“ might be able to look at portions of real spi-
“ ders, and thus gradually accustom himself
“ to whole ones, at first dead, and then living
“ ones.”

Dr. Zimmermann's method of cure appears
rather more ingenious, than his way of account-

ing for the disease. Are all the natives of Barbadoes subject to convulsions at the sight of the large spiders in that island? or why does Mr. George Matthews's having been born there account so satisfactorily for his antipathy?

The cure of these unreasonable fears of harmless animals, like all other antipathies, would, perhaps, be easily effected, if it were judiciously attempted early in life. The epithets which we use in speaking of animals, and our expressions of countenance, have great influence on the minds of children. If we, as Dr. Darwin advises, call the spider *the ingenious spider*, and the frog *the harmless frog*, and if we look at them with complacency, instead of aversion, children, from sympathy, will imitate our manner, and from curiosity will attend to the animals, to discover whether the commendatory epithets we bestow upon them are just.

It is comparatively of little consequence to conquer antipathies which have trifling objects. An individual can go through life very well without eating sturgeon, or touching spiders; but when we consider the influence of the same

disposition to associate false ideas too strongly in more important instances, we shall perceive the necessity of correcting it by education.

Locke tells us of a young man, who, having been accustomed to see an old trunk in the room with him when he learned to dance, associated his dancing exertions so strongly with the sight of this trunk, that he could not succeed by any voluntary efforts in its absence. We have, in our remarks upon attention, pointed out the great inconveniences to which those are exposed, who acquire associated habits of intellectual exertion; who cannot speak, or write, or think, without certain habitual aids to their memory or imagination. We must farther observe, that incessant vigilance is necessary in the moral education of children disposed to form strong associations; they are liable to sudden and absurd dislikes or predilections, with respect to persons, as well as things; they are subject to caprice in their affections and temper, and liable to a variety of mental infirmities, which, in different degrees, we call passion or

madness. Locke tells us, that he knew a man, who, after having been restored to health by a painful operation, had so strongly associated the idea and figure of the operator with the agony he had endured, that though he acknowledged the obligation, and felt gratitude towards this friend who had saved him, he never afterwards could bear to see his benefactor. There are some people, who associate so readily and incorrigibly the idea of any pain or insult they have received from another, with his person and character, that they can never afterwards forget or forgive. They are hence disposed to all the intemperance of hatred and revenge; to the chronic malice of an Iago, or the acute pangs of an Achilles. Homer, in the speech of Achilles to Agamemnon's mediating ambassadors, has drawn a strong and natural picture of the progress of anger. It is worth studying as a lesson in metaphysics. Whenever association suggests to the mind of Achilles the injury he has received, he loses his reason, and the orator works himself up from argument to declamation, and from declamation to desperate

resolution, through a close linked connexion of ideas' and sensations.

The insanities of ambition, avarice, and vanity, originate in early mistaken associations. A feather, or a crown, or an alderman's chain, or a cardinal's hat, or a purse of yellow counters, are unluckily associated in the minds of some men with the idea of happiness, and, without staying to deliberate, these unfortunate persons hunt through life the phantasms of a disordered imagination. Whilst we pity, we are amused by the blindness and blunders of those, whose mistakes can affect no one's felicity but their own; but any delusions, which prompt their victims to actions inimical to their fellow-creatures, are the objects, not usually of pity, but of indignation, of private aversion, and public punishment. We smile at the avaricious insanity of the miser, who dresses himself in the cast-off wig of a beggar, and who pulls a crushed pancake from his pocket for his own and for his friend's dinner*. We smile at the insane vanity of the pauper, who dressed

* Elwes: See his Life.

himself in a many-coloured paper star, assumed the title of Duke of Baubleshire, and as such required homage from every passenger*. But are we inclined to smile at the outrageous vanity of the man, who styled himself the son of Jupiter, and who murdered his best friend for refusing him divine honours? Are we disposed to pity the slave-merchant, who, urged by the maniacal desire for gold, hears unmoved the groans of his fellow-creatures, the execrations of mankind, and that "small still voice," which haunts those who are stained with blood?

The moral insanities which strike us with horror, compassion, or ridicule, however they may differ in their effects, have frequently one common origin; an early false association of ideas. Persons who mistake in measuring their own feelings, or who neglect to compare their ideas, and to balance contending wishes, scarcely merit the name of *rational* creatures. The man, who does not deliberate, is lost.

We have endeavoured, though well aware

* There is an account of this poor man's death in the Star, 1796.

of the difficulty of the subject, to point out some of the precautions that should be used in governing the imagination of young people of different dispositions. We should add, that in all cases the pupil's attention to his own mind will be of more consequence, than the utmost vigilance of the most able preceptor; the sooner he is made acquainted with his own character, and the sooner he can be excited to govern himself by reason, or to attempt the cure of his own defects, the better.

There is one habit of the imagination, to which we have not yet adverted, the habit of reverie. In reverie we are so intent upon a particular train of ideas, that we are unconscious of all external objects, and we exert but little voluntary power. It is true that some persons in castle-building both reason and invent, and therefore must exert some degree of volition; even in the wildest reverie there may be traced some species of consistency, some connexion amongst the ideas; but this is simply the result of the association of ideas. Inventive castle-builders are rather nearer the state of in-

sanity than of reverie; they reason well upon false principles; their airy fabrics are often both in good taste and in good proportion; nothing is wanting to them but a foundation. On the contrary, nothing can be more silly than the reveries of silly people; they are not only defective in consistency, but they want all the unities; they are not extravagant, but they are stupid; they consist usually of a listless reiteration of uninteresting ideas; the whole pleasure enjoyed by those addicted to them consists in the facility of repetition.

It is a mistaken notion, that only people of ardent imaginations are disposed to reverie; the most indolent and stupid persons waste their existence in this indulgence; they do not act always in consequence of their dreams, therefore we do not detect their folly. Young people of active minds, when they have not sufficient occupation, necessarily indulge in reverie; and by degrees this wild exercise of their invention and imagination becomes so delightful to them, that they prefer it to all sober employments.

Mr. Williams, in his Lectures upon Educa-

tion, gives an account of a boy singularly addicted to reverie. The desire of invisibility had seized his mind, and for several years he had indulged his fancy with imagining all the pleasures that he should command, and all the feats that he could perform, if he were in possession of Gyges's ring. The reader should, however, be informed, that this castle-builder was not a youth of strict veracity; his confession upon this occasion, as upon others, might not have been sincere. We only state the story from Mr. Williams.

To prevent children from acquiring a taste for reverie, let them have various occupations both of mind and body. Let us not direct their imagination to extraordinary future pleasures, but let us suffer them to enjoy the present. Anticipation is a species of reverie, and children, who have promises of future pleasures frequently made to them, live in a continual state of anticipation.

To cure the habit of reverie when it has once been formed, we must take different methods with different tempers. With those who in-

dulge in the *stupid rêverie*, we should employ strong excitations, and present to the senses a rapid succession of objects, which will completely engage without fatiguing them. This mode must not be followed with children of different dispositions, else we should increase instead of curing the disease. The most likely method to break this habit in children of great quickness or sensibility, is to set them to some employment which is wholly new to them, and which will consequently exercise and exhaust all their faculties, so that they shall have *no life* left for castle-building. Monotonous occupations, such as copying, drawing, or writing, playing on the harpsichord, &c. are not, *if habit has made them easy* to the pupil, fit for our purpose. We may all perceive, that in such occupations the powers of the mind are left unexercised. We can frequently read aloud with tolerable emphasis for a considerable time together, and at the same time think upon some subject foreign to the book we hold in our hands.

The most difficult exercises of the mind, such

as invention, or strict reasoning, are those alone which are sufficient to subjugate and chain down the imagination of some active spirits: To such laborious exercises they should be excited by the encouraging voice of praise and affection. Imaginative children will be more disposed to invent than to reason, but they cannot perfect any invention without reasoning; there will, therefore, be a mixture of what they like and dislike in the exercise of invention, and the habit of reasoning will, perhaps, gradually become agreeable to them, if it be thus dexterously united with the pleasures of the imagination.

So much has already been written by various authors upon the pleasures and the dangers of imagination, that we could scarcely hope to add any thing new to what they have produced: but we have endeavoured to arrange the observations which appeared most applicable to practical education; we have pointed out how the principles of taste may be early taught without injury to the general understanding, and how the imagination should be prepared for the

higher pleasures of eloquence and poetry. We have attempted to define the boundaries between the enthusiasm of genius, and its extravagance ; and to shew some of the precautions which may be used, to prevent the moral defects to which persons of ardent imagination are usually subject. The degree in which the imagination should be cultivated must, we have observed, be determined by the views which parents may have for their children, by their situations in society, and by the professions for which they are destined. The homely proverb, which has been applied to fire, may with equal truth be applied to imagination : “ It is a good servant, but a bad master.”

CHAPTER. XXIII.

ON WIT AND JUDGMENT.

IT has been shewn, that the powers of memory, invention, and imagination, ought to be rendered subservient to judgment: it has been shewn, that reasoning and judgment abridge the labours of memory, and are necessary to regulate the highest flights of imagination. We shall now consider the power of reasoning in another point of view, as being essential to our conduct in life. The object of reasoning is to adapt means to an end, to attain the command of effects by the discovery of the causes on which they depend.

Until children have acquired some know-

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ledge of effects, they cannot inquire into causes. Observation must precede reasoning; and as judgment is nothing more than the perception of the result of comparison, we should never urge our pupils to judge, until they have acquired some portion of experience.

To teach children to compare objects exactly, we should place the things to be examined distinctly before them. Every thing that is superfluous should be taken away, and a sufficient motive should be given to excite the pupil's attention. We need not here repeat the advice that has formerly been given respecting the choice of proper motives to excite and fix attention; or the precautions necessary to prevent the pain of fatigue, and of unsuccessful application. If comparison be early rendered a task to children, they will dislike and avoid this exercise of the mind, and they will consequently shew an inaptitude to reason; if comparing objects be made interesting and amusing to our pupils, they will soon become expert in discovering resemblances and differences; and thus they will be prepared for reasoning.

Rouffeau has judiciously advised, that *the senses* of children should be cultivated with the utmost care. In proportion to the distinctness of their perceptions will be the accuracy of their memory, and, probably, also the precision of their judgment. A child, who sees imperfectly, cannot reason justly about the objects of sight, because he has not sufficient data. A child, who does not hear distinctly, cannot judge well of sounds; and, if we could suppose the sense of touch to be twice as accurate in one child as in another, we might conclude, that the judgment of these children must differ in a similar proportion. The defects in organization are not within the power of the preceptor; but we may observe, that inattention, and want of exercise, are frequently the causes of what are mistaken for natural defects; and, on the contrary, increased attention and cultivation sometimes produce that quickness of eye and ear, and that consequent readiness of judgment, which we are apt to attribute to natural superiority of organization or capacity. Even amongst children we may early observe a con-

considerable difference between the quickness of their senses and of their reasoning upon subjects where they have had experience, and upon those on which they have not been exercised.

The first exercises for the judgment of children should; as Rousseau recommends, relate to visible and tangible substances. Let them compare the size and shape of different objects; let them frequently try what they can lift; at what distance they can see objects; at what distance they can hear sounds: by these exercises they will learn to judge of distances and weight; and they may learn to judge of the solid contents of bodies of different shapes, by comparing the observations of their sense of feeling and of sight. The measure of hollow bodies can be easily taken by pouring liquids into them, and then comparing the quantities of the liquids that fill vessels of different shapes. This is a simple method of exercising the judgment of children; and, if they are allowed to try these little experiments for themselves, the amusement will fix the facts in their memory.

and will associate pleasure with the habits of comparison. Rousseau rewards Emilius with cakes when he judges rightly; success, we think, is a better reward. Rousseau was himself childishly fond of cakes and cream.

The step which immediately follows comparison, is deduction. The cat is larger than the kitten; then a hole through which the cat can go, must be larger than a hole through which the kitten can go. Long before a child can put this reasoning into words, he is capable of forming the conclusion, and we need not be in haste to make him announce it in mode and figure. We may see by the various methods which young children employ to reach what is above them, to drag, to push, to lift different bodies, that they reason; that is to say, that they adapt means to an end, before they can explain their own designs in words. Look at a child building a house of cards: he dexterously balances every card as he floors the edifice; he raises story over story, and shews us that he has some design in view, though he would be utterly incapable of describing his in-

tentions previously in words. We have formerly endeavoured to shew how the vocabulary of our pupils may be gradually enlarged, exactly in proportion to their real knowledge. A great deal depends upon our attention to this proportion; if children have not a sufficient number of words to make their thoughts intelligible, we cannot assist them to reason by our conversation, we cannot communicate to them the result of our experience; they will have a great deal of useless labour in comparing objects, because they will not be able to understand the evidence of others, as they do not understand their language; and at last, the reasonings which they carry on in their own minds will be confused for want of signs to keep them distinct. On the contrary, if their vocabulary exceed their ideas, if they are taught a variety of words to which they connect no accurate meaning, it is impossible that they should express their thoughts with precision. As this is one of the most common errors in education, we shall dwell upon it more particularly.

We have pointed out the mischief which is

done to the understanding of children by the nonsensical conversation of common acquaintance. "Should you like to be a king? What are you to be? Are you to be a bishop, or a judge? Had you rather be a general, or an admiral, my little dear?" are some of the questions which every one has probably heard proposed to children of five or six years old. Children who have not learned by rote the expected answers to such interrogatories, stand in amazed silence upon these occasions; or else answer at random, having no possible means of forming any judgment upon such subjects. We have often thought, in listening to the conversations of grown up people with children, that the children reasoned infinitely better than their opponents. People, who are not interested in the education of children, do not care what arguments they use, what absurdities they utter in talking to them; they usually talk to them of things which are totally above their comprehension; and they instill error and prejudice, without the smallest degree of compunction; or rather, without in the least knowing what they

are about. We earnestly repeat our advice to parents, to keep their children as much as possible from such conversation: children will never reason if they are frequently allowed to hear or to talk nonsense. Unless they have been in the habit of hearing foolish conversation, they very seldom talk nonsense. They may express themselves in a manner which we do not understand, or they may make mistakes from not accurately comprehending the words of others; but in these cases we should not reprove or silence them, we should patiently endeavour to find out their hidden meaning. If we rebuke or ridicule them, we shall intimidate them, and either lessen their confidence in themselves or in us. In the one case we prevent them from thinking, in the other we deter them from communicating their thoughts; and thus we preclude ourselves from the possibility of assisting them in reasoning. To show parents the nature of the mistakes which children make from their imperfect knowledge of words, we shall give a few examples from real life.

S—, at five years old, when he heard some

one speak of *bay* horses, said, he supposed that a bay horse must be *the best*. Upon cross questioning him, it appeared that he was led to this conclusion by the analogy between the sound of the words *bay* and *obey*. A few days previous to this his father had told him, that spirited horses were always the most ready to obey.

These erroneous analogies between the sound of words and their sense frequently mislead children in reasoning; we should, therefore, encourage children to explain themselves fully, that we may rectify their errors.

When S—— was between four and five years old, a lady who had taken him upon her lap playfully, put her hands before his eyes, and (we believe) asked if he liked to be blinded. S—— said no; and he looked very thoughtful. After a pause, he added, “Smellie says, “that children like better to be blinded than “to have their legs tied.” (S—— had read this in Smellie two or three days before.)

Father. “Are you of Smellie’s opinion?”

S—— hesitated.

Father. "Would you rather be blinded, or have your legs tied?"

S——. "I would rather have my legs tied
"not quite tight."

Father. "Do you know what is meant by
"blinded?"

S——. "Having their eyes put out."

Father. "How do you mean?"

S——. "To put something into the eye to
"make the blood burst out; and then the blood
"would come all over it, and cover it, and
"stick to it, and hinder them from seeing, I
"don't know how."

It is obvious, that whilst this boy's imagination pictured to him a bloody orb when he heard the word *blinded*, he was perfectly right in his reasoning in preferring to have his legs tied; but he did not judge of the proposition meant to be laid before him; he judged of another which he had formed for himself. His father explained to him, that Smellie meant blindfolded, instead of blinded; a handkerchief was then tied round the boy's head so as hinder him from seeing, and he was made per-

fectly to understand the meaning of the word *blindfolded*.

In such trifles as these it may appear of little consequence to rectify the verbal errors of children; but exactly the same species of mistake will prevent them from reasoning accurately in matters of consequence. It will not cost us much trouble to detect these mistakes when the causes of them are yet recent; but it will give us infinite trouble to retrace thoughts which have passed in infancy. When prejudices, or the habits of reasoning inaccurately, have been formed, we cannot easily discover or remedy the remote trifling origin of the evil.

When children begin to inquire about causes, they are not able to distinguish between coincidence and causation; we formerly observed the effect which this ignorance produces upon their temper; we must now observe its effect upon their understanding. A little reflection upon our own minds will prevent us from feeling that stupid amazement, or from expressing that insulting contempt, which the natural thoughts of children sometimes excite in per-

sons, who have frequently less understanding than their pupils. What account can we give of the connexion between cause and effect? How is the idea, that one thing is the cause of another, first produced in our minds? All that we know is, that amongst human events those which precede are, in some cases, supposed to produce what follow. When we have observed, in several instances, that one event constantly precedes another, we believe, and expect, that these events will in future recur together. Before children have had experience, it is scarcely possible that they should distinguish between fortuitous circumstances and causation; accidental coincidences of time, and juxtaposition, continually lead them into error. We should not accuse children of reasoning ill, we should not imagine that they are defective in judgment, when they make mistakes from deficient experience; we should only endeavour to make them delay to decide until they have repeated their experiments; and, at all events, we should encourage them to lay open their

minds to us, that we may assist them by our superior knowledge.

This spring, little W—— (three years old) was looking at a man who was mowing the grass before the door. It had been raining, and when the sun shone the vapour began to rise from the grass. "Does the man mowing *make* the smoke rise from the grass?" said the little boy. He was not laughed at for this simple question. The man's mowing immediately preceded the rising of the vapour; the child had never observed a man mowing before, and it was absolutely impossible that he could tell what effects might be produced by it; he very naturally imagined, that the event which immediately preceded the rising of the vapour was the cause of its rise; the sun was at a distance; the scythe was near the grass. The little boy shewed by the tone of his inquiry, that he was in the philosophic state of doubt; had he been ridiculed for his question, had he been told that he talked nonsense, he would not upon another occasion have told his thoughts, and he certainly could not have improved in reasoning.

The way to improve children in their judgment with respect to causation, is to increase their knowledge, and to lead them to try experiments by which they may discover what circumstances are essential to the production of any given effect, and what are merely accessory, unimportant concomitants of the event*.

A child, who for the first time sees blue and red paints mixed together to produce purple, could not be certain that the pallet on which these colours were mixed, the spatula with which they were tempered, were not necessary circumstances. In many cases the vessels in which things are mixed are essential; therefore, a sensible child would repeat the experiment exactly in the same manner in which he had seen it succeed. This exactness should not be suffered to become indolent imitation, or superstitious adherence to particular forms. Children should be excited to add or deduct particulars in trying experiments, and to observe the effects in these changes. In "Chemistry," and "Mechanics," we have pointed out a variety

* Y. Stewart.

of occupations, in which the judgment of children may be exercised upon the immediate objects of their senses.

