JEAN JACQUES ROUSSEAU.

ÉMILE;

OR,

CONCERNING EDUCATION.

Extracts

CONTAINING THE PRINCIPAL ELEMENTS OF PEDAGOGY FOUND IN THE FIRST THREE BOOKS. WITH AN INTRODUCTION AND NOTES BY JULES STEEG, *DÉPUTÉ*, PARIS, FRANCE.

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BOSTON:

D. C. HEATH & COMPANY.

1889.

J. S. Cushing & Co., Printers, Boston, Mass.

TRANSLATOR'S PREFACE.

M. JULES STEEG has rendered a real service to French and American teachers by his judicious selections from Rousseau's Émile. For the three-volume novel of a hundred years ago, with its long disquisitions and digressions, so dear to the heart of our patient ancestors, is now distasteful to all but lovers of the curious in books.

"Émile" is like an antique mirror of brass; it reflects the features of educational humanity no less faithfully than one of more modern construction. In these few pages will be found the germ of all that is useful in present systems of education, as well as most of the ever-recurring mistakes of well-meaning zealots.

The eighteenth century translations of this wonderful book have for many readers the disadvantage of an English style long disused. It is hoped that this attempt at a new translation may, with all its defects, have the one merit of being in the dialect of the nineteenth century, and may thus reach a wider circle of readers.

INTRODUCTION.

JEAN JACQUES ROUSSEAU'S book on education has had a powerful influence throughout Europe, and even in the New World. It was in its day a kind of gospel. It had its share in bringing about the Revolution which renovated the entire aspect of our country. Many of the reforms so lauded by it have since then been carried into effect, and at this day seem every-day affairs. In the eighteenth century they were unheard-of daring; they were mere dreams.

Long before that time the immortal satirist Rabelais, and, after him, Michael Montaigne, had already divined the truth, had pointed out serious defects in education, and the way to reform. No one followed out their suggestions, or even gave them a hearing. Routine went on its way. Exercises of memory, — the science that consists of mere words, — pedantry, barren and vain-glorious, — held fast their "bad eminence." The child was treated as a machine, or as a man in miniature, no account being taken of his nature or of his real needs; without any greater solicitude about reasonable method — the hygiene of mind — than about the hygiene of the body.

Rousseau, who had educated himself, and very badly at that, was impressed with the dangers of the education of his day. A mother having asked his advice, he took up the pen to write it; and, little by little, his counsels grew into a book, a large work, a pedagogic romance.

This romance, when it appeared in 1762, created a great noise and a great scandal. The Archbishop of Paris, Christophe de Beaumont, saw in it a dangerous, mischievous work, and gave himself the trouble of writing a long encyclical letter in order to point out the book to the reprobation of the faithful. This document of twenty-seven chapters is a formal refutation of the theories advanced in "Émile."

The archbishop declares that the plan of education proposed by the author, "far from being in accordance with Christianity, is not fitted to form citizens, or even men." He accuses Rousseau of irreligion and of bad faith; he denounces him to the temporal power as animated "by a spirit of insubordination and of revolt." He sums up by solemnly condemning the book "as containing an abominable doctrine, calculated to overthrow natural law, and to destroy the foundations of the Christian religion; establishing maxims contrary to Gospel morality; having a tendency to disturb the peace of empires, to stir up subjects to revolt against their sovereign; as containing a great number of propositions respectively false, scandalous, full of hatred toward the Church and its ministers, derogating from the respect due to Holy Scripture and the traditions of the Church, erroneous, impious, blasphemous, and heretical."

In those days, such a condemnation was a serious matter; its consequences to an author might be terrible. Rousseau had barely time to flee. His arrest was decreed by the parliament of Paris, and his book was burned by the executioner. A few years before this, the author would have run the risk of being burned with his book.

As a fugitive, Rousseau did not find a safe retreat even in his own country. He was obliged to leave Geneva, where his book was also condemned, and Berne, where he had sought

refuge, but whence he was driven by intolerance. He owed it to the protection of Lord Keith, governor of Neufchâtel, a principality belonging to the King of Prussia, that he lived for some time in peace in the little town of Motiers in the Val de Travers.