It is natural, perhaps, that we should expect our pupils to shew surprise at those things, which excite surprise in our minds; but we should consider, that almost every thing is new to children, and therefore there is scarcely any gradation in their astonishment. A child of three or four years old would be as much amused, and, probably, as much surprised, by seeing a paper kite fly, as he could be by beholding the ascent of a balloon. We should not attribute this to stupidity or want of judgment, but simply to ignorance.

A few days ago W———— (three years old), who was learning his letters, was let to sow an *s* in the garden with mustard seed. W———— was much pleased with the operation. When the green plants appeared above ground, it was expected that W———— would be much surprised at seeing the exact shape of his *s*. He was taken to look at it; but he shewed no surprise, no sort of emotion.

We have advised, that the judgment of children should be exercised upon the objects of their senses. It is scarcely possible, that they should reason upon the subjects which are sometimes proposed to them; with respect to manners and society, they have had no experience, consequently they *can* form no judgments. By imprudently endeavouring to turn the attention of children to conversation that is unsuited to them, people may give the appearance of early intelligence, and a certain readiness of repartee and fluency of expression; but these are transient advantages. Smart, witty children amuse the circle for a few hours, and are forgotten; and we may observe, that almost all children who are praised and admired for sprightliness and wit, reason absurdly, and continue ignorant. Wit and judgment depend upon different and opposite habits of the mind. Wit searches for remote resemblances between objects or thoughts apparently dissimilar. Judgment compares the objects placed before it, in order to find out their differences rather than their resemblances. The comparisons of judg-

ment may be slow ; those of wit must be rapid. The same power of attention in children may produce either wit or judgment. Parents must decide in which faculty, or rather, in which of these habits of the mind, they wish their pupils to excel ; and they must conduct their education accordingly. Those who are desirous to make their pupils witty, must sacrifice some portion of their judgment to the acquisition of the talent for wit ; they must allow their children to talk frequently at random. Amongst a multitude of hazarded observations a happy hit is now and then made : for these happy hits children who are to be made wits should be praised ; and they must acquire sufficient courage to speak from a cursory view of things ; therefore the mistakes they make from superficial examination must not be pointed out to them ; their attention must be turned to the comic, rather than to the serious side of objects ; they must study the different meanings and powers of words ; they should hear witty conversation, read epigrams, and comedies : and in all company they should be exercised

before numbers in smart dialogue and repartee.

When we mention the methods of educating a child to be witty, we at the same time point out the dangers of this education: and it is but just to warn parents against expecting inconsistent qualities from their pupils. Those who steadily prefer the solid advantages of judgment, to the transient brilliancy of wit, should not be mortified when they see their children, perhaps, deficient at nine or ten years old in the showy talents for general conversation; they must bear to see their pupils appear slow; they must bear the contrast of flippant gaiety and sober simplicity; they must pursue exactly an opposite course to that which has been recommended for the education of wits; they must never praise their pupils for hazarding observations; they must cautiously point out any mistakes that are made from a precipitate survey of objects; they should not harden their pupils against that feeling of shame, which arises in the mind from the perception of having uttered an absurdity; they should never

encourage their pupils to play upon words; and their admiration of wit should never be vehemently or enthusiastically expressed.

We shall give a few examples to convince parents, that children, whose reasoning powers have been cultivated, are rather slow in comprehending and in admiring wit. They require to have it explained, they want to settle the exact justice and morality of the repartee, before they will admire it.

(November 20th, 1795.) To day at dinner the conversation happened to turn upon wit. Somebody mentioned the well known reply of the hackney coachman to Pope. S——, a boy of nine years old, listened attentively; but did not seem to understand it, his father endeavoured to explain it to him. "Pope was a little ill made man; his favourite exclamation was, 'God mend me!' Now, when he was in a passion with the hackney coachman, he cried as usual, 'God mend me!' 'Mend you, Sir,' said the coachman: 'it would be easier to make a new one.' Do you understand this now, S——?"

S—— looked dull upon it, and, after some minutes consideration, said, "Yes, Pope was ill made; the man meant it would be better to make a new one than to mend him." S—— did not yet seem to taste the wit; he took the answer literally, and understood it soberly.

Immediately afterwards, the officer's famous reply to Pope was told to S——. About ten days after this conversation, S—— said to his sister, "I wonder, M——, that people don't oftener laugh at crooked people: like the officer who called Pope a note of interrogation."

M——. "It would be ill natured to laugh at them."

S——. "But you all praised that man for saying *that* about Pope. You did not think him ill natured."

Mr. ——. "No, because Pope had been impertinent to him."

S——. "How?"

M——. "Don't you remember, that when the officer said that a note of interro-

"gation would make the passage clear, Pope
"turned round, and looking at him with great
"contempt, asked if he knew what a note of
"interrogation was?"

S———. "Yes, I remember that; but I
"do not think that was very impertinent, be-
"cause Pope might not know whether the
"man knew it or not."

Mr. ———. "Very true; but then you
"see, that Pope took it for granted that the
"officer was extremely ignorant; a boy who
"is just learning to read knows what a note of
"interrogation is."

S——— (thoughtfully). "Yes, it *was* rude
"of Pope; but then the man was an officer,
"and therefore, it was very likely that he
"might be ignorant; you know you said that
"officers were often very ignorant."

Mr. ———. "I said *often*; but not *always*.
"Young men, I told you, who are tired of
"books, and ambitious of a red coat, often
"go into the army to save themselves the trou-
"ble of acquiring the knowledge necessary for
"other professions. A man cannot be a good

“lawyer, or a good physician, without having
 “acquired a great deal of knowledge ; but an
 “officer need have little knowledge to know
 “how to stand to be shot at. But though it
 “may be true in general that officers are often
 “ignorant, it is not necessary that they should
 “be so ; a man in a red coat may have as
 “much knowledge as a man in a black, or a
 “blue one ; therefore no sensible person should
 “decide that a man is ignorant merely because
 “he is an officer, as Pope did.”

S——. “No to be sure. I understand
 “now.”

M——. “But I thought, S——, you
 “understood this before.”

Mr. ——. “He is very right not to let
 “it pass without understanding it thoroughly.
 “You are very right, S——, not to swallow
 “things whole ; chew them well.”

S—— looked as if he was still chewing.

M——. “What are you thinking of,
 “S——?”

S——. “Of the man’s laughing at Pope
 “for being crooked.”

Mr. ——. “If Pope had not said any thing
“rude to that man, the man would have done
“very wrong to have laughed at him. If the
“officer had walked into a coffee-house, and
“pointing at Pope, had said, ‘there’s a little
“crooked thing like a note of interrogation,’
“people might have been pleased with his wit
“in seeing that resemblance, but they would
“have disliked his ill nature ; and those who
“knew Mr. Pope would probable have an-
“swered, Yes, Sir, but that crooked little man
“is one of the most witty men in England ; he
“is the great poet, Mr. Pope.’ But when Mr.
“Pope had insulted the officer the case was
“altered. Now, if the officer had simply an-
“swered, when he was asked what a note of
“interrogation was, ‘a little crooked thing ;’
“and if he had looked at Pope from head to
“foot as he spoke these words, every body’s
“attention would have been turned upon
“Pope’s figure ; but then the officer would
“have reproached him only for his personal
“defects ; but by saying, ‘a little crooked
“thing *that asks questions*,’ the officer reproved

“Pope for his impertinence. Pope had just asked him a question, and every body perceived the double application of the answer. It was an exact description of a note of interrogation, and of Mr. Pope. It is this sort of partial resemblance quickly pointed out between things, which at first appear very unlike, that surprises and pleases people, and they call it wit.”

How difficult it is to explain wit to a child! and how much more difficult to fix its value and morality! About a month after this conversation had passed, S—— returned to the charge: his mind had not been completely settled about *wit*.

(January 9th, 1796.) “So, S——, you don’t yet understand wit, I see,” said M—— to him, when he looked very grave at something that was said to him in jest. S—— immediately asked, “What is wit?”

M—— answered (laughing), “Wit is the folly of grown up people.”

Mr. ——. “How can you give the boy such an answer! Come to me, my dear,

“and I’ll try if I can give you a better. There
 “are two kinds of wit, one which depends upon
 “words, and another which depends upon
 “thoughts. I will give you an instance of wit
 “depending upon words :

“Hear yonder beggar, how he cries
 “I am so lame, I cannot rise !
 “If he tells truth, he lies.”

“Do you understand that ?”

S——. “No ! If he tells truth he lies !

“No, he can’t both tell truth and tell a lie at
 “the same time ; that’s impossible.”

Mr. —— . “Then there is something in the
 “words which you don’t understand : in the
 “*common* sense of the words they contradict
 “each other ; but try if you can find out
 “any uncommon sense, any word which can
 “be understood in two senses.”

S—— muttered the words, “if he tells truth
 “he lies,” and looked indignant, but presently
 said, “Oh, now I understand ; the beggar was
 “lying down ; he lies, means he lies down, not
 “he tells a lie.”

The perception of the double meaning of the

words did not seem to please this boy; on the contrary, it seemed to provoke him, and he appeared to think that he had wasted his time upon the discovery.

Mr. —. “ Now I will give you an instance
“ of wit that depends upon the ideas rather
“ than on the words. A man of very bad cha-
“ racter had told falsehoods of another, who
“ then made these two lines :

“ Lie on, whilst my revenge shall be,
“ To tell the very truth of thee.”

S — approved of this immediately, and heartily, and recollected the only epigram he knew by rote, one which he had heard in conversation two or three months before this time. It was made upon a tall stupid man, who had challenged another to make an epigram extempore upon him.

“ Unlike to Robinson shall be my song;
“ It shall be witty, and it shan’t be long.”

At the time S — first heard this epigram, he had been as slow in comprehending it as possible; but after it had been thoroughly ex-

plained, it pleased him, and remained fixed in his memory.

Mr. ——— observed, that this epigram contained wit both in words and in ideas; and he gave S—— one other example. “ There were
“ two contractors; I mean people who make a
“ bargain with government, or with those who
“ govern the country, to supply them with
“ certain things at a certain price; there were
“ two contractors, one of whom was employed
“ to supply government with corn, the other
“ agreed to supply government with rum.
“ Now, you know, corn may be called grain,
“ and rum may be called spirit. Both these
“ contractors cheated in their bargain; both
“ their names were the same; and the follow-
“ ing epigram was made on them.

“ Both of a name, lo! two contractors come;
“ One cheats in corn, and t’other cheats in rum.
“ Which is the greater, if you can, explain,
“ A rogue in spirit, or a rogue in grain?”

“ *Spirit*,” continued Mr. ———, “ has another
“ sense, you know—will, intention, soul; he
“ has the spirit of a rogue; she has the spirit of
“ contradiction. And grain has also another.

" meaning ; the grain of this table, the grain of
 " your coat. Dyed in grain, means dyed into
 " the substance of the material so that the dye
 " can't be washed out. A rogue in grain,
 " means a man whose habit of cheating is fixed
 " in his mind : and it is difficult to determine
 " which is the worst, a man who has the wish,
 " or a man who has the habit of doing wrong.
 " At first it seems as if you were only asked
 " which was the worst, to cheat in felling grain,
 " or in felling spirit ; but the concealed mean-
 " ing makes the question both sense and wit."

These detailed examples we fear may appear
 tiresome ; but we know not how without them
 to explain ourselves fully. We should add for
 the consolation of those who admire wit, and
 we are amongst the number ourselves, that it is
 much more likely that wit should be engrafted
 upon judgment, than that judgment should be
 engrafted upon wit.

We hope that we have, in the chapter on
 books, fully explained the danger of accustom-
 ing children to read what they do not under-
 stand. Poetry they cannot early comprehend,

and even if they do understand it, they cannot improve their reasoning faculty by poetic studies. The analogies of poetry and of reasoning are very different. "The muse," says an excellent judge upon this subject, "would make but an indifferent school-mistress." We include under the head poetry all books in which declamation and eloquence are substituted for reasoning. We should accustom our pupils to judge strictly of the reasoning which they meet with in books; no names of high authority should ever preclude an author's arguments from examination.

The following passage from St. Pierre's *Etudes de la Nature* was read to two boys: H—, 14 years old; S—, 10 years old.

"Hurtful insects present (the same) oppositions and signs of destruction; the gnat, thirsty of human blood, announces himself to our sight by the white spots with which his brown body is speckled; and by the shrill sound of his wings, which interrupts the calm of the groves, he announces himself to our ear as well as to our eye. The carnivorous

"wasp is streaked like the tiger, with bands of black over a yellow ground."

H—— and S—— both at once exclaimed, that these spots in the gnat, and streaks in the wasp, had nothing to do with their stinging us. "The buzzing of the gnat," said S——, "would, I think, be a very agreeable found to us, if we did not know that the gnat would sting, and that it was coming near us; and, as to the wasp, I remember stopping one day upon the stairs to look at the beautiful black and yellow body of a wasp. I did not think of danger, nor of it's stinging me then, and I did not know that it was like the tiger. After I had been stung by a wasp, I did not think a wasp such a beautiful animal. I think it is very often from our knowing that animals can hurt us, that we think them ugly. "We might as well say," continued S——, pointing to a crocus which was near him, "we might as well say, that a man who has a yellow face has the same disposition as that crocus, or that the crocus is in every thing like the man, because it is yellow."

Cicero's "curious consolation for deafness" is properly noticed by Mr. Hume. It was read to S—— a few days ago, to try whether he could detect the sophistry: he was not previously told what was thought of it by others.

"How many languages are there," says Cicero, "which you do not understand! The Punic, Spanish, Gallic, Egyptian, &c. With regard to all these you are as if you were deaf, and yet you are indifferent about the matter. Is it then so great a misfortune to be deaf to one language more?"

"I don't think," said S——, "that was at all a good way to console the man, because it was putting him in mind that he was more deaf than he thought he was. He did not think of those languages, perhaps, till he was put in mind that he could not hear them."

In stating any question to a child, we should avoid letting our own opinion be known, lest we lead or intimidate his mind. We should also avoid all appearance of anxiety, all impatience for the answer; our pupil's mind should be in a calm state when he is to judge: if we

turn his sympathetic attention to our hopes and fears, we agitate him, and he will judge by our countenances rather than by comparing the objects or propositions which are laid before him.

Some people, in arguing with children, teach them to be disingenuous by the uncandid manner in which they proceed ; they show a desire for victory rather than for truth ; they state the arguments only on their own side of the question, and they will not allow the force of those which are brought against them. Children are thus piqued, instead of being convinced, and in their turn they become zealots in support of their own opinions ; they hunt only for arguments in their own favour, and they are mortified when a good reason is brought on the opposite side of the question to that on which they happen to have enlisted. To prevent this we should never argue, or suffer others to argue for victory with our pupils ; we should not praise them for their cleverness in finding out arguments in support of their own opinion ; but we should praise their candour and good sense when they perceive and acknowledge the force of

their opponent's arguments. They should not be exercised as advocates, but as judges; they should be encouraged to keep their minds impartial, to sum up the reasons which they have heard, and to form their opinion from these without regard to what they may have originally asserted. We should never triumph over children for changing their opinion. "I thought you were on *my* side of the question; or, I thought you were on the other side of the question just now!" is sometimes tauntingly said to an ingenuous child, who changes his opinion when he hears a new argument. You think it a proof of his want of judgment, that he changes his opinion. Do you think it a proof that your scales are bad, because they vibrate with every additional weight that is added to either side?

Idle people sometimes amuse themselves with trying the judgment of children, by telling them improbable, extravagant stories, and then ask the simple listeners whether they believe what has been told them. The readiness of belief in children will always be proportioned to their

experience of the veracity of those with whom they converse ; consequently children, who live with those who speak truth to them, will scarcely ever be inclined to doubt the veracity of strangers. Such trials of the judgment of our pupils should never be permitted. Why should the example of lying be set before the honest minds of children, who are far from silly when they shew simplicity ? They guide themselves by the best rules, by which even a philosopher in similar circumstances could guide himself. The things asserted are extraordinary, but the children believe them, because they have never had any experience of the falsehood of human testimony.

The Socratic mode of reasoning is frequently practised upon children. People arrange questions artfully, so as to bring them to whatever conclusion they please. In this mode of reasoning much depends upon getting the first move ; the child has very little chance of having it, his preceptor usually begins first with a peremptory voice, " Now answer me this question ? " The pupil, who knows that the interrogatories are

put with a design to entrap him, is immediately alarmed, and instead of giving a direct candid answer to the question, is always looking forward to the possible consequences of his reply; or he is considering how he may evade the snare that is laid for him. Under these circumstances he is in imminent danger of learning the shuffling habits of cunning; he has little chance of learning the nature of open, manly investigation.

Preceptors, who imagine that it is necessary to put on very grave faces, and to use much learned apparatus in teaching the art of reasoning, are not nearly so likely to succeed as those are, who have the happy art of encouraging children to lay open their minds freely, and who can make every pleasing trifle an exercise for the understanding. If it be playfully pointed out to a child that he reasons ill, he smiles and corrects himself; but you run the hazard of making him positive in error, if you reprove or ridicule him with severity. It is better to seize the subjects that accidentally arise in conversa-

tion, than formally to prepare subjects for discussion.

“ The king’s stag hounds,” (says Mr. White of Selborne, in his entertaining observations on quadrupeds*,) the king’s stag hounds “ came down to Alton, attended by a huntsman and six yeoman prickers with horns, to try for the stag that has haunted Hartley-wood and its environs for so long a time. Many hundreds of people, horse and foot, attended the dogs to see the deer unharboured ; but though the huntsman drew Hartley-wood, and Long-coppice, and Shrub-wood, and Temple-hangers, and in their way back, Hartley, and Ward-le-ham-hangers, yet no stag could be found.

“ The royal pack, accustomed to have the deer turned out before them, never drew the coverts with any address and spirit,” &c.

Children, who are accustomed to have the game started and turned out before them by their

* A Naturalist’s Calendar by the late Rev. Gilbert White, M. A. published by Dr. Aikin, printed for B. and J. White, Fleet-Street.

preceptors, may perhaps, like the royal pack, lose their wonted address and spirit, and may be disgracefully *at a fault* in the public chace. Preceptors should not help their pupils out in argument, they should excite them to explain and support their own observations.

Many ladies shew in general conversation the powers of easy raillery joined to reasoning, unincumbered with pedantry. If they would employ these talents in the education of their children, they would probably be as well repaid for their exertions, as they can possibly be by the polite, but transient applause, of the visitors to whom they usually devote their powers of entertaining. A little praise or blame, a smile from a mother, or a frown, a moment's attention, or a look of cold neglect, have the happy, or the fatal power of repressing or of exciting the energy of a child, of directing his understanding to useful or pernicious purposes. Scarcely a day passes in which children do not make some attempt to reason about the little events which interest them, and upon these occasions a mother, who joins in conversation

with her children, may instruct them in the art of reasoning without the parade of logical disquisitions.

Mr. Locke has done mankind an essential service, by the candid manner in which he has spoken of some of the learned forms of argumentation. A great proportion of society, he observes, are unacquainted with these forms, and have never heard the name of Aristotle; yet without the aid of syllogisms, they can reason sufficiently well for all the useful purposes of life, often much better than those who have been disciplined in the schools. It would indeed "be putting one man sadly over the head of another," to confine the reasoning faculty to the disciples of Aristotle, to any sect or system, or to any forms of disputation. Mr. Locke has very clearly shewn, that syllogisms do not assist the mind in the perception of the agreement or disagreement of ideas; but, on the contrary, that they invert the natural order in which the thoughts should be placed, and in which they must be placed, before we can draw a just conclusion. To children who are not familiarised

with scholastic terms, the sound of harsh words, and quaint language, unlike any thing that they hear in common conversation, is alone sufficient to alarm their imagination with some confused apprehension of difficulty. In this state of alarm they are seldom sufficiently masters of themselves, either to deny or to acknowledge an adept's major, minor, or conclusion. Even those who are most expert in syllogistical reasoning do not often apply it to the common affairs of life; in which reasoning is just as much wanted as it is in the abstract questions of philosophy: and many argue, and conduct themselves with great prudence and precision, who might, perhaps, be caught on the horns of a dilemma, or who would infallibly fall victims to *the crocodile*.

Young people should not be ignorant, however, of these boasted forms of argumentation; and it may, as they advance in the knowledge of words, be a useful exercise to resist the attacks of sophistry. As defensive weapons, it is necessary, that young people should have the command of logical terms; as offensive wea-

pons, no ingenuous person would wish to teach a child to employ them. They should know the evolutions, and be able to perform the exercise of a logician, according to the custom of the times, according to the usage of different nations ; but they should not attach any undue importance to this technical art : nor should they trust to it in the day of battle.

We have seen fyllogisms, crocodiles, enthymemas, sorites, &c. explained and tried upon a boy of nine or ten years old in playful conversation, so that he became accustomed to the terms without learning to be pedantic in the abuse of them ; and his quickness in reasoning was increased by exercise in detecting puerile sophisms: such as that of *the Cretans*—Gorgias and his bargain about the winning of his first cause. In the following sorites* of Themistocles—“ My son commands his mother ; his
“ mother commands me ; I command the Athenians ; the Athenians command Greece ;
“ Greece commands Europe ; Europe com-

* V. Deinology ; where there are many entertaining examples of the figures of rhetoric.

"mands the whole earth; therefore my son
"commands the whole earth"—the sophism
depends upon the inaccurate use of the word
commands, which is employed in different
senses in the different propositions. This error
was without difficulty detected by S—— at ten
years old; and we make no doubt that any
unprejudiced boy of the same age would imme-
diately point out the fallacy without hesitation;
but we do not feel quite sure that a boy exer-
cised in logic, who had been taught to admire
and reverence the ancient figures of rhetoric,
would with equal readiness detect the sophism.
Perhaps it may seem surprising, that the same
boy, who judged so well of this sort of
Themistocles, should a few months before have
been easily entrapped by the following simple
dilemma:

M——. "We should avoid what gives us
pain."

S——. "Yes to be sure."

M——. "Whatever burns us gives us
pain."

S——. "Yes, that it does!"

M——. "We should then avoid whatever burns us."

To this conclusion S—— heartily assented, for he had but just recovered from the pain of a burn.

M——. "Fire burns us."

S——. "Yes, I know that."

M——. "We should then avoid fire."

S——. "Yes."

This hasty *yes* was extorted from the boy by the mode of interrogatory; but he soon perceived his mistake.

M——. "We should avoid fire. What 'when we are very cold?'"

S——. "Oh, no; I meant to say, that we 'should avoid a certain degree of fire. We 'should not go *too* near the fire. We should 'not go *so* near as to burn ourselves."

Children who have but little experience frequently admit assertions to be true in general, which are only true in particular instances. and this is often attributed to their want of judgment: it should be attributed to their want of experience. Experience, and nothing else,

can rectify these mistakes: if we attempt to correct them by words, we shall merely teach our pupils to argue about terms, not to reason. Some of the questions and themes which are given to boys may afford us instances of this injudicious education. "Is eloquence advantageous, or hurtful to a state?" What a vast range of ideas, what variety of experience in men and things should a person possess, who is to discuss this question! Yet it is often discussed by unfortunate scholars of eleven or twelve years old. "What is the greatest good?" The answer expected by a preceptor to this question obviously is, virtue; and, if a boy can in decent language write a page or two about *pleasure's* being a transient, and *virtue's* being a permanent good, his master flatters himself that he has early taught him to reason philosophically. But what ideas does the youth annex to the words pleasure and virtue? Or does he annex any? If he annex no idea to the words, he is merely talking about sounds.

All reasoning ultimately refers to matters of fact; to judge whether any piece of reasoning

be within the comprehension of a child, we must consider whether the facts to which it refers are within his experience. The more we increase his knowledge of facts, the more we should exercise him in reasoning upon them; but we should teach him to examine carefully before he admits any thing to be a fact, or any assertion to be true. Experiment, as to substances, is the test of truth; and attention to his own feelings, as to matters of feeling. Comparison of the evidence of others with the general laws of nature, which he has learned from his own observation, is another mode of obtaining an accurate knowledge of facts. M. Condillac, in his *Art of Reasoning*, maintains, that the evidence of reason depends solely upon our perception of the *identity*, or, to use a less formidable word, *sameness*, of one proposition with another. "A demonstration," he says, "is only a chain of propositions, in which the same ideas passing from one to the other differ only because they are differently expressed; the evidence of any reasoning consists solely in its identity."

M. Condillac * exemplifies this doctrine by translating this proposition, "The measure of every triangle is the product of its height by half its base," into self-evident, or, as he calls them, identical propositions. The whole ultimately referring to the ideas which we have obtained by our senses of a triangle; of its base, of measure, height, and number. If a child had not previously acquired any one of these ideas, it would be in vain to explain one term by another, or to translate one phrase or proposition into another; they might be identical, but they would not be self-evident propositions to the pupil; and no conclusion, except what relates merely to words, could be formed from such reasoning. The moral which we should draw from Condillac's observations for Practical Education must be, that clear ideas should first be acquired by the exercise of the senses, and that afterwards, when we reason about

* Une démonstration est donc une suite de propositions, où les mêmes idées passant de l'une à l'autre, ne diffèrent que parce qu'elles sont énoncées différemment; et l'évidence d'un raisonnement consiste uniquement dans l'identité. V. Art de Raïsonner, p. 2.

things in words, we should use few and accurate terms, that we may have as little trouble as possible in changing or translating one phrase or proposition into another.

Children, if they are not overawed by authority, if they are encouraged in the habit of observing their own sensations, and if they are taught precision in the use of the words by which they describe them, will probably reason accurately where their own feelings are concerned.

In appreciating the testimony of others, and in judging of chances and probability, we must not expect our pupils to proceed very rapidly. There is more danger that they should overrate, than that they should undervalue the evidence of others; because, as we formerly stated, we take it for granted, that they have had little experience of falsehood. We should, to preserve them from credulity, excite them, in all cases where it can be obtained, never to rest satisfied without the strongest species of evidence, that of their own senses. If a child says, "I am sure of such a thing," we should immediately examine into his reasons for be-

lieving it. "Mr. A. or Mr. B. told me so," is not a sufficient cause of belief, unless the child has had long experience of A, and B.'s truth and accuracy; and, at all events, the indolent habit of relying upon the assertions of others, instead of verifying them, should not be indulged.

It would be waste of time to repeat those experiments, of the truth of which the uniform experience of our lives has convinced us; we run no hazard, for instance, in believing any one who simply asserts, that they have seen an apple fall from a tree; this assertion agrees with the great natural *law of gravity*, or, in other words, with the uniform experience of mankind: but if any body told us, that they had seen an apple hanging self-poised in the air, we should reasonably suspect the truth of their observation, or of their evidence. This is the first rule which we can most readily teach our pupils in judging of evidence. We are not speaking of children from four to six years old, for every thing is almost equally extraordinary to them; but when children are about ten or

eleven, they have acquired a sufficient variety of facts to form comparisons, and to judge to a certain degree of the probability of any new fact that is related. In reading and in conversation we should now exercise them in forming judgments, where we know that they have the means of comparison. "Do you believe such a thing to be true? and why do you believe it? Can you account for such a thing?" are questions we should often ask at this period of their education. On hearing extraordinary facts some children will not be satisfied with vague assertions, others content themselves with saying, "It is so, I read it in a book." We should have little hopes of those who swallow every thing they read in a book; we are always pleased to see a child hesitate and doubt, and require positive proof before he believes. The taste for the marvellous is strong in ignorant minds, the wish to account for every new appearance characterises the cultivated pupil.

A lady told a boy of nine years old (S——) the following story, which she had just met with in "The Curiosities of Literature." An

officer, who was confined in the Bastille, used to amuse himself by playing on the flute: one day he observed, that a number of spiders came down from their webs, and hung round him as if listening to his music; a number of mice also came from their holes, and retired as soon as he stopped. The officer had a great dislike to mice; he procured a cat from the keeper of the prison, and when the mice were entranced by his music, he let the cat out amongst them.

S— was much displeased by this man's treacherous conduct towards the poor mice, and his indignation for some moments suspended his reasoning faculty; but, when S— had sufficiently expressed his indignation against the officer in the affair of the mice, he began to question the truth of the story; and he said, that he did not think it was certain, that the mice and spiders came to listen to the music. "I do not know about the mice," said he, "but I think, perhaps, when the officer played upon the flute, he set the air in motion, and shook the cobwebs, so as to disturb the spiders." We do not, nor did the child think,

that this was a satisfactory account of the matter, but we mention it as an instance of the love of investigation, which we wish to encourage.

The difficulty of judging concerning the truth of evidence increases, when we take moral causes into the account. If we had any suspicion, that a man who told us that he had seen an apple fall from a tree, had himself pulled the apple down and stolen it, we should set the probability of his telling a falsehood, and his motive for doing so, against his evidence; and though, according to the natural physical course of things, there would be no improbability in his story, yet there might arise improbability from his character for dishonesty; and thus we should feel ourselves in doubt concerning the fact. But if two people agreed in the same testimony our doubt would vanish, the dishonest man's doubtful evidence would be corroborated, and we should believe, notwithstanding his general character, in the truth of his assertion in this instance. We could make the matter infinitely more complicated, but what has been

said will be sufficient to suggest to preceptors the difficulty, which their young and inexperienced pupils must feel, in forming judgments of facts where physical and moral probabilities are in direct opposition to each other.

We wish that a writer equal to such a task would write trials for children as exercises for their judgment; beginning with the simplest, and proceeding gradually to more complicated cases in which moral reasonings can be used. We do not mean, that it would be advisable to initiate young readers in the technical forms of law; but the general principles of justice, upon which all law is founded, might, we think, be advantageously exemplified. Such trials would entertain children extremely. There is a slight attempt at the kind of composition we mean, in a little trial in *Evenings at Home*; and we have seen children read it with great avidity. Cyrus's judgment about the two coats, and the ingenious story of the olive merchant's cause rejudged by the sensible child in the *Arabian Tales*, have been found highly interesting to a young audience.

We should prefer truth to fiction; if we could select any instances from real life, any trials suited to the capacity of young people, they would be preferable to any which the most ingenious writer could invent for our purpose. A gentleman, who has taken his two sons, one of them ten, and the other fifteen years old, to hear trials at his county assizes, found by the account which the boys gave of what they had heard, that they had been interested, and that they were capable of understanding the business.

Allowance must be made at first for the bustle and noise of a public place, and for the variety of objects which distract the attention.

Much of the readiness of forming judgments depends upon the power of discarding and obliterating from our mind all the superfluous circumstances; it may be useful to exercise our pupils, by telling them now and then stories in the confused manner in which they are sometimes related by puzzled witnesses; let them reduce the heterogeneous circumstances to order, make a clear statement of the case for themselves, and try if they can point out the

facts on which the decision principally rests. This is not merely education for a lawyer, the powers of reasoning and judgment, when they have been exercised in this manner, may be turned to any art or profession. We should, if we were to try the judgment of children, observe, whether in unusual circumstances they can apply their former principles, and compare the new objects that are placed before them without perplexity. We have sometimes found, that on subjects entirely new to them, children, who have been used to reason, can lay aside the circumstances that are not essential, and form a distinct judgment for themselves, independently of the opinion of others.

Last winter the entertaining life of the celebrated miser Mr. Elwes was read aloud in a family, in which there were a number of children. Mr. Elwes, once, as he was *walking* home on a dark night, in London, ran against a chair pole and bruised both his skins. His friends sent for a surgeon. Elwes was alarmed at the idea of expence, and he laid the surgeon a wager to the amount of his bill, that the leg

which he took under his own protection would get well sooner than that which was put under the surgeon's care ; at the same time Mr. Elwes promised to put nothing to the leg of which he took charge. Mr. Elwes's favourite leg got well sooner than that which the surgeon had undertaken to cure, and Mr. Elwes won his wager. In a note upon this transaction his biographer says, "This wager would have been a bubble bet if it had been brought before the Jockey-club, because Mr. Elwes, though he promised to put nothing to the leg under his own protection, took Velnos' vegetable sirup during the time of its cure."

C—— (a girl of 12 years old,) observed when this anecdote was read, that "still the wager was a fair wager, because *the medicine* which Mr. Elwes took, if it was of any use, must have been of use to both legs ; therefore the surgeon and Mr. Elwes had equal advantage from it." C—— had never heard of the Jockey club, nor of bubble bets before, and she used the word *medicine*, because she forgot the name of Velnos' vegetable sirup.

We have observed, that works of criticism are unfit for children, and teach them rather to remember what others say of authors, than to judge of the books themselves impartially; but, when we objected to works of criticism, we did not mean to object to criticism; we think it an excellent exercise for the judgment, and we have ourselves been so well corrected, and so kindly assisted by the observations of young critics, that we cannot doubt their capacity. This book has been read to a jury of young critics, who gave their utmost attention to it for about half an hour at a sitting, and many amendments have been made from their suggestions. In the chapter on obstinacy, for instance, when we were asserting, that children sometimes forget their old bad habits, and do not consider these as a part of themselves, there was this allusion.

“As the snake when he casts his skin leaves
“the slough behind him, and winds on his
“way in new and beautiful colours.”

The moment this sentence was read, it was objected to by the audience. S——, who had

been pondering over the affair in silence, exclaimed, "But I think there is a fault in the allusion; do not snakes cast their skins every year? Then these *new and beautiful colours*, which are the good habits, must be thrown aside and forgotten the next time; but that should not be."

This criticism appeared conclusive even to the author, and the sentence was immediately expunged.

When young people have acquired a command of language, we must be careful lest their fluency and their ready use of synonymous expressions should lessen the accuracy of their reasoning. Mr. Horne Tooke has ably shewn the connection between the study of language and the art of reasoning. It is not necessary to make our pupils profound grammarians, or etymologists, but attention to the origin, abbreviations, and various meanings of words, will assist them not only to speak, but to think and argue with precision. This is not a study of abstract speculation, but of practical, daily utility; half the disputes, and much of the

misery of the world, originate and perpetuate themselves by the inaccurate use of words. One party uses a word in *this* sense, the opposite party uses the same word in another sense; all their reasonings appear absurd to each other; and, instead of explaining them, they quarrel. This is not the case merely in *philosophical* disputes between authors, but it happens continually in the busy active scenes of life. Even whilst we were writing this passage, in the newspaper of to-day we met with an instance, that is sufficiently striking.

"The accusation against me," says Sir Sidney Smith, in his excellent letter to Pichegru, expostulating upon his unmerited confinement, "brought forward by *your* justice of the peace, "was, that I was the enemy of the republic. "You know, General, that with military men "the word *enemy* has merely a technical signification, without expressing the least character "of hatred. You will readily admit this principle, "the *result* of which is, that I ought not to be "persecuted for the injury I have been enabled "to do whilst I carried arms against you."

Here the argument between two Generals, one of whom is pleading for his liberty, if not for his life, turns upon the meaning and construction of a single word. Accuracy of reasoning, and some knowledge of language, may, it appears, be of essential service in all professions.

It is not only necessary to attend to the exact meaning which is avowedly affixed to any terms used in argument, but it is also useful to attend to the thoughts which are often suggested to the disputants by certain words. Thus, the words happiness, and beauty, suggest in conversation very different ideas to different men, and in arguing concerning these they could never come to a conclusion: even persons who agree in the same definition of a word frequently do not sufficiently attend to the ideas which the word suggests; to the association of thoughts and emotions which it excites; and, consequently, they cannot strictly abide by their own definition, nor can they discover where the error lies. We have observed, that the imagination is powerfully affected by words that suggest

long trains of ideas; our reasonings are influenced in the same manner, and the elliptical figures of speech are used in reasoning as well as in poetry.

“I would do so and so, if I were Alexander.”

“And so would I, if I were Parmenio :”

is a short reply, which suggests a number of ideas, and a train of reasoning. To those who cannot supply the intermediate ideas the answer would not appear either sublime or rational. Young people, when they appear to admire any compressed reasoning, should be encouraged to shew, that they can supply the thoughts and reasons that are not expressed. Vivacious children will be disgusted, however, if they are required to detail upon the subject; all that is necessary is, to be sure that they actually comprehend what they admire.

Sometimes a question that appears simple involves the consideration of others which are difficult. Whenever a preceptor cannot go to the bottom of the business, he will do wisely to say so at once to his pupil, instead of attempting a superficial or evasive reply. For instance,

if a child was to hear that the Dutch burn and destroy quantities of spice, the produce of their India islands, he would probably express some surprise, and perhaps some indignation. If a preceptor were to say, "The Dutch have a right to do what they please with what is their own, and the spice is their own," his pupil would not be satisfied; he would probably say, "Yes, they have a right to do what they please with what is their own; but why should they destroy what is useful?" The preceptor might answer, if he chose to make a foolish answer, "The Dutch follow their own interest in burning the spice; they sell what remains at a higher price; the market would be overstocked if they did not burn some of their spice." Even supposing the child to understand the terms, this would not be a satisfactory answer; nor could one be given without discussing the nature of commerce, and the *justice* of monopolies. Where one question in this manner involves another, we should postpone the discussion if it cannot be completely made; the road may be just

pointed out, and the pupil's curiosity may be excoited to future enquiry. It is even better to be ignorant, than to have superficial knowledge.

A philosopher, who himself excelled in accuracy of reasoning, recommends the study of mathematics to improve the acuteness and precision of the reasoning faculty*. To study any thing accurately will have an excellent effect upon the mind, and we may afterwards direct the judgment to whatever purposes we please. It has been often remarked, as a reproach upon men of science and literature, that those who judge extremely well of books, and of abstract philosophical questions, do not shew the same judgment in the active business of life; a man, undoubtedly, may be a good mathematician, a good critic, an excellent writer, and may yet not shew, or rather not employ, much judgment in his conduct: his powers of reasoning cannot be deficient, the habit of employing those powers in conducting himself he should have been taught by early education. Moral

* Locke, On the Conduct of the Human Understanding.

reasoning, and the habit of acting in consequence of the conviction of judgment, we call prudence; a virtue of so much consequence to all the other virtues, a virtue of so much consequence to ourselves and to our friends, that it surely merits a whole chapter in Practical Education.

CHAPTER XXIV.

ON PRUDENCE AND ECONOMY.