It was from this place that he replied to the archbishop of Paris by an apology, a long-winded work in which he repels, one after another, the imputations of his accuser, and sets forth anew with greater urgency his philosophical and religious principles. This work, written on a rather confused plan but with impassioned eloquence, manifests a lofty and sincere spirit. It is said that the archbishop was deeply touched by it, and never afterward spoke of the author of "Émile" without extreme reserve, sometimes even eulogizing his character and his virtues.

The renown of the book, condemned by so high an authority, was immense. Scandal, by attracting public attention to it, did it good service. What was most serious and most suggestive in it was not, perhaps, seized upon; but the "craze" of which it was the object had, notwithstanding, good results. Mothers were won over, and resolved to nurse their own infants; great lords began to learn handicrafts, like Rousseau's imaginary pupil; physical exercises came into fashion; the spirit of innovation was forcing itself a way.

It was not among ourselves, however, that the theories of Rousseau were most eagerly experimented upon; it was among foreigners, in Germany, in Switzerland, that they found more resolute partisans, and a field more ready to receive them.

Three men above all the rest are noted for having popularized the pedagogic method of Rousseau, and for having been inspired in their labors by "Émile." These were Basedow, Pestalozzi, and Froebel.

Basedow, a German theologian, had devoted himself entirely to dogmatic controversy, until the reading of "Émile" had the effect of enlarging his mental horizon, and of revealing to him his true vocation. He wrote important books to show how Rousseau's method could be applied in different departments of instruction, and founded at Dessau, in 1774, an institution to bring that method within the domain of experience.

This institution, to which he gave the name of "Philanthropinum," was secular in the true sense of the word; and at that time this was in itself a novelty. It was open to pupils of every belief and every nationality, and proposed to render study easy, pleasant, and expeditious to them, by following the directions of nature itself. In the first rank of his disciples may be placed Campé, who succeeded him in the management of the Philanthropinum.

Pestalozzi of Zürich, one of the foremost educators of modern times, also found his whole life transformed by the reading of "Émile," which awoke in him the genius of a reformer. He himself also, in 1775, founded a school, in order to put in practice there his progressive and professional method of teaching, which was a fruitful development of seeds sown by Rousseau in his book. Pestalozzi left numerous writings, — romances, treatises, reviews, — all having for sole object the popularization of his ideas and processes of education. The most distinguished among his disciples and continuators is Froebel, the founder of those primary schools or asylums known by the name of "kindergartens," and the author of highly esteemed pedagogic works.

These various attempts, these new and ingenious processes which, step by step, have made their way among us, and are beginning to make their workings felt, even in institutions most

stoutly opposed to progress, are all traceable to Rousseau's "Émile."

It is therefore not too much for Frenchmen, for teachers, for parents, for every one in our country who is interested in what concerns teaching, to go back to the source of so great a movement.

It is true that "Émile" contains pages that have outlived their day, many odd precepts, many false ideas, many disputable and destructive theories; but at the same time we find in it so many sagacious observations, such upright counsels, suitable even to modern times, so lofty an ideal, that, in spite of everything, we cannot read and study it without profit. There is no one who does not know the book by name and by reputation; but how many parents, and even teachers, have never read it!

This is because a large part of the book is no longer in accordance with the actual condition of things; because its very plan, its fundamental idea, are outside of the truth. We are obliged to exercise judgment, to make selections. Some of it must be taken, some left untouched. This is what we have done in the present edition.

We have not, indeed, the presumption to correct Rousseau, or to substitute an expurgated "Émile" for the authentic "Émile." We have simply wished to draw the attention of the teachers of childhood to those pages of this book which have least grown old, which can still be of service, can hasten the downfall of the old systems, can emphasize, by their energy and beauty of language, methods already inaugurated and reforms already undertaken. These methods and reforms cannot be too often recommended and set in a clear light. We have desired to call to the rescue this powerful and impassioned writer, who brings to bear upon every subject he approaches the magical attractiveness of his style.

There is absolutely nothing practicable in his system. It consists in isolating a child from the rest of the world; in creating expressly for him a tutor, who is a phœnix among his kind; in depriving him of father, mother, brothers, and sisters, his companions in study; in surrounding him with a perpetual charlatanism, under the pretext of following nature; and in showing him only through the veil of a factitious atmosphere the society in which he is to live. And, nevertheless, at each step it is sound reason