VOLTAIRE says, that the king of Prussia always wrote with one kind of enthusiasm, and acted with another. It often happens, that men judge with one degree of understanding, and conduct themselves with another * ; hence the common place remarks on the difference between theory and practice ; hence the observation, that it is easy to be prudent for other people, but extremely difficult to be pru-

* Here lies the mutton eating king ;
Whose promise none relied on ;
Who never *said* a foolish thing,
And never did a wise one.

EPITAPH on Charles 2d.

dent for ourselves. Prudence is a virtue compounded of judgment and resolution: we do not here speak of that narrow species of prudence, which is more properly called worldly wisdom; but we mean that enlarged, comprehensive wisdom, which, after taking a calm view of the objects of happiness, steadily prefers the greatest portion of felicity. This is not a selfish virtue, for, according to our definition, benevolence, as one of the greatest sources of our pleasures, must be included in the truly prudent man's estimate. Two things are necessary to make any person prudent, the power to judge, and the habit of acting in consequence of his conviction. We have in the preceding chapter, as far as we were able, suggested the best methods of cultivating the powers of reasoning in our pupils; we must now consider how these can be applied immediately to their conduct, and associated with habits of action.

Instead of deciding always for our young pupils, we should early accustom them to choose for themselves about every trifle which is interesting to childhood: if they choose wisely,

they should enjoy the natural reward of their prudence ; and if they decide rashly, they should be suffered to feel the consequence of their own error. Experience, it is said, makes even fools wise ; and the sooner we can give experience, the sooner we shall teach wisdom. But we must not substitute belief upon trust for belief upon conviction. When a little boy says, " I did not eat any more custard, because mamma told me that the custard would make me sick," he is only obedient, he is not prudent ; he submits to his mother's judgment, he does not use his own. When obedience is out of the question, children sometimes follow the opinions of others ; of this we formerly gave an instance (v. Toys) in the poor boy, who chose a gilt coach, because his mamma "*and every body said it was the prettiest,*" whilst he really preferred the useful cart : we should never prejudice them either by our *wisdom* or our folly.

When their attention is not turned to divine what the spectators think and feel, children will have leisure to consult their own minds, and

to compare their own feelings. As this has been already spoken of, we shall not dwell upon it; we only mention it as a necessary precaution in teaching prudence.

Some parents may perhaps fear, that, if they were to allow children to choose upon every trifling occasion for themselves, they would become wilful and troublesome: this certainly will be the effect, if we make them think that there is a pleasure in the exercise of free-will, independently of any good that may be obtained by judicious choice. "Now, my dear, you shall have *your* choice! You shall choose for *yourself*! You shall have your *free* choice!" are expressions that may be pronounced in such a tone, and with such an emphasis to a child, as immediately to excite a species of triumphant ecstasy from the mere idea of having his *own* free choice. By a different accent and emphasis we may represent the ideas of triumph, and without intimidating the pupil, we may turn his mind to the difficulties, rather than the glory of being in a situation to decide for himself.

We must not be surprised at the early imprudence of children ; their mistakes when they first are allowed to make a choice are inevitable ; all their sensations are new to them, consequently they cannot judge of what they shall like or dislike. If some of Lord Macartney's suite had, on his return from the late embassy to China, brought home some plant whose smell was perfectly unknown to Europeans, would it have been possible for the greatest philosopher in England to have decided, if he had been asked, whether he should like the unknown perfume ? Children for the first five or six years of their lives are in the situation of this philosopher, relatively to external objects. We should never reproachfully say to a child, " You asked to smell such a thing ; you asked to see such a thing ; and now you have had your wish, you don't like them ! " How can the child possibly judge of what he shall like or dislike, before he has tried ? Let him try experiments upon his own feelings ; the more accurate knowledge he acquires, the sooner he will be enabled to choose *prudently*. You may expe-

dite his progress, by exciting him to compare each new sensation with those to which he is already familiarised; this will counteract that love of novelty which is often found dangerous to prudence; if the mind is employed in comparing, it cannot be dazzled by new objects.

Children often imagine, that what they like for the present minute, they shall continue to like for ever; they have not learnt from experiment, that the most agreeable sensations fatigue, if they are prolonged or frequently repeated; they have not learnt, that all violent stimuli are followed by weariness or ennui. The sensible preceptor will not insist upon his pupil's knowing these things by inspiration, or will he expect that his assertions or prophecies should be implicitly believed; he will wait till the child *feels*, and at that moment he will excite his pupil to observe his own feelings. "You thought that you should never be tired of smelling that rose, or of looking at that picture; now you perceive that you *are* tired: remember this, it may be of use to you another time." If this be said in a friendly

manner, it will not pique the child to defend his past choice, but it will direct his future judgment.

Young people are often reproached for their imprudence in preferring a small present pleasure to a large distant advantage; this error also arises from inexperience, not from want of judgment, or deficiency in strength of mind.

When that which has been the future has in its turn become present, children begin to have some idea of the nature of time, and they can then form some comparisons between the value of present and future pleasures. This is a very slow process; old people calculate and depend upon the distant future more than the young, not always from their increased wisdom or prudence, but merely from their increased experience, and consequent belief that the future will in time arrive. It is imprudent in old people to depend upon the future; if they were to reason upon the chance of their lives, they ought not to be secure of its arrival; yet habit in this instance, as in many others, is more powerful than reason; in all the plans of elderly

people there is seldom any error from impatience as to the future ; there often appear gross errors in their security as to its arrival. If these opposite habits could be mixed in the minds of the old, and of the young, it would be for their mutual advantage.

It is not possible to *infuse* experience into the mind ; our pupils must feel for themselves : but by teaching them to observe their own feelings we may abridge their labour ; a few lessons will teach a great deal when they are properly applied. To teach children to calculate and compare their present and future pleasures, we may begin by fixing short intervals of time for our experiments ; an hour, a day, a week, perhaps, are periods of time to which their imagination will easily extend ; they can measure and compare their feelings within these spaces of time, and we may lead them to observe their own errors in not providing for the future. “ Now “ Friday is come ; last Monday you thought “ Friday would never come. If you had not “ cut away all your pencil last week, you would

"have had some left to draw with to-day.

"Another time you will manage better." —

We should also lead them to compare their ideas of any given pleasure, before and after the period of its arrival. "You thought last summer that you should like making snow-balls in winter, better than making hay in summer. Now you have made snow-balls to-day; and you remember what you felt when you were making hay last summer; do you like the snow-ball pleasure, or the hay-making pleasure the best?" V. Berquin's *Quatre Saisons*.

If our pupils, when they have any choice to make, prefer a small gratification to a great future pleasure, we should not at the moment of their decision reproach their imprudence, but we should *steadily make them abide by their choice*; and when the time arrives at which the greater pleasure might have been enjoyed, we should remark the circumstance, but not with a tone of reproach, for it is their affair, not ours. "You preferred having a sheet of paper the moment you wanted it last week, to the

"having a quire of paper this week." "Oh, but," says the child, "I wanted a sheet of paper very much then, but I did not consider how soon this week would come, I wish I had chosen the quire." "Then remember what you feel now, and you will be able to choose better upon another occasion." We should always refer to the pupils own feelings, and look forward to their future advantage; the reason why so few young people attend to advice is, that their preceptors do not bring it actually home to their feelings; it is useless to reproach for past imprudence; the child sees the error as plainly as we do; all that can be done is to make it a lesson for the future.

To a geometrician the words *by proposition* stand for a whole demonstration: if he recollects that he has once gone over the demonstration, he is satisfied of its truth, and without verifying it again, he makes use of it in making out the demonstration of a new proposition. In moral reasoning, we proceed in the same manner; we recollect the result of our past experiments, and we refer to this moral de-

monstration in solving a new problem. In time, by frequent practice, this operation is performed so rapidly by the mind, that we scarcely perceive it, and yet it guides our actions. A man in walking across the room keeps out of the way of the tables and chairs, without perceiving that he reasons about the matter; a sober man avoids hard drinking, because he knows it to be hurtful to his health; but he does not every time he refuses to drink go over the whole train of reasoning which first decided his determination. A modern philosopher * calls this rapid species of reasoning "intuitive analogy;" applied to the business of life, the French call it tact. Sensible people have this tact in higher perfection than others, and prudent people govern themselves by it more regularly than others: by the methods which we have recommended, we hope it may be successfully cultivated in early education.

Rousseau, in expressing his contempt for those who make *habit* their only guide of action, goes, as he is apt to do in the heat of de-

* Darwin's Zoonomia.

clamation, into the error opposite to that which he ridicules. "The only habit," cries he, "that I wish my Emilius to have, is the habit of having no habits." Emilius would have been a strange being, had he literally accomplished his preceptor's wish. To go up stairs would have been a most operose, and to go down stairs a most tremendous affair to Emilius, for as he was to have no habits, between every step of the stairs new deliberations must take place, and fresh decisions of the judgment and will ensue. In his moral judgments Emilius would have had as much useless labour. Habit surely is necessary, even to those who make reason the ultimate judge of their affairs. Reason is not to be appealed to upon every trivial occasion, to rejudge the same cause a million of times. Must a man, every time he draws a straight line, repeat to himself, "a right line is that which lieth evenly between its points?" Must he rehearse the propositions of Euclid, instead of availing himself of their practical use?

"Christian, canst thou raise a perpendicular

“upon a straight line?” is the apostrophe with which the cross-legged emperor of Barbary, seated on his throne of rough deal boards, accosts every *learned* stranger who frequents his court. In the course of his reign, probably, his Barbaric majesty may have reiterated the demonstration of this favourite proposition, which he learned from a French surgeon, about five hundred times; but his majesty’s understanding is not materially improved by these recitals; his geometrical learning is confined, we are told, to this single proposition.

It would have been scarcely worth while to have singled out for combat this paradox of Rousseau’s concerning habit, if it had not presented itself in the formidable form of an antithesis. A false maxim conveyed in an antithesis is dangerous, because it is easily remembered and repeated, and it quickly passes current in conversation.

But to return to our subject, of which we have *imprudently* lost sight. Imprudence does not always arise from neglect of our past experience, or from our forgetting to take the future

into our calculations, but from false associations, or from passion. Objects often appear different to one man, from what they do to the rest of the world: this man may reason well upon what the majority of reasonable people agree to call false appearances; he may follow strictly the conviction of his own understanding, and yet the world will say that he acts very imprudently: To the taste or smell of those who are in a fever, objects not only appear, but really are to the patients different from what they appear to persons in sound health; in the same manner to the imagination objects have really a different value in moments of enthusiasm, from what they have in our cooler hours, and we scarcely can believe that our view of objects will ever vary. It is in vain to oppose reason to false associations, we must endeavour to combat one set of associations by another, and to alter the situation, and consequently, the views of the mistaken person. Suppose, for instance, that a child had been in a coach and fix upon some *pleasant* excursion (it is an improbable thing, but we may suppose any thing): sup-

pose that a child had enjoyed from some accidental circumstances an extraordinary degree of pleasure in a coach and six, he might afterwards long to be in a similar vehicle, from a mistaken notion, that it could confer happiness. Here we should not oppose the force of reasoning to a false association, but we should counteract the former association. Give the child an equal quantity of amusement when he is not in a coach and six, and then he will form fresh pleasurable associations with other objects which may balance his first prepossession. If you oppose reason ineffectually to passion or taste, you bring the voice and power of reason into discredit with your pupil. When you have changed his view of things, you may then reason with him, and show him the cause of his former mistake.

In the excellent fable of the shield that was gold on one side and silver on the other, the two disputants never could have agreed until they changed places. When you have in several instances proved by experiment that you judge more prudently than your pupil, he will

be strongly inclined to listen to your counsels, and then your experience will be of real use to him ; he will argue from it with safety and satisfaction. When, after recovering from fits of passion or enthusiasm, you have upon several occasions convinced him, that your admonitions would have prevented him from the pain of repentance, he will recollect this when he again feels the first rise of passion in his mind, and he may in that lucid moment avail himself of your calm reason, and thus avoid the excesses of extravagant passions. That unfortunate French monarch*, who was liable to temporary fits of frenzy, learned to foresee his approaching malady, and often requested his friends to disarm him, lest he should injure any of his attendants.

In a malady which precludes the use of reason, it was possible for this humane patient to foresee the probable mischief he might do to his fellow creatures, and to take prudent measures against his own violence ; and may not we expect, that those who are early accustomed to attend to their own feelings, may prepare against

* Charles VI.

the extravagance of their own passions, and avail themselves of the regulating advice of their temperate friends?

In the education of girls we must teach them much more caution than is necessary to boys: their prudence must be more the result of reasoning than of experiment; *they must trust to the experience of others*, they cannot always have recourse to what *ought to be*, they must adapt themselves to what is. They cannot rectify the material mistakes in their conduct*. Timidity, a certain tardiness of decision, and reluctance to act in public situations, are not considered as defects in a woman's character; her pausing prudence does not to a man of discernment denote imbecility, but appears to him the graceful auspicious characteristic of female virtue. There is always more probability, that women should endanger their own happiness by precipitation than by forbearance. Promptitude of choice is seldom expected from the female sex; they should avail themselves of the

* "No penance can absolve their guilty fame,

"Nor tears, that wash out sin, can wash out shame."

leisure that is permitted to them for reflection.

“Begin nothing of which you have not well

“considered the end,” was the piece of advice

for which the Eastern Sultan* paid a purse of

gold, the price set upon it by a sage. The

monarch did not repent of his purchase. This

maxim should be engraved upon the memory

of our female pupils by the repeated lessons of

education. We should even in trifles avoid

every circumstance which can tend to make

girls venturesome, which can encourage them

to trust to their good fortune, instead of relying

on their own prudence. Marmontel’s tale, en-

titled “*Heureusement*,” is a witty, but surely

not a *moral* tale. Girls should be discouraged

from hazarding opinions in general conversation,

but amongst their friends they should be excited

to reason with accuracy and with temper. It

is really a part of a woman’s prudence to have

command of temper; if she has it not, her wit

and sense will not have their just value in do-

mestic life. Calphurnia, a Roman lady, used

to plead her own causes before the senate, and

* Persian Tales.

we are informed, that she became "so troublesome and confident, that the judges decreed that thenceforward no woman should be suffered to plead." Did not this lady make an imprudent use of her talents?

In the choice of friends, and on all matters of taste, young women should be excited to reason about their own feelings. "There is no reasoning about taste," is a pernicious maxim; if there was more reasoning, there would be less disputation upon this subject. If women questioned their own minds, or allowed their friends to question them concerning the reasons of their "preferences and aversions," there would not probably be so many love matches, and so few love marriages. It is in vain to expect, that young women should begin to reason miraculously, at the very moment that reason is wanted in the guidance of their conduct: we should also observe, that women are called upon for the exertion of their prudence at an age when young men are scarcely supposed to possess that virtue; therefore women should be more early, and more carefully edu-

cated for the purpose. The important decisions of a woman's life are often made before she is twenty; a man does not come upon the theatre of public life, where most of his prudence is shewn, till he is much older.

Economy is an essential domestic virtue. Some women have a foolish love of expensive baubles; a taste which a very little care, probably, in their early education, might have prevented. We are told, that when a collection of three hundred and fifty pounds was made for the celebrated Cuzzona to save her from absolute want, she immediately laid out two hundred pounds of the money in the purchase of a *shell cap*, which was then in fashion *. Prudent mothers will avoid shewing any admiration of pretty trinkets before their young daughters, and they will oppose the ideas of utility and durability to the mere caprice of fashion, which creates a taste for beauty, as it were, by proclamation. "Such a thing is pretty, but it is of no use. Such a thing is pretty, but it will soon wear out"—a mother may say; and she

* Mrs. Piozzi's English Synonymy, vol. i. p. 359.

would prove the truth of her assertions to her pupils.

Economy is usually confined to the management of money, but it may be shewn on many other occasions: economy may be exercised in taking care of whatever belongs to us; children should have the care of their own clothes, and if they are negligent of what is in their charge, this negligence should not be repaired by servants or friends, they should feel the real natural consequences of their own neglect, but no other punishment could be inflicted; and they should be left to make their own reflections upon their errors and misfortunes, undisturbed by the reproaches of their friends, or by the proving moral of a governess or preceptor. We recommend, for we must descend to these trifles, that girls should be supplied with an independent stock of all the little things which are in daily use; housewives and pocket books well stored with useful implements; and there should be no lending and borrowing amongst children. It will be but just to provide our pupils with convenient places for the preservation and arrangement of

their little goods. Order is necessary to economy, and we cannot more certainly create a taste for order, than by shewing early its advantages in practice as well as in theory. The aversion to *old* things should, if possible, be prevented in children; we should not express contempt for *old* things, but we should treat them with increased reverence, and exult in their having arrived under our protection to such a creditable age. "I have had such a hat so long, therefore it does not signify what becomes of it!" is the speech of a *promising* little spendthrift. "I have taken care of my hat, it has lasted so long; and I hope I shall make it last longer," is the exultation of a young economist, in which his prudent friend should sympathise.

"Waste not, want not," is an excellent motto in an English nobleman's kitchen*. The most opulent parents ought not to be ashamed to adopt it in the economic education of their children; early habits of care, and an early aversion and contempt for the selfish spirit of waste,

* Lord Scarfdale's. Kedleston.

ful extravagance, may preserve the fortunes, and, what is of far more importance, the integrity and peace of mind, of noble families.

We have said, that economy cannot be exercised without children's having the management of money. Whilst our pupils are young, if they are educated at home, they cannot have much real occasion for money; all the necessities of life are provided for them; and if they have money to spend, it must be probably laid out in superfluities. This is a bad beginning. Money should be represented to our pupils as what it really is, the conventional sign of the value of commodities; before children are acquainted with the real and comparative value of any of these commodities, it is surely imprudent to trust them with money. As to the idea that children may be charitable and generous in the disposal of money, we have expressed our sentiments fully upon this subject already. We are however sensible, that when children are sent to any school, it is adviseable to supply them with pocket-money enough to put them upon an equal footing with their companions;

otherwise we might run the hazard of inducing worse faults than extravagance—meanness, or envy.

Young people who are educated at home should, as much as possible, be educated to take a family interest in all the domestic expences. Parental reserve in money matters is extremely impolitic; as Mr. Locke judiciously observes, that a father, who wraps his affairs up in mystery, and who “views his son with jealous eyes,” as a person who is to begin *to live* when he dies, *must* make him an enemy by treating him as such. A frank simplicity and cordial dependence upon the integrity and upon the sympathy of their children, will ensure to parents their disinterested friendship. Ignorance is always more to be dreaded than knowledge. Young people who are absolutely ignorant of affairs, who have no idea of the relative expence of different modes of living, and of the various wants of a family, are apt to be extremely unreasonable in the imaginary disposal of their parent’s fortune; they confine their view merely to their own expences. “I *only*

“spend such a sum,” they say, “and surely that is nothing to my father’s income.” They consider only the absolute amount of what they spend, they cannot compare it with the number of other expences which are necessary for the rest of the family; they do not know these, therefore they cannot perceive the proportion which it is reasonable that their expenditure should bear to the whole. Mrs. D’Arblay, in one of her excellent novels, has given a striking picture of the ignorance in which young women sometimes leave their father’s house, and begin to manage in life for themselves, without knowing any thing of the *powers* of money. Camilla’s imprudence must chiefly be ascribed to her ignorance. Young women should be accustomed to keep the family accounts, and their arithmetic should not be merely a speculative science; they should learn the price of all necessities, and of all luxuries; they should learn what luxuries are suited to their fortune and rank, what degree of expence in dress is essential to a regularly neat appearance, and what must be the increased expence and temp-

tations of fashion in different situations; they should not be suffered to imagine that they can resist these temptations more than others, if they get into company above their rank, nor should they have any indistinct idea, that by some wonderfully economical operations they can make a given sum of money go farther than others can do. The steadiness of calculation will prevent all these vain notions; and young women, when they see in stubborn figures what must be the consequence of getting into situations where they must be tempted to exceed their means, will probably begin by avoiding, instead of braving, the danger.

Most parents think that their sons are more disposed to extravagance than their daughters; the sons are usually exposed to greater temptations. Young men excite one another to expence, and to a certain carelessness of economy, which assumes the name of spirit, while it often forfeits all pretensions to justice. A prudent father will never, from any false notions of forming his son early to *good* company, introduce him to associates whose only merit is

their rank or their fortune. Such companions will lead a weak young man into every species of extravagance, and then desert and ridicule him in the hour of distress. If a young man has a taste for literature, and for rational society, his economy will be secured simply, because his pleasures will not be expensive, nor dependent upon the caprice of fashionable associates. The intermediate state between that of a school-boy and a man is the dangerous period, in which taste for expence is often acquired, before the means of gratifying it are obtained. Boys listen with anxiety to the conversation of those who are a few years older than themselves. From this conversation they gather *information* respecting the ways of the world, which, though often erroneous, they tenaciously believe to be accurate: it is in vain that their older friends may assure them that such and such frivolous expences are not necessary to the well-being of a man in society, they adhere to the opinion of the younger counsel; they conclude that every thing is changed since their parents were young, that they must not govern themselves by anti-

quoted notions, but by the scheme of economy which happens to be the fashion of the day. During this boyish state parents should be particularly attentive to the company which their sons keep; and they should frequently in conversation with sensible, but not with morose or old-fashioned people, lead to the subject of economy, and openly discuss and settle the most essential points. At the same time a father should not intimidate his son with the idea that nothing but rigid economy can win his parental favour; his parental favour should not be a mercenary object; he should rather shew his son, that he is aware of the great temptations to which a young man is exposed in going first into the world; he should shew him, both that he is disposed to place confidence in him, and that he yet knows the fallibility of youthful prudence. If he expect from his son unerring prudence, he expects too much, and he will, perhaps, create an apprehension of his displeasure, which may chill and repress all ingenuous confidence. In all his childish, and in all his youthful distresses, a son should be habitually inclined

to turn to his father as to his *most indulgent friend*. "Apply to me if ever you get into any difficulties, and you will always find me your most indulgent friend," were the words of a father to a child of twelve years old, pronounced with such encouraging benevolence, that they were never forgotten by the person to whom they were addressed.

Before a young man goes into the world, it will be a great advantage to him to have some share in the management of his father's affairs; by laying out money for another person he will acquire habits of care, which will be useful to him afterwards in his own affairs. A father, who is building, or improving grounds, who is carrying on works of any sort, can easily allot some portion of the business to his son, as an exercise for his judgment and prudence. He should hear and see the estimates of workmen, and he should, as soon as he has collected the necessary facts, form estimates of his own, before he hears the calculation of others; this power of estimating will be of great advantage to gentlemen, it will circumscribe their wishes,

and it will protect them against the low frauds of designing workmen.

It may seem trivial, but we cannot forbear to advise young people to read the newspapers of the day regularly: they will keep up by these means with the current of affairs, and they will exercise their judgment upon interesting business, and large objects. The sooner boys acquire the sort of knowledge necessary for the conversation of sensible men the better; they will be the less exposed to feel false shame. False shame, the constant attendant upon ignorance, often leads young men into imprudent expences; when, upon any occasion, they do not know by any certain calculation to what any expence may amount, they are ashamed to inquire minutely. From another sort of weakness they are ashamed to resist the example or importunity of numbers; against this weakness, the strong desire of preserving the good opinion of estimable friends is the best preservative. The taste for the esteem of superior characters cures the mind of fondness for vulgar applause.

We have in the very first chapter of this book spoken of the danger of the passion for gaming, and the precautions that we have recommended in early education will, it is hoped, prevent the disorder from appearing in our pupils as they grow up. Occupations for the understanding, and objects for the affections, will preclude the necessity of the violent stimulus of the gaming table. It may be said, that many men of superior abilities, and of generous social tempers, become gamesters. They do so, because they have exhausted other pleasures, and because they have been accustomed to strong excitements. Such excitements do not become necessary to happiness, till they have been made habitual.

There was an excellent Essay on Projects, published some years ago by an anonymous writer, which we think would make a proper impression upon young persons of good sense. We do not wish to repress the generous enterprising ardour of youth, nor to confine the ideas to the narrow circle of which self must be the centre. Calculation will shew what can be

done, and how it can be done ; and thus the individual, without injury to himself, may, if he wish it, speculate extensively for the good of his fellow creatures.

It is scarcely possible, that the mean passion of avarice should exist in the mind of any young person who has been tolerably well educated ; but too much pains cannot be taken to preserve that domestic felicity, which arises from entire confidence and satisfaction amongst the individuals of a family with regard to property. Exactness in accounts and in business relative to property, far from being unnecessary amongst friends and relations, are, we think, peculiarly agreeable, and essential to the continuance of frank intimacy. We should, whilst our pupils are young, teach them a love for exactness about property ; a respect for the rights of others, rather than a tenacious anxiety about their own. When young people are of a proper age to manage money and property of their own, let them know precisely what they can annually spend ; in whatever form they receive an income, let that income be certain : if pre-

sents of pocket money or of drefs are from time to time made to them, this creates expectation and uncertainty in their minds. All persons who have a fluctuating revenue are disposed to be imprudent and extravagant. It is remarkable, that the West Indian planters, whose property is a kind of lottery, are extravagantly disposed to speculation; in the hopes of a favourable season they live from year to year in unbounded profusion. It is curious to observe, that the propensity to extravagance exists in those who enjoy the greatest affluence, and in those who have felt the greatest distress. Those who have little to lose are reckless about that little; and any uncertainty as to the tenure of property, or as to the rewards of industry, immediately operates, not only to depress activity, but to destroy prudence. "Prudence," says Mr. Edwards, "is a term that has no place in the negro vocabulary; instead of trusting to what are called the *ground provisions*, which are safe from the hurricanes, the negroes, in the cultivation of their *own* lands, trust more to plantain-groves, corn, and other

“vegetables that are liable to be destroyed by
 “storms. When they earn a little money, they
 “immediately gratify their palate with salted
 “meats and other provisions, which are to them
 “delicacies. The idea of accumulating, and
 “of being economic in order to accumulate, is
 “unknown to these poor slaves, who hold their
 “lands by the most uncertain of all tenures*.”

We are told, that the *provision ground*, the creation of the negro's industry, and the hope of his life, is sold by public auction to pay his master's debts. Is it wonderful that the term prudence should be unknown in the negro vocabulary?

The very poorest class of people in London, who feel despair, and who merely live to bear the evil of the day, are, it is said, very little disposed to be prudent. In a late publication, Mr. Colquhoun's "Treatise on the Police of the Metropolis," he tells us, that the "chief consumption of oysters, crabs, lobsters, pickled salmon, &c. when first in season, and when the prices are high, is by the *lowest* classes of

* V. Edwards's History of the West Indies.

“ the people. The middle ranks, and those
 “ immediately under them, abstain generally
 “ from such indulgencies until the prices are
 “ moderate *.”

Perhaps it may be thought, that the consumption of oysters, crabs, and pickled salmon, in London, or the management of the negro's *provision ground* in Jamaica, has little to do with a practical essay upon economy and prudence for children ; but we hope, that we may be permitted to use these far fetched illustrations, to shew that the same causes act upon the mind independently of climate : they are mentioned here to shew, that the little *revenue* of young people ought to be fixed and certain.

When we recommend economy and prudence to our pupils, we must at the same time keep their hearts open to the pleasures of generosity ; economy and prudence will put it in the power of the generous to give.

“ The worth of every thing

“ Is as much money as 'twill bring,”

* V. a note in page 32 of the Treatise on the Police of the Metropolis.

will never be the venal maxim of those who understand the nature of philosophic prudence.

The worth of money is to be estimated by the number of real pleasures which it can procure: there are many which are not to be bought by gold*; these will never lose their pre-eminent value with persons who have been educated both to reason and to feel.

* "Turn from the glittering bribe your scornful eye,
"Nor sell for gold what gold can never buy."

JOHNSON'S London.

We admire the sentiment, notwithstanding the *inaccuracy* of these lines.

CHAPTER XXV.

SUMMARY.

“**T**HE general principle,” that we should associate pleasure with whatever we wish that our pupils should pursue, and pain with whatever we wish that they should avoid, forms, our readers will perceive, the basis of our plan of education. This maxim, applied to the cultivation of the understanding, or of the affections, will, we apprehend, be equally successful; virtues, as well as abilities, or what is popularly called genius, we believe to be the result of education, more than the gift of nature. A fond mother will tremble at the idea, that so much depends upon her own care in the early education of her children; but, even though

she may be inexperienced in the art, she may be persuaded that patience and perseverance will ensure her success: even from her timidity we may prophesy favourably; for, in education, to know the danger is often to avoid it. The first steps require rather caution and gentle kindness, than any difficult or laborious exertions; the female sex are from their situation, their manners, and talents, peculiarly suited to the superintendence of the early years of childhood. We have therefore, in the first chapters of the preceding work, endeavoured to adapt our remarks principally to female readers, and we shall think ourselves happy if any anxious mother feels their practical utility.

In the chapters on Toys, Tasks, and Attention, we have attempted to shew how the instruction and amusements of children may be so managed as to coincide with each other. *Play*, we have observed, is only a change of occupation, and toys, to be permanently agreeable to children, must afford them continued employment. We have declared war against *tasks*, or rather against the train of melancholy ideas

which, associated with this word, usually render it odious to the ears of the disgusted scholar. By kind patience, and well-timed, distinct, and, above all, by short lessons, a young child may be initiated in the mysteries of learning, and in the first principles of knowledge, without fatigue, or punishment, or tears. No matter how little be learned in a given time, provided the pupil be not disgusted; provided the wish to improve be excited, and the habits of attention be acquired. Attention we consider as the faculty of the mind which is essential to the cultivation of all its other powers.

It is essential to success in what are called accomplishments, or talents, as well as to our progress in the laborious arts or abstract sciences. Believing so much to depend upon this faculty or habit, we have taken particular pains to explain the practical methods by which it may be improved. The general maxims, that the attention of young people should at first be exercised but for very short periods; that they should never be urged to the point of fatigue; that pleasure, especially the great pleasure of sus-

cess, should be associated with the exertions of the pupil; are applicable to children of all tempers. The care which has been recommended, in the use of words, to convey uniformly distinct ideas, will, it is hoped, be found advantageous. We have, without entering into the speculative question concerning the original differences of temper and genius, offered such observations as we thought might be useful in the education of the attention of vivacious, and indolent children; whether their idleness or indolence proceed from nature, or from mistaken modes of instruction, we have been anxious to point out means of curing their defects; and, from our successful experience with pupils apparently of opposite dispositions, we have ventured to assert with some confidence, that no parent should despair of correcting a child's defects, that no preceptor should despair of producing in his pupil the species of abilities which his education steadily tends to form. These are encouraging hopes, but not flattering promises. Having just opened these bright views to parents, we have paused to warn them, that all their expect-

tations, all their cares will be in vain, unless they have sufficient prudence and strength of mind to follow a certain mode of conduct with respect to servants, and with respect to common acquaintance. More failures in private education have been occasioned by the interference of servants and acquaintance, than from any other cause. It is impossible, we repeat it in the strongest terms, it is impossible that parents can be successful in the education of their children at home, unless they have steadiness enough to resist all interference from visitors and acquaintance, who from thoughtless kindness, or a busy desire to administer advice, are apt to counteract the views of a preceptor; and who often in a few minutes undo the work of years. When our pupils have formed their habits, and have reason and experience sufficient to guide them, let them be left as free as air; let them choose their friends and acquaintance; let them see the greatest variety of characters, and hear the greatest variety of conversation and opinions: but whilst they are children, whilst they are destitute of the means to judge, their parents

or preceptors must supply their deficient reason; and authority, without violence, should direct them to their happiness. They must see, that all who are concerned in their education agree in the means of governing them; in all their commands and prohibitions, in the distribution of praise and blame, of reward and punishment, there must be unanimity. Where there does not exist this unanimity in families; where parents have not sufficient firmness to prevent the interference of acquaintance, and sufficient prudence to keep children *from all clandestine communication with servants*, we earnestly advise that the children be sent to some public seminary of education. We have taken some pains to detail the methods by which all hurtful communication between children and servants in a well regulated family may be avoided, and we have asserted, from the experience of above twenty years, that these methods have been found not only practicable, but easy.

In the Chapters on Obedience, Temper, and Truth, the general principle, that pleasure should excite to exertion and virtue, and that

pain should be connected with whatever we wish our pupils to avoid, is applied to practice with a minuteness of detail which we knew not how to avoid. Obedience we have considered as a relative, rather than as a positive virtue; before children are able to conduct themselves, their obedience must be rendered habitual; obedience alters its nature as the pupil becomes more and more rational; and the only method to secure the obedience, the willing, enlightened obedience of rational beings, is to convince them by experience, that it tends to their happiness. Truth depends upon example more than precept, and we have endeavoured to impress it on the minds of all who are concerned in education, that the first thing necessary to teach their pupils to love truth, is in their whole conduct to respect it themselves. We have reprobated the artifices sometimes used by preceptors towards their pupils; we have shewn that all confidence is destroyed by these deceptions. May they never more be attempted! May parents unite in honest detestation of these practices! Children are not fools, and they are not

to be governed like fools. Parents who adhere to the firm principle of truth, may be certain of the respect and confidence of their children. Children who never see the example of falsehood, will grow up with a simplicity of character, with an habitual love of truth, that must surprise preceptors who have seen the propensity to deceit which early appears in children who have had the misfortune to live with servants, or with persons who have the habits of meanness and cunning. We have advised, that children, before their habits are formed, should never be exposed to temptations to deceive; that no questions should be asked them which hazard their young integrity; that as they grow older they should gradually be trusted; and that they should be placed in situations where they may feel the advantages both of speaking truth, and of obtaining a character for integrity. The perception of the utility of this virtue to the individual, and to society, will confirm the habitual reverence in which our pupils have been taught to hold it. As young people become reasonable, the nature of their habits and of

their education should be explained to them, and their virtues, from being virtues of custom, should be rendered virtues of choice and reason.

It is easier to confirm good habits by the conviction of the understanding, than to induce habits in consequence of that conviction. This principle we have pursued in the chapter on Rewards and Punishments; we have not considered punishment as vengeance or retaliation, but as *pain inflicted with the reasonable hope of procuring some future advantage to the delinquent, or to society*. The smallest possible quantity of pain that can effect this purpose, we suppose, must, with all just and humane persons, be the measure of punishment. This notion of punishment, both for the sake of the preceptor and the pupil, should be clearly explained as early as it can be made intelligible. As to rewards, we do not wish that they should be bribes; they should stimulate, without weakening the mind. The consequences which naturally follow every species of good conduct, are the proper and best rewards that we can devise; children whose understandings are cul-

tivated, and whose tempers are not spoiled, will be easily made happy without the petty bribes, which are administered daily to ill educated, ignorant, over stimulated, and consequently, wretched and illhumoured children. Far from making childhood a state of continual penance, restraint, and misery, we wish that it should be made a state of uniform happiness; that parents and preceptors should treat their pupils with as much equality as their improving reason justifies. The views of children should be extended to their future advantage*, and they should consider childhood as a part of their existence, not as a certain number of years which must be passed over before they can enjoy any of the pleasures of life, before they can enjoy any of the privileges of *grown up people*. Preceptors should not accustom their pupils to what they call indulgence, but they should give them the utmost degree of present pleasure which is consistent with their future advantage. Would it not be folly and cruelty to give present pleasure at the expence of a much larger por-

* *Emilius*.

tion of future pain? When children acquire experience and reason, they rejudge the conduct of those who have educated them; and their confidence and their gratitude will be in exact proportion to the wisdom and justice with which they have been governed.

It was necessary to explain at large these ideas of rewards and punishments, that we might clearly see our way in the progress of education. After having determined, that our object is to obtain for our pupils the greatest possible portion of felicity; after having observed, that no happiness can be enjoyed in society without the social virtues, without the *useful* and the *agreeable* qualities; our view naturally turns to the means of forming these virtues, of ensuring these essential qualities. On our sympathy with our fellow-creatures depend many of our social virtues; from our ambition to excel our competitors arise many of our most *useful* and *agreeable* actions. We have considered these principles of action as they depend on each other, and as they are afterwards separated. Sympathy and sensibility, uninformed

by reason, cannot be proper guides to action. We have endeavoured to shew how sympathy may be improved into virtue. Children should not see the deformed expression of the malevolent passions in the countenance of those who live with them: before the habits are formed, before sympathy has any rule to guide itself, it is necessarily determined by example. Benevolence and affectionate kindness from parents to children first inspire the pleasing emotions of love and gratitude. Sympathy is not able to contend with passion or appetite: we should therefore avoid placing children in painful competition with one another. We love those from whom we receive pleasure. To make children fond of each other, we must make them the cause of pleasure to each other; we must place them in situations where no passion or appetite crosses their natural sympathy. We have spoken of the difference between transient, convivial sympathy, and that higher species of sympathy which, connected with esteem, constitutes friendship. We have exhorted parents not to exhaust imprudently the sensibility of their chil-

dren ; not to lavish careffes upon infancy, and cruelly to withdraw kindness when their children have learned to expect the daily stimulus of affection. The idea of exercising sensibility we have endeavoured to explain, and to shew, that if we require premature gratitude and generosity from young people, we shall only teach them affectation and hypocrisy. We have slightly touched on the dangers of excessive female sensibility, and have suggested, that useful, active employments, and the cultivation of the reasoning faculty, render sympathy and sensibility more respectable, and not less graceful.

In treating of vanity, pride, and ambition, we have been more indulgent to vanity than our *proud* readers will approve. We hope, however, not to be misunderstood ; we hope that we shall not appear to be admirers of that mean and ridiculous foible, which is anxiously concealed by all who have any desire to obtain esteem. We cannot, however, avoid thinking, that it is absurd to inspire young people with a wish to excel, and at the same time to insist

upon their repressing all expressions of satisfaction if they succeed. The desire to obtain the good opinion of others is a strong motive to exertion: this desire cannot be discriminative in children before they have any knowledge of the comparative value of different qualities, and before they can estimate the consequent value of the applause of different individuals. We have endeavoured to shew how, from appealing at first to the opinions of others, children may be led to form judgments of their own actions, and to appeal to their own minds for approbation. The sense of duty and independent self-complacency may gradually be substituted in the place of weak, ignorant vanity. There is not much danger that young people, whose understandings are improved, and who mix gradually with society, should not be able to repress those offensive expressions of vanity or pride, which are disagreeable to the feelings of the impartial spectators. We should rather let the vanity of children find its own level than attempt any artificial adjustments; they will learn propriety of manners from observation and experience; we

should have patience with their early uncivilised presumption, lest, by premature restraints, we check the energy of the mind, and induce the cold, feeble vice of hypocrisy. In their own family, among the friends whom they ought to love and esteem, let children, with simple, unreserved vivacity, express the good opinion they have of themselves. It is infinitely better that they should be allowed this necessary expansion of self-complacency in the company of their superiors, than that it should be repressed by the cold hand of authority, and afterwards be displayed in the company of inferiors and sycophants. We have endeavoured to distinguish between the proper and improper use of praise as a motive in education: we have considered it as a stimulus which, like all other excitements, is serviceable or pernicious, according to the degree in which it is used, and the circumstances in which it is applied.

Whilst we have thus been examining the general means of educating the heart and the understanding, we have avoided entering minutely into the technical methods of obtaining cer-

tain parts of knowledge. It was essential, in the first place, to shew, how the desire of knowledge was to be excited: what acquirements are most desirable, and how they are to be most easily obtained, are the next considerations. In the chapters on Books—Classical Literature and Grammar—Arithmetic and Geometry—Geography and Astronomy—Mechanics and Chemistry—we have attempted to shew, how a taste for literature may early be infused into the minds of children, and how the rudiments of science, and some general principles of knowledge, may be acquired, without disgusting the pupil, or fatiguing him by unceasing application. We have, in speaking of the choice of books for children, suggested the general principles, by which a selection may be safely made; and by minute, but we hope not invidious criticism, we have illustrated our principles so as to make them practically useful.

The examination of M. Condillac's Cours d'Etude was meant to illustrate our own sentiments, more than to attack a particular system. Far from intending to depreciate this author,

we think most highly of his abilities; but we thought it necessary to point out some practical errors in his mode of instruction. Without examples from real life, we should have wandered, as many others of far superior abilities have already wandered, in the shadowy land of theory.

In our chapters on Grammar, Arithmetic, Mechanics, Chemistry, &c. all that we have attempted has been to recall to preceptors the difficulties which they once experienced, and to trace those early footsteps which time insensibly obliterates. How few possess, like Faruk-naz in the Persian tale, the happy art of transfusing their own souls into the bosoms of others!

We shall not pity the reader whom we have dragged through Garretson's Exercises, if we can save one trembling little pilgrim from that "slough of despond." We hope that the patient, quiet mode of teaching classical literature, that we have found to succeed in a few instances, may be found equally successful in others; we are not conscious of having exaggerated, and we sincerely wish that some intelligent, be-

nevolent parents may verify our experiments upon their own children.

The great difficulty which has been found in attempts to instruct children in science has, we apprehend, arisen from the theoretic manner in which preceptors have proceeded. The knowledge that cannot be immediately applied to use, has no interest for children, has no hold upon their memories; they may learn the principles of mechanics, or geometry, or chemistry; but if they have no means of applying their knowledge, it is quickly forgotten, and nothing but the disgust connected with the recollection of useless labour remains in the pupil's mind. It has been our object, in treating of these subjects, to shew how they may be made interesting to young people; and for this purpose we should point out to them, in the daily, active business of life, the practical use of scientific knowledge. Their senses should be exercised in experiments, and these experiments should be simple, distinct, and applicable to some object in which our pupils are immediately interested. We are not solicitous about the quan-

tity of knowledge that is obtained at any given age, but we are extremely anxious that the desire to learn should continually increase, and that whatever is taught should be taught with that perspicuity, which improves the general understanding. If the first principles of science are once clearly understood, there is no danger that the pupil should not, at any subsequent period of his life, improve his practical skill, and increase his knowledge to whatever degree he thinks proper.

We have hitherto proceeded without discussing the comparative advantages of public or private education. Whether children are to be educated at home, or to be sent to public seminaries, the same course of education, during the first years of their lives, should be pursued; and the preparatory care of parents is essential to the success of the public preceptor. We have admitted the necessity of public schools, and, in the present state of society, we acknowledge that many parents have it not in their power properly to superintend the private education of a family. We have earnestly advised

parents not to attempt private education without first calculating the difficulties of the undertaking; we have pointed out that, by co-operating with the public instructor, parents may assist in the formation of their children's characters, without undertaking the sole management of their classical instruction. A private education, upon a calm survey of the advantages of both systems, we prefer, because more is in the power of the private than of the public instructor. One uniform course of experience may be preserved, and no examples, but those which we wish to have followed, need be seen by those children who are brought up at home. When we give our opinion in favour of private education, we hope that all we have said on servants and on acquaintance will be full in the reader's recollection. No private education, we repeat it, can succeed without perfect unanimity, consistency, and steadiness, amongst all the individuals in the family.

We have recommended to parents the highest liberality as the highest prudence, in rewarding the care of enlightened preceptors. Ye great

and opulent parents, condescend to make your children happy ; provide for yourselves the cordial of domestic affection against “ that sickness of long life—old age.”

In what we have said of governesses, masters, and the value of female accomplishments, we have considered not only what is the fashion of to-day, but rather what is likely to be the fashion of ten or twenty years hence. Mothers will look back, and observe how much the system of female education has altered within their own memory ; and they will see, with “ the prophetic eye of taste,” what may probably be the fashion of another spring—another race*. We have endeavoured to substitute the words *domestic happiness* instead of the present terms, “ success in the world—fortunate establishments,” &c. This will lead, perhaps, at first, to some confusion in the minds of those who have been long used to the old terms ; but the new vocabulary has its advantages ; the young and unprejudiced will, perhaps, per-

* “ Another spring, another race supplies.”

POPE'S HOMER.

ceive them, and maternal tenderness will estimate with more precision, but not with less eagerness, the chances of happiness according to the new and old tables of calculation.

Sectary-metaphysicians, if any of this description should ever deign to open a book that has a *practical* title, will, we fear, be disappointed in our chapters on Memory—Imagination and Judgment. They will not find us the partizans of any system, and they will probably close the volume with supercilious contempt. We endeavour to console ourselves by the hope that men of sense and candour will be more indulgent, and will view with more complacency an attempt to collect from all metaphysical writers those observations, which can be immediately of practical use in education. Without any pompous pretensions, we have given a sketch of what we have been able to understand and ascertain of the history of the mind. On some subjects the wisest of our readers will at least give us credit for knowing that we are ignorant.

We do not set that high value upon Memory,

which some preceptors are inclined to do. From all that we have observed, we believe that few people are naturally deficient in this faculty; though in many it may have been so injudiciously cultivated as to induce the spectators to conclude, that there was some original defect in the retentive power. The recollective power is less cultivated than it ought to be, by the usual modes of education; and this is one reason why so few pupils rise above mediocrity. They lay up treasures for moths to corrupt; they acquire a quantity of knowledge, they learn a multitude of words by rote, and they cannot produce a single fact, or a single idea, in the moment when it is wanted: they collect, but they cannot combine. We have suggested the means of cultivating the inventive faculty at the same time that we store the memory; we have shewn, that on the order in which ideas are presented to the mind depends the order in which they will recur to the memory; and we have given examples from the histories of great men and little children of the reciprocal assist-

ance, which the memory and the inventive powers afford each other.

In speaking of Taste it has been our wish to avoid prejudice and affectation. We have advised that children should early be informed, that the principles of taste depend upon casual, arbitrary, variable associations. This will prevent our pupils from falling into the vulgar error of being amazed and *scandalised* at the tastes of other times and other nations. The beauties of nature and the productions of art, which are found to be most generally pleasing, we should associate with pleasure in the mind : but we ought not to expect that children should admire those works of imagination which suggest instead of expressing ideas. Until children have acquired the language, until they have all the necessary trains of ideas, many of the finest strokes of genius in oratory, poetry, and painting, must to them be absolutely unintelligible.

In a moral point of view we have treated of the false associations which have early influence upon the imagination, and produce the furious

passions and miserable vices. The false associations which first inspire the young and innocent mind with the love of wealth, or power, or of what is falsely called pleasure, are pointed out ; and some practical hints are offered to parents, which it is hoped may tend to preserve their children from these moral insanities.

We do not think that persons who are much used to children will quarrel with us for what we have said of early prodigies of wit. People, who merely talk to children for the amusement of the moment, may admire their "lively nonsense," and will probably think the simplicity of mind that we prefer is downright stupidity. The habit of reasoning is seldom learned by children who are much taken notice of for their sprightly repartees ; but we have observed, that children, after they have learned to reason, as they grow up and become acquainted with the manners and customs of the world, are by no means deficient in talents for conversation, and in that species of wit which depends upon the perception of analogy between ideas, rather

than a play upon words. At all events we would rather that our pupils should be without the brilliancy of wit, than the solid and essential power of judgment.

To cultivate the judgment of children, we must begin by teaching them accurately to examine and compare such external objects as are immediately obvious to their senses ; when they begin to argue, we must be careful to make them explain their terms and abide by them. In books and conversation, they must avoid all bad reasoning, nor should they ever be encouraged in the quibbling habit of arguing for victory.

Prudence we consider as compounded of judgment and resolution. When we teach children to reflect upon and compare their own feelings, when we frequently give them their *choice* in things that are interesting to them, we educate them to be prudent. We cannot teach this virtue until children have had some experience ; as far as their experience goes their prudence may be exercised. Those who re-

flect upon their own feelings, and find out exactly what it is that makes them happy, are taught wisdom by a very few distinct lessons. Even fools, it is said, grow wise by experience, but it is not until they grow old under her rigid discipline.

Economy is usually understood to mean prudence in the management of money; we have used this word in a more enlarged sense. Children, we have observed, may be economic of any thing that is trusted to their charge; until they have some use for money they need not be troubled or tempted with it; if all the necessities and conveniences of life are provided for them, they must spend whatever is given to them as pocket money in superfluities. This habituates them early to extravagance. We do not apprehend that young people should be entrusted with money, till they have been some time used to manage the money business of others. They may be taught to keep the accounts of a family, from which they will learn the price and value of different commodities. All this our readers will perceive is nothing

more than the application of the reasoning powers to different objects.

We have thus slightly given a summary of the chapters in the preceding work to recall the whole in a connected view to the mind; a few simple principles run through the different parts; all the purposes of practical education tend to one distinct object; to render our pupils good and wise, that they may enjoy the greatest possible share of happiness at present and in future.

Parental care and anxiety, the hours devoted to the instruction of a family, will not be thrown away. If parents have the patience to wait for their reward, that reward will far surpass their most sanguine expectations; they will find in their children agreeable companions, sincere and affectionate friends. Whether they live in retirement, or in the busy world, they will feel their interest in life increase, their pleasures multiplied by sympathy with their beloved pupils; they will have a happy home. How much is comprised in that single expression! The gratitude of their pupils will continually

recall the delightful reflection, that the felicity of a whole family is their own work ; and that the virtues and talents of their children are the necessary consequences of good education.

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APPENDIX.

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NOTES,

CONTAINING

CONVERSATIONS AND ANECDOTES OF CHILDREN.

SEVERAL years ago a mother*, who had a large family to educate, and who had turned her attention with much sollicitude to the subject of education, re-

* Honora Edgeworth, daughter of Edward Sneyd, Esq. of Lichfield. As this lady's name has been mentioned in a monody on the death of Major André, we take this opportunity of correcting a mistake that occurs in a note to that performance.

“ Till busy rumour chased each pleasing dream,

“ And quenched the radiance of the silver beam.”

Monody on Major André

The note on these lines is as follows :

“ The tidings of Honora's marriage. Upon that event Mr.

“ André quitted his profession as a merchant, and joined our army
“ in America.”

Miss Honora Sneyd was married to Mr. Edgeworth in July 1773, and the date of Major André's first commission in the Welsh Fusiliers is March 4th, 1771.

solved to write notes from day to day of all the trifling things which mark the progress of the mind in childhood. She was of opinion, that the art of education should be considered as an experimental science, and that many authors of great abilities had mistaken their road by following theory instead of practice. The title of "*Practical Education*" was chosen by this lady, and prefixed to a little book for children, which she began, but did not live to finish. The few notes which remain of her writing are preserved, not only merely out of respect for her memory, but because it is thought that they may be useful. Her plan of keeping a register of the remarks of children has at intervals been pursued in her family; a number of these anecdotes have been interspersed in this work, a few which did not seem immediately to suit the didactic nature of any of our chapters remain, and with much hesitation and diffidence are offered to the public. We have selected such anecdotes as may in some measure illustrate the principles that we have endeavoured to establish; and we hope that from these trifling, but genuine conversations of children and parents, the reader will distinctly perceive the difference between practical and theoretic education. As some further apology for offering them to the public, we recur to a passage in Dr. Reid's * *Essays*, which encourages an attempt to study minutely the minds of children.

"If we could obtain a distinct and full history of all that hath passed in the mind of a child from the beginning of life and sensation till it grows up to the

* This has been formerly quoted in the preface to *Parent's Assistant*.

“ use of reason, how its infant faculties begin to work,
“ and how they brought forth and ripened all the va-
“ rious notions, opinions, and sentiments, which we
“ find in ourselves when we come to be capable of re-
“ flection, this would be a treasure of natural history
“ which would probably give more light into the hu-
“ man faculties, than all the systems of philosophers
“ about them from the beginning of the world.”

The reader, we hope, will not imagine that we think we can present him with this treasure of natural history; we have only a few scattered notices, as Bacon would call them, to offer: perhaps, even this slight attempt may awaken the attention of persons equal to the undertaking; if able preceptors and parents would pursue a similar plan, we might, in time, hope to obtain a full history of the infant mind.

It may occur to parents, that writing notes of the remarks of children would lessen their freedom and simplicity in conversation; this would certainly be the case if care were not taken to prevent the pupils from thinking of the *note-book* *. The following notes were never seen by the children who are mentioned in them, and though it was in general known in the family that such notes were taken, the particular remarks that were written down were never known to the pupils; nor was any curiosity excited upon this subject. The attempt would have been immediately abandoned, if we had perceived that it produced any bad consequences. The simple language of childhood has been preserved without alteration in the following notes; and as we could

* The anecdotes mentioned in the *preceding* pages were read to the children with the rest of the work.

not devise any better arrangement, we have followed the order of time, and we have constantly inserted the ages of the children, for the satisfaction of preceptors and parents, to whom alone these infantine anecdotes can be interesting. We say nothing farther as to their accuracy; if the reader does not see in the anecdotes themselves internal marks of veracity, all we could say would be of no avail,

X—— (a girl of five years old) asked why a piece of paper fell quickly to the ground when rumbled up, why so slowly when opened.

Y—— (a girl of three years and a half old) seeing her sister taken care of and nursed when she had chilblains, said, that she wished to have chilblains.

Z—— (a girl between two and three), when her mother was putting on her bonnet, and when she was going out to walk, looked at the cat, and said with a plaintive voice, "Poor Puffey! You have no bonnet, Puffey!"

X—— (5 years old) asked why she was as tall as the trees when she was far from them.

Z—— (4 years old) went to church, and when she was there said, "Do those mens do every thing better than we; because they talk so loud, and I think they read."

It was a country church, and people sang; but the child said, "She thought they did'nt sing, but roared, because they were shut up in that place, and didn't like it."

L—— (a boy between 3 and 4 years old) was standing before a grate with coals in it, which were not lighted; his mother said to him, "What is the use of coals?"

L—. "To put in your grate."

Mother. "Why are they put there?"

L—. "To make fire."

Mother. "How do they make fire?"

L—. "Fire is brought to them?"

Mother. "How is fire brought to them?"

L—. "Fire is brought to them upon a candle
"put to them."

L—, a little while afterwards, asked leave to light
a candle, and when a bit of paper was given to him
for that purpose, said, "But, mother, may I take
"some light out of your fire to put to it?"

This boy had more exact ideas of property than Pro-
metheus had.

Z—, when she was between five and six, said,
"Water keeps *things* alive, and eating keeps alive chil-
"dren."

Z— (same age), meddling with a fly, said, "she
"did not hurt it." "Were you ever a fly?" said her
mother. "Not *that I know of*," answered the child.

Z—'s father sent her into a room where there
were some knives and forks. "If you meddle with
"them," said he, "you may cut yourself."

Z—. "I won't cut myself."

Father. "Can you be sure of that?"

Z—. "No, but I can take care."

Father. "But if you should cut yourself, would it
"do you any good?"

Z—. "No—Yes."

Father. "What good?"

Z—. "Not to do so another time."

— (same age.) Z—'s mother said to her,
"Will you give me some of your fat cheeks?"

Z—. "No, I cannot, it would hurt me."

Mother. "But if it would not hurt you, would you give me some?"

Z—. "No, it would make two holes in my cheeks that would be disagreeable."

A sentimental mother would perhaps have been displeased with the simple answers of this little girl. (V. Sympathy and Sensibility.)

The following memorandums of Mrs. H—E—'s (dated 1779) have been of great use to us in our chapter of Toys.

"The playthings of children should be calculated to fix their attention, that they may not get a habit of doing any thing in a listless manner."

"There are periods as long as two or three months at a time, in the lives of young children, when their bodies appear remarkably active and vigorous, and their minds dull and inanimate; they are at these times incapable of comprehending any new ideas, and forgetful of those they have already received. When this disposition to exert the bodily faculties subsides, children shew much restlessness and distaste for their usual plays. The interval between meals appear long to them, they ask a multitude of questions, and are continually looking forward to some future good; if at this time any mental employment be presented to them, they receive it with the utmost avidity, and pursue it with assiduity; their minds appear to have acquired additional powers from having remained inactive for a considerable time."

H. E.

(January 1781.) Z—, (7 years old.) "What are bones made of? My father says it has not been

"found out. If I should find it out, I shall be wiser
"in that respect than my father."

(April 8th.) Z——, "What becomes of the blood
"when people die?"

Father. "It stays in the body."

Z——. "I thought it went out of the body; be-
"cause you told me that what we eat was turned into
"blood, and that blood nourished the body and kept
"it alive."

Father. "Yes, my dear; but blood must be in
"motion to keep the body alive; the heart moves the
"blood through the arteries and veins, and the blood
"comes back again to the heart. We don't know how
"this motion is performed. What we eat is not
"turned at once into blood; it is dissolved by some-
"thing in the stomach, and is turned into something
"white like milk, which is called chyle; the chyle
"passes through little pipes in the body called lacteals,
"and into the veins and arteries, and becomes blood.
"But I don't know how. I will shew you the inside
"of the body of a dead pig: a pig's inside is something
"like that of a man."

Z——, (same age.) When her father had given
her an account of a large stone that was thrown to a
considerable distance from Mount Vesuvius at the
time of an eruption, she asked, how the air could keep
a large stone from falling, when it would not support
her weight.

Z——, (same age) when she was reading the Ro-
man history, was asked, what she thought of the con-
duct of the wife of Asdrubal. Z—— said she did not
like her. She was asked why. The first reason Z——
gave for not liking the lady was, "that she spoke

"loud;" the next, "that she was unkind to her husband, and killed her children."

We regret (though perhaps our readers may rejoice) that several years elapsed in which these little notes of the remarks of children were discontinued. In 1792 the following notes were begun by one of the same family.

(March 92.) Mr. — saw an Irish giant at Bristol, and when he came home Mr. — gave his children a description of the giant. His height, he said, was about eight feet. S— (a boy of five years old) asked whether this giant had lived much longer than other men.

Father. "No : why did you think he had lived longer than other men !"

S—. "Because he was so much taller."

Father. "Well."

S—. "And he had so much more time to grow."

Father. "People, after a certain age, do not grow any more. Your sister M—, and I, and your mother, have not grown any taller since you can remember, have we ?"

S—. "No ; but I have, and B—, and C—."

Father. "Yes ; you are children. Whilst people are growing they are called children ; after they have done growing, they are called men and women."

(April 92.) At tea-time, to-day, somebody said that hot chocolate scalds worse than hot tea or hot water. Mr. — asked his children if they could give any reason for this. They were silent.

Mr. —, "If water be made as hot as it can be

“made, and if chocolate be made as hot as it can be
“made, the chocolate will scald you the most. Can
“you tell me why?”

C——, (a girl between 8 and 9 years old.) “Be-
“cause there is oil, I believe, in the chocolate; and
“because it is thicker, and the parts closer together,
“than in tea or water.”

Father. “What you say is true; but you have not
“explained the reason yet. Well, H——.”

H——, (a boy between 9 and 10.) “Because
“there is water in the bubbles.”

Father. “Water in the bubbles I don’t understand.
“Water in what bubbles?”

H——. “I thought I had always seen, when wa-
“ter boils, that there are a great many little bubbles
“upon the top.”

Father. “Well; but what has that to do with the
“question I asked you?”

H——. “Because the cold air that was in the
“bubbles would cool the water next them, and then”
—(he was quite confused, and stopped.)

B—— (a girl of 10 or 11 years old) spoke next. “I
“thought that chocolate was much thicker than water,
“and there were more parts, and those parts were
“closer together, and each could hold but a certain
“quantity of heat; and therefore chocolate could be
“made hotter than water.”

Father. “That is a good chemical idea. You sup-
“pose that the chocolate and tea can be *saturated* with
“heat. But you have none of you yet told me the
“reason.”

The children were all silent,

Father. "Can water ever be made hotter than
"boiling hot?"

B——. "No."

Father. "Why?"

B——. "I don't know."

Father. "What happens to water when it does
"what we call *boil*?"

H——. "It bubbles, and makes a sort of noise."

B——. "It turns into steam or vapour, I believe."

Father. "All at once?"

B——. "No: but what is at the top first?"

Father. "Now you see the reason why water can't
"be made hotter than boiling hot; for if a certain
"degree of heat be applied to it, it changes into the
"form of vapour, and flies off. When I was a little
"boy, I was once near having a dreadful accident.
"I had not been taught the nature of water, and
"steam, and heat, and evaporation; and I wanted
"to fill a wet hollow stick with melted lead. The mo-
"ment I poured the lead into the stick, the water in
"the wood turned into vapour suddenly, and the lead
"was thrown with great violence to the ceiling: my
"face narrowly escaped. So you see people should
"know what they are about before they meddle with
"things.—But now as to the chocolate."

No one seemed to have any thing to say about the
chocolate.

Father. "Water, you know, boils with a certain
"degree of heat. Will oil, do you think, boil with
"the same heat?"

C——. "I don't understand."

Father. "In the same *degree of heat* (you must learn

“to accustom yourself to those words, though they
 “seem difficult to you)—In the same heat do you
 “think water or oil would boil the soonest?”

None of the children knew.

Father. “Water would boil the soonest. More
 “heat is necessary to make oil boil, or turn into va-
 “pour, than to make water evaporate. Do you know
 “of any thing which is used to *determine*, to *show*, and
 “mark to us the different degrees of heat?”

B——. “Yes; a thermometer.”

Father. “Yes: thermometer comes from two
 “Greek words, one of which signifies heat, and the
 “other measure. Meter, means measure. Thermo-
 “meter a measurer of heat; barometer a measurer of
 “the weight of the air; hygrometer a measurer of
 “moisture. Now, if you remember, on the thermo-
 “meter you have seen these words at a certain mark,
 “the heat of boiling water. The quicksilver, in a ther-
 “mometer, rises to that mark when it is exposed to
 “that degree of heat which will make the water turn
 “into vapour. Now the degree of heat which is ne-
 “cessary to make oil evaporate is not marked on the
 “thermometer; but it requires several degrees more
 “heat to evaporate oil than is necessary to evaporate
 “water.—So now you know that chocolate, containing
 “more oil than is contained in tea, it can be made
 “hotter before it turns into vapour.”

Children may be led to acquire a taste for chemistry
 by slight hints in conversation.

(July 22d, 1794.) Father. “S——, can you tell
 “me what is meant by a body’s falling?”

S——, (7 years old.) “A body’s falling means a
 “body’s dying, I believe.”

Father. "By *body*, I don't mean a person, but
"any thing. What is meant by any thing's falling?"

S——. "Coming down from a high place."

Father. "What do you mean by a high place?"

S——. "A place higher than places usually are;
"higher than the ground."

Father. "What do you mean by the ground?"

S——. "The earth."

Father. "What shape do you think the earth is?"

S——. "Round."

Father. "Why do you think it is round?"

S——. "Because I have heard a great many peo-
"ple say so."

Father. "The shadow.—It is so difficult to explain
"to you, my dear, why we think that the earth is
"round, that I will not attempt it *yet*."

It is better, as we have often observed, to avoid
all *imperfect* explanations, which give children confused
ideas.

(August 18th, 1794.) Master — came to see us,
and taught S—— to fish for minnows. It was explain-
ed to S—— that fishing with worms for baits tortures
the worms. No other argument was used, no senti-
mental exclamations made upon the occasion; and
S—— fished no more, nor did he ever mention the
subject again.

Children sometimes appear cruel, when in fact they
do not know that they give pain to animals.

(July 27th, 1794.) S—— saw a beautiful rainbow,
and he said, "I wish I could walk over that fine
"arch."

This is one of the pleasures of Ariel, and of the
Sylphs in the Rape of the Lock. S—— was not

praised for a poetic wish, lest he should have learnt affectation.

(September 3d, 1794.) Mr. ——— attempted to explain to B——, H——, S——, and C——, the nature of insurance, and the day afterwards he asked them to explain it to him. They none of them understood it except B——, who could not, however, explain it, though she did understand it. The terms were all new to them, and they had no ships to insure.

(September 19th.) At dinner to-day, S—— (7 years old) said to his sister C——, "What is the name of that man that my father was talking to that sounded like Idem, Ifdal, or Iward, I believe." "Iward!" said somebody at table, "that name sounds like Lizard; yes, there is a family of the Lizards in the Guardian."

S——. "A real family?"

Mr. ———. "No, my dear; a name given to supposed characters."

M——. "Wasn't it one of the young Lizards who would prove to his mother when she had just scalded her fingers with boiling water out of the tea-kettle, that there's no more heat in fire than heat's you, than pain in the stick that beats you?"

Mr. ———. "Yes; I think that character has done harm, it has thrown a ridicule upon metaphysical disquisitions."

Mrs. ———. "Are not those lines about the pain in the stick in the "Letter * to my Sisters at Crux Easton," in Doddsley's poems?"

* Seame Jennings's.

Mr. —. "Yes; but they come originally from
"Hudibras, you know."

In flight conversations, such as these, which are not contrived for the purpose, the curiosity of children is awakened to literature; they see the use which people make of what they read, and they learn to talk freely about what they meet with in books. What a variety of thoughts came in a few instants from S——'s question about *Idem*!

(November 8th, 1795.) Mr. — read the first chapter of Hugh Trevor to us; which contains the history of a passionate farmer, who was in a rage with a goose because it would not eat some oats which he offered it. He tore off the wings of the animal, and twisted off its neck; he bit off the ear of a pig because it squealed when he was ringing it; he ran at his apprentice Hugh Trevor with a pitchfork, because he suspected that he had drunk some milk; the pitchfork stuck in a door. Hugh Trevor then told the passionate farmer, that the dog Jowler had drunk the milk, but that he would not tell this before, because he knew his master would have hanged the dog.

S—— admired Hugh Trevor for this extremely.

The farmer in his lucid intervals is extremely penitent, but his fit of rage seizes him again one morning when he sees some milk boiling over. He flies at Hugh Trevor, and stabs him with a clasp knife, with which he had been cutting bread and cheese; the knife is stopped by half a crown which Hugh Trevor had sewed in his waistcoat; *this half crown he had found on the highway a few days before.*

It was doubted by Miss M. S—— whether this last was a proper circumstance to be told to children, because it might lead them to be dishonest.

The evening after Mr. — had read the story, he asked S—— to repeat it to him. S—— remembered it, and told it distinctly till he came to the half crown; at this circumstance he hesitated. He said he did not know how Hugh Trevor “*came to keep it*,” though he had found it. He wondered that Hugh Trevor did not ask about it.

Mr. — explained to him, that when a person finds any thing upon the highway, he should put it into the hand of the public crier, who should cry it. Mr. — was not quite certain whether the property found on the high road, after it has been *cried* and no owner appears, belongs to the king, or to the person who finds it. Blackstone's Commentaries were consulted; the passage concerning *Treasure trove* was read to S——; it is written in such distinct language that he understood it completely.

Young people may acquire much knowledge by consulting books, at the moment that any interest is excited by conversation upon particular subjects.

Explanations about the *law* were detailed to S——, because he was intended for a lawyer. In conversation we may direct the attention of children to what are to be their professional studies, and we may associate entertainment and pleasure with the idea of their future profession.

The story of the passionate farmer in Hugh Trevor was thought to be a good lesson for children of vivacious tempers, as it shews to what crimes excess of passion may transport. This man appears an object of compassion; all the children felt a mixture of pity

and abhorrence when they heard the history of his disease.

(November 23d, 1795.) This morning at breakfast Miss ——— observed, that the inside of the cream cover, which was made of black Wedgwood's ware, looked brown and speckled, as if the glazing had been worn away; she asked whether this was caused by the cream. One of the company immediately exclaimed, "Oh! I've heard that Wedgwood's ware won't hold oil." Mr. ——— observed, that it would be best to try the experiment, instead of resting content with this hearsay evidence; he asked H—— and S—— what would be the best method of trying the experiment exactly.

S—— proposed to pour oil into a vessel of Wedgwood's ware, and to measure the depth of the oil when first put in; to leave the oil in the vessel for some time, and then to measure again the depth of the oil.

H—— said, "I would weigh the Wedgwood's ware vessel, then pour oil into it, and weigh it (them) again; then I would leave the oil in the vessel for some time, and afterwards I would pour out the oil, and would weigh the vessel to see if it had gained any weight; and then weigh the oil to find out whether it had lost any weight since it was put into the vessel." H——'s scheme was approved.

A black Wedgwood's ware salt-cellar was weighed in accurate scales; it weighed 1196 grains; 110 grains of oil were poured into it; total weight of the salt-cellar and oil 1306 grs. Six months afterwards, the salt-cellar was produced to the children, who were astonished to see that the oil had disappeared. The lady,

who had first asserted that Wedgwood's ware would not hold oil, was inclined to believe that the oil had oozed through the pores of the salt-cellar; but the little spectators thought it was more probable that the oil might have been accidentally spilled; the salt-cellar weighed as before 1196 grains.

The experiment was repeated, and this time it was resolved to lock up the salt-cellar, that it might not again be thrown down.

(April 14th, 1796.) Into the same salt-cellar 100 grains weight of oil was poured (total weight 1296 grains): The salt-cellar was put on a saucer and covered with a glass tumbler. (June 3d, 1796.) Mr. — weighed the salt-cellar, and found that with the oil it weighed precisely the same as before 1296 grains; without the oil 1196 grains, its original weight; therefore it was clear that the Wedgwood's ware had neither imbibed the oil, or let it pass through its pores.

This little experiment has not been thus minutely told for philosophers, but for children; however trivial the subject, it is useful to teach children early to try experiments. Even the weighing and calculating in this experiment amused them, and gave some ideas of the exactness necessary to prove any fact.

(December 1st, 1795.) S—— (8 years old), in reading Gay's fable of "the painter who pleased every body and nobody," was delighted to hear that the painter put his pallet upon his thumb, because S—— had seen a little pallet of his sister A——'s which she used to put on her thumb. S—— had been much amused by this, and he was very fond of this sister, who had been absent for some time. Association makes

slight circumstances agreeable to children ; if we do not know these associations we are surprised at their expressions of delight. It is useful to trace them. (Vid. Chapter on Imagination.)

S—— seemed puzzled when he read that the painter “dipped his pencil, talked of *Greece*.” “Why did he talk of *Greece* ?” said S—— with a look of astonishment. Upon enquiry, it was found that S—— mistook the word *Greece* for *Grease* !

It was explained to him, that Grecian statues and Grecian figures are generally thought to be particularly graceful and well executed ; that, therefore, painters attend to them.

December 1st, 1795. After dinner to-day, S—— was looking at a little black toothpick-case of his father's : his father asked him if he knew what it was made of.

The children guessed different things ; wood, horn, bone, paper, pasteboard, glue.

Mr.——. “Instead of examining the tooth-pick case, “S——, you hold it in your hand, and turn your eyes “away from it that you may think the better. Now, “when I want to find out any thing about a particular “object, I keep my eye fixed upon it. Observe the “texture of that toothpick-case, if you want to know “the materials of which it is made ; look at the edges, “feel it.”

S——. “May I smell it ?”

Mr.——. “Oh yes. You may use all your senses.”

S——, (feeling the toothpick-case, smelling it, and looking closely at it.) “It is black, and smooth, and “strong and light. What is, let me see, both strong “and light, and it will bend—parchment ?”

Mr. ——. "That is a good guess; but you are
"not quite right yet. What is parchment? I think by
"your look that you don't know."

S——. "Is it not paper pasted together?"

M——. "No; I thought you mistook pasteboard
"for parchment."

S——. "Is parchment skin?"

Mr. ——. "Of what?"

S——. "Animals."

Mr. ——. "What animal?"

S——. "I don't know."

Mr. ——. "Parchment is the skin of sheep."

"But, S——, don't keep the toothpick-case in
"your hand, push it round the table to your neigh-
"bours, that every body may look again before they
"guess. I think, for certain reasons of my own, that
"H—— will guess right."

H——. "Oh, I know what it is now!"

H—— had lately made a pump, the piston of which
was made of leather; the leather had been wetted, and
then forced through a mould of the proper size. H——
recollected this, as Mr. — thought he would, and
guessed that the case might have been made of leather,
and by a similar process.

S——. "Is it made of the skin of some animal?"

Mr. ——. "Yes; but what do you mean by the
"skin of some animal? What do you call it?"

S—— (laughing). "Oh, leather! leather!"

H——. "Yes, it's made the same way that the
"piston of my pump is made, I suppose."

M——. "Could not shoes be made in the same
"manner in a mould?"

Mr. —. "Yes; but there would be one disadvantage; the shoes would lose their shape as soon as they were wet; and the sole and upper leather must be nearly of the same thickness."

S—. "Is the toothpick-case made out of any particular kind of leather? I wish I could make one!"

M—. "You have a bit of green leather, will you give it to me? I'll punch it out like H—'s piston; but I don't exactly know how the toothpick-case was made into the right shape?"

Mr. —. "It was made in the same manner in which pencil-cases and thimbles are made. If you take a thin piece of silver, or of any ductile material, and lay it over a concave mould, you can readily imagine that you can make the thin, ductile material take the shape of any mould into which you put it; and you may go on forcing it into moulds of different depths, till at last the plate of silver will have been shaped into a cylindrical form; a thimble, a pencil-case, a toothpick-case, or any similar figure."

We have observed, (V. Mechanics) that children should have some general idea of mechanics before they go into the large manufactories; this can be given to them from time to time in conversation, when little circumstances occur which *naturally* lead to the subject.

(November 30th, 1795.) S— said he liked the beginning of Gay's fable of "The man and the flea" very much, but he could not tell what was meant by the crab's crawling beside the *coral grove*, and hearing

the ocean roll *above*. "The ocean cannot roll *above*,
"can it, mother?"

Mother. "Yes, when the animal is crawling be-
"low he hears the water rolling above him."

M——. "Coral groves mean the branches of co-
"ral which look like trees; you saw some at Bristol in
"Mr. B——'s collection."

The difficulty S—— found in understanding "coral
"groves" confirms what has been observed, that chil-
"dren should never read poetry without its being tho-
"roughly explained. (V. Chapter on Books.)

(January 10th, 1795.) S—— (8 years old) said
that he had been thinking about the wind; and he
believed that it was the earth's turning round that made
the wind.

M——. "Then how comes it that the wind does
"not blow always the same way?"

S——. "Aye, that's the thing I can't make out;
"besides, perhaps the air would stick to the earth as it
"turns round, as threads stick to my spinning top,
"and go round with it."

(January 4th, 1795.) As we were talking of the
king of Poland's little dwarf, S—— recollected by
contrast the Irish giant whom he had seen at Bristol.
"I liked the Irish giant very much, because," said
S——, "though he was so large he was not furly;
"and when my father asked him to take out his shoe-
"buckle to try whether it would cover my foot, he
"did not seem in a hurry to do it. I suppose he did
"not wish to shew how little I was."

Children are nice observers of that kind of politeness
which arises from good nature; they may hence learn

what really pleases in manners, without being taught grimace.

Dwarfs and giants led us to Gulliver's Travels. S—— had never read them, but one of the company now gave him some general account of Lilliput and Brobdignag. He thought the account of the little people more entertaining than that of the large ones; the carriage of Gulliver's hat by a team of Lilliputian horses diverted him; but, when he was told that the queen of Brobdignag's dwarf stuck Gulliver one day at dinner into a marrow bone, S—— looked grave, and seemed rather shocked than amused; he said, "It must have almost suffocated poor Gulliver, and must have spoiled his clothes." S—— wondered of what cloth they could make him new clothes, because the cloth in Brobdignag must have been too thick, and as thick as a board. He also wished to know what sort of glass was used to glaze the windows in Gulliver's wooden house; "because," said he, "their common glass must have been so thick that it would not have been transparent to Gulliver." He thought that Gulliver must have been extremely afraid of setting his small wooden house on fire.

M——. "Why more afraid than we are? His house was as large for Gulliver as our house is for us."

S——. "Yes, but what makes the fire must have been *so much* larger! One cinder, one spark of theirs would have filled his little grate. And how did he do to read their books?"

S—— was told that Gulliver stood at the topmost line of the page, and ran along as fast as he read till he got to the bottom of the page. It was suggested,

that Gulliver might have used a diminishing glass. S—— immediately exclaimed, “How entertaining it must have been to him to look through their telescopes!” An instance of invention arising from *contrast*.

If the conversation had not here been interrupted, S—— would probably have invented a greater variety of pleasures and difficulties for Gulliver; his eagerness to read Gulliver’s Travels was increased by this conversation. We should let children exercise their invention upon all subjects, and not tell them the whole of every thing, and all the ingenious parts of a story. Sometimes they invent these, and are then interested to see how the *real* author has managed them. Thus children’s love for literature may be increased, and the activity of their minds may be exercised. “Le secret d’ennuyer,” says an author* who never tires us, “Le secret d’ennuyer est celui de tout dire.” This may be applied to the art of education. (V. Attention, Memory, and Invention.)

(January 17th, 1796.) S——. “I don’t understand about the tides.”

H—— (13 years old). “The moon when it comes near the earth draws up the sea by the middle; attracts it, and as the middle rises, the water runs down from that again into the channels of rivers.”

S——. “But—Hum!—the moon attracts the sea; but why does not the sun attract it by the middle as well as the moon? How can you be sure that it is the moon that does it?”

Mr. ——. “We are not sure that the moon is the cause of tides,”

* Voltaire.

We should never force any system upon the belief of children; but wait till they can understand all the arguments on each side of the question.

(January 18th, 1796.) S—— (9 years old). “Fa-
 “ther, I have thought of a reason for the wind’s
 “blowing. When there has been a hot sunshiny day,
 “and when the ground has been wet, the sun attracts
 “a great deal of vapour: then *that* vapour must have
 “room, so it must push away some air to make room
 “for itself: besides, vapour swells with heat, so it
 “must have a *great-great* deal of room as it grows hot-
 “ter and hotter; and the moving the air to make way
 “for it must make wind.”

It is probable, that if children are not early taught by rote words which they cannot understand, they will *think* for themselves! and, however strange their incipient theories may appear, there is hope for the improvement of children as long as their minds are active

(February 13th, 1796.) S——. “How do phy-
 “sicians try new medicines? If they are not sure
 “they will succeed, they may be hanged for murder,
 “mayn’t they? It is cruel to try *them* (*them* meant
 “medicines) on animals; besides, all animals are not
 “the same as men. A pig’s inside is the most like
 “that of a man. I remember my father shewed us
 “the inside of a pig once.”

Some time afterwards, S—— inquired what was meant by the circulation of the blood. “How are we
 “sure that it does move? You told me that it doesn’t
 “move after we die, then nobody can have seen it
 “really moving in the veins; that beating that I feel
 “in my pulse does not feel like any thing running
 “backwards and forwards; it beats up and down.”

The lady to whom S—— addressed these questions and observations unfortunately could not give him any information upon this subject, but she had at least the prudence or honesty, to tell the boy that “she did not “know any thing about the matter.”

S—— should have been shewn the circulation of the blood in fishes; which he might have seen by a microscope.

Children’s minds turn to such inquiries; surely, if they were intended for physicians, these are the moments to give them a taste for their future profession, by associating pleasure with instruction, and connecting with the eagerness of curiosity the hope of making discoveries; a hope which all vivacious young people strongly feel.

(February 16th.) S—— objected to that fable of Phædrus in which it is said, that a boy threw a stone at Æsop, and that Æsop told the boy to throw a stone at another passenger, pointing to a rich man. The boy did as Æsop desired, and the rich man had the boy hanged.

S—— said, that he thought that Æsop should have been hanged, because Æsop was the cause of the boy’s fault.

How little suited *political* fables are to children. This fable, which was meant to shew, we suppose, that the *rich* could not, like the poor, be insulted with impunity, was quite unintelligible to a boy (nine years old) of *simple* understanding.

(July 19th, 1796.) Amongst “*Vulgar errors*,” Sir Thomas Browne might have mentioned the common notion, that if you take a hen and hold her head down to the ground, and draw a circle of chalk round her,

she will be enchanted by this magical operation so that she cannot stir. We determined to try the experiment, for which Dr. Johnson would have laughed at us, as he laughed at Browne * for trying "*the hopeless experiment*" about the magnetic dials.

A hen's head was held down upon a stone flag, and a chalk line was drawn before her; she did not move. The same hen was put into a circle of chalk that had been previously drawn for her reception; her head was held down according to the letter of the charm, and she did not move; line or circle apparently operated alike. It was suggested (by A——) that perhaps the hen was frightened by her head's being held down to the ground, and that the chalk line and circle had nothing to do with the business. The hen was carried out of sight of the magic line and circle, her head was held down to the ground as before; but when the person who had held her gently withdrew his hand she did not move. She did not for some instants recover from her terror; or, perhaps, the feeling of pressure seemed to her to remain upon her head after the hand was withdrawn.

Children who are accustomed to *doubt*, and to try experiments, will not be dupes to "Vulgar errors."

(July 20th, 1796.) S—— (between 9 and 10), when he heard a lady propose to make use of a small glass tumbler to hold pomatum, made a face expressive of great disgust; he was begged to give a reason for his dislike. S—— said it appeared to him dirty and disagreeable to put pomatum into a tumbler out of which we are used to drink wine or water.

* V. Johnson's Life of Browne.

We have observed, (V. Chapter on Taste and Imagination) that children may early be led to reflect upon the cause of their tastes.

(July 24th, 1796.) S—— observed, that “lachrymal sack is like Aboulcasem’s cup, (in the Persian tales). It is emptied and fills again of itself; though “it is emptied ever so often, it continues full.”

The power of reasoning had been more cultivated in S—— than the taste of wit or allusion, yet it seems his mind was not defective in that quickness of seizing resemblances which *may* lead to wit. He was not praised for the lachrymal sack, and Aboulcasem’s cup. (V. Chapter on Wit and judgment.)

(August 3d, 1796.) C—— (11 years old), after she had heard a description of a fine engine, said, “I want to read the description of the fire engine over again, for whilst my father was describing one particular part, I recollected something that I had heard before, and *that* took my attention quite away from what he was saying. Very often when I am listening, something that is said puts me in mind of something, and then I go on thinking of *that*, and I cannot hear what is said any longer.”

Preceptors should listen to the observations that their pupils make upon their own minds; this remark of C—— suggested to us some ideas that have been detailed in the “Chapter on Attention.”

(August 1st, 1796.) S——, who had been translating some of Ovid’s Metamorphoses to his father, exclaimed, “I hate those ancient gods and goddesses, they are so wicked! I wish I was Perseus and had his shield, I would fly up to heaven and turn Jupiter, and Apollo, and Venus into stone; then they

"would be too heavy to stay in heaven, and they
"would tumble down to earth ; and then they would
"be stone statues, and we should have much finer sta-
"tues of Apollo and Venus than any they have now
"at Rome."

(November 8th, 1796.) The following are the
"Curiosities of Literature," which were promised to
the reader in the chapter upon grammar and classical
literature.

Translation from Ovid. The Cave of Sleep (*first*
edition.)

"No watchful cock Aurora's beams invite ;
"No dog or goose, the guardians of the night."

Dog and goose were objected to, and the young author
changed them into dogs and geese.

"No herds nor flocks, nor human voice is heard ;
"But nigh the cave a *ruffling* spring appeared."

When this line was read to S—— he changed the
epithet *ruffling* into *gliding*.

"And with soft murmurs faithless sleep invites,
"And there the flying past again delights ;
"And near the door the noxious poppy grows,
"And spreads his sleepy milk at daylight's close."

S—— was now requested to translate the beginning
of the sentence, and he produced these lines :

"Far from the sun there lies a cave forlorn,
"Which Sol's bright beams *can't* enter eve nor morn."

Can't was objected to. Mr. —— asked S—— what

was the literal English. S—— first said *not*, and then *nor*; and he corrected his line, and made it

"Which Sol's bright beams *nor* visits eve nor morn."

Afterwards :

"Far in a vale there lies a cave forlorn,

"Which Phœbus never enters eve nor morn."

After an interval of a few days the lines were all read to the boy, to try whether he could farther correct them; he desired to have the two following lines left out:

"No herds, nor flocks, no human voice is heard,

"But nigh the cave a gliding spring appeared."

And in the place of them he wrote,

"No flocks nor herds disturb the silent plains,

"Within the sacred walls mute quiet reigns."

Instead of the two following,

"And with soft murmurs faithless sleep invites,

"And there the flying past again delights,"

S—— desired his *secretary* to write,

"But murmuring Lethe soothing sleep invites,

"In dreams again the flying past delights."

Instead of

"And near the doors the noxious poppy grows,

"And spreads his sleepy milk at daylight's close,"

the following lines were written. S—— did not say doors, because he thought the cave had no doors; yet his Latin, he said, spoke of squeaking hinges.

“From milky flowers that near the cavern grow,
“Night scatters the collected sleep below.”

We shall not make any farther apology for inserting all these corrections, because we have already sufficiently explained our motives. (V. Chapter on Grammar and Classical Literature.)

(February 1797.) A theatre was put up for the children, and they acted a little play. When the scenes were pulled down afterwards, S—— was extremely sorry to see the whole theatre vanish; he had succeeded as an actor, and he wished to have another play acted. His father did not wish that he should become ambitious of excelling in this way at ten years old, because, it might have turned his attention away from things of more consequence; and, if he had been much applauded for his talent, he would, perhaps, have been over stimulated. (V. Chapter on Vanity and Ambition.)

The way to turn this boy's mind away from its present pursuit, was to give him another object, not to blame or check him for the natural expression of his wishes. It is difficult to find objects for children who have not cultivated a taste for literature; but infinite variety can be found for those who have acquired this happy taste.

Soon after S—— had expressed his ardent wish to have another play performed, the trial of some poor man in the neighbourhood happened to be mentioned, and it was said, that the criminal had the choice of either going to Botany-bay, or being hanged.

S—— asked how that could be. “I didn’t think,”
 “said he, that a man could have two punishments.
 “Can the judge change the punishment? I thought it
 “was fixed by the law.”

Mr. ——— told S—— that these were sensible ques-
 tions, and as he saw that the boy’s attention was fixed,
 he seized the opportunity to give him some general
 idea upon the subject. He began with telling S——
 the manner in which a suspected person is brought be-
 fore a justice of the peace. A warrant and committal
 were described; then the manner of trying criminals;
 what is called the court, the jury, &c. the crier of the
 court, and the forms of a trial; the reason why the
 prisoner when he is asked how he will be tried? an-
 swers, “By God and my country;” this led to an
 account of the old absurd fire and water ordeals, and
 thence the advantages of a trial by jury became more
 apparent by comparison. Mr. ——— told S—— why
 it is called *impanelling* a jury, and why the jury are
 called a *panel*; the manner in which the jury gave
 their verdict; the duty of the judge, to sum up the
 evidence, to explain the law to the jury. “The judge
 “is by the humane laws of England always supposed
 “to be the protector of the accused: and now, S——,
 “we are come round to your question; the judge
 “cannot make the punishment more severe; but when
 “the punishment is fine or imprisonment, the quantity
 “or duration of the punishment is left to his judgment.
 “The king may remit the punishment entirely; he
 “may pardon the criminal; he may, if a man be sen-
 “tenced to be hanged, give him his choice whether

"he will be hanged or *transported*." (The word was explained.)

"But," said S——, "since the judge cannot *change* the punishment, why may the king? I think it is very unjust that the king should have such a power, because, if he changes the punishment for one thing, why mayn't he for another and another, and so on?"

Mr. ——. "I am inclined to believe, my dear S——, that it is for the good of a state that a king should have such a power; but I am not sure. If any individual should have this power, I think it most safely trusted to a king; because, as he has no connection with the individuals who are tried, as he does not live amongst them, he is not so liable as judges and jurymen might be to be prejudiced, to be influenced by personal revenge, friendship, or pity. When he pardons, he is supposed to pardon without any personal motives. But of all this, S——, you will judge for yourself when you study the law. I intend to take you with me to ——— next assizes to hear a trial."

S—— looked fully as eager to hear a trial, as he had done, half an hour before, to act a play. We should mention, that in the little play in which he had acted he had played the part of a justice of the peace, and a sort of trial formed the business of the play; the ideas of trials and law, therefore, joined readily with his former train of thought. Much of the success of education depends upon the preceptor's seizing these slight connexions. It is scarcely possible to explain this fully in writing.

(February 25th, 1797.) S—— was reading in

"Evenings at Home" the story of "A friend in need
"is a friend indeed."

"Mr. G. Cornish having raised a moderate fortune;
"and being now beyond the meridian of life; he felt a
"*strong desire* of returning to his native country."

S——. "How much better that is than to say he
"felt an *irrefrangible desire*, or an *insupportable desire*, as peo-
"ple sometimes say in books."

Our pupils were always permitted to stop when they
were reading aloud, to make whatever remarks they
pleased upon whatever books they read. They did not
by this method get through so many books as other
children of their age usually do; but their taste for
reading seemed to increase rapidly. (V: Books.)

(March 8th, 1797.) H—— (14) told us that he
remembered seeing, when he was five years old, some
puppets packed up by a showman in a triangular box;
"and for some time afterwards," said H——; "when
"I saw my father's triangular hat-box, I expected
"puppets to come out of it. A few days ago, I met
"a man with a triangular box upon his head, and I
"thought that there were puppets in the box."

We have taken notice of this propensity in children
to believe that particular are general causes; and we
have endeavoured to shew how it affects the temper;
and the habits of reasoning. (V: Temper, and Wit
and Judgment.)

(March 27th, 1797.) Mr. ——— shewed little
W—— (3 years old) a watch, and asked him if he
thought it was alive:

W——. "Yes:"

Mr. ———. "Do you think that fire is alive?"

W——. "Yes."

Mr. — (the child was standing at the tea table).

"Do you think the urn is alive?"

W——. "No."

Mr. —. "Do you think that book is alive?"

W——. "No."

Mr. —. "The horses?"

W——. "Yes."

Mr. —. "Do you think that the chaise is
"alive?"

W——. "Yes." Then, after looking in Mr.
——'s face, he changed his opinion, and said *No*.

W—— did not seem to know what was meant by
the word *alive*.

Mr. — called Ho. (5 years old), and asked her
whether she thought that the watch was alive. She at
first said Yes; but, as soon as she had time to recol-
lect herself, she said that the watch was not alive.

This question was asked to try whether Reid was
right in his conjecture as to the answers a child would
give to such a question. (V. Reid's *Essays on the In-
tellectual Powers of Man*.)

We frequently say, that flowers, &c. are dead: we
should explain to children that there are two kinds of
life; or rather, that the word *life* is used to express two
ideas; vegetable life, and animal life.

(July 1797.) Little W—— (3 years old) was
shewn Miss B——'s beautiful copy of the *Aurora fur-
gens of Guido*. The car of Apollo is encircled by the
dancing hours, so that its shape is not seen, part of
one wheel only is visible between the robes of the dan-
cing figures. We asked little W—— why that man
(pointing to the figure of Apollo in his invisible car).

looked so much higher up in the air than the other people ?

W——. “ Because he is in a carriage; he is fitting in a carriage.”

We pointed to the imperfect wheel, and asked if he knew what that was; he immediately answered, “ Yes, “ the wheel of the carriage.” We wanted to see whether the imagination of a child of three years old would supply the invifible parts of the *car*, and whether the wheel and horfes, and man holding the reins, would fuffest the idea of a phaeton. (V. Chapter on Taste and Imagination.)

We fhall not trefpafs upon the reader’s patience with any more anecdotes from the nurfery. We hope, that candid and intelligent parents will pardon, if they have difcovered any defire in us to *exhibit* our pupils. We may miftake our own motives, and we do not pretend to be perfectly impartial judges upon this occafion; but we have hoped, that only fuch converfations or anecdotes have been produced as may be of fome ufe in Practical Education. From converfation, if properly managed, children may learn with eafe, expedition, and delight, a variety of knowledge; and a fkilful preceptor can apply in converfation all the principles that we have laborioufly endeavoured to make intelligible.

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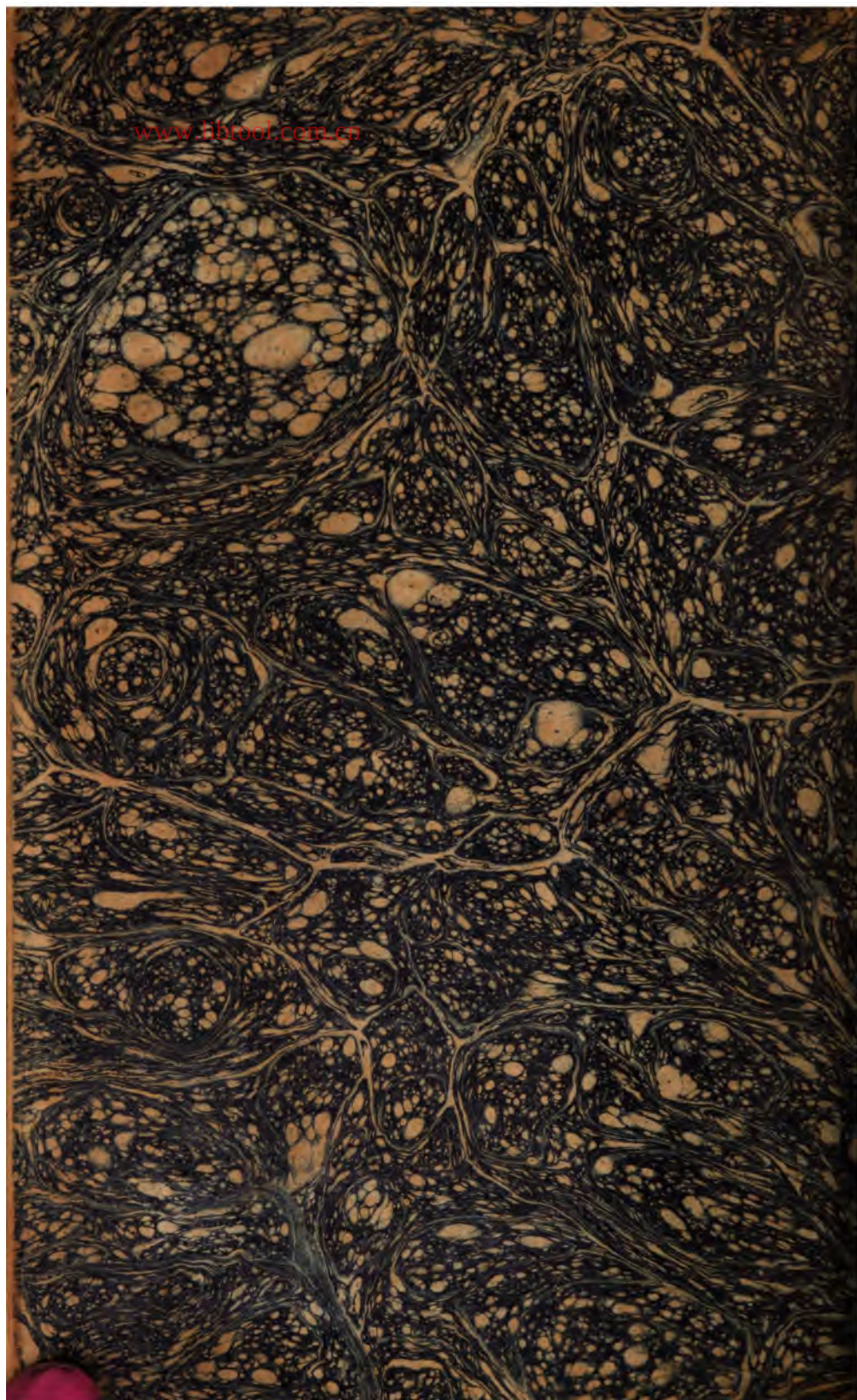
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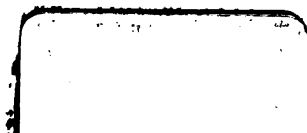
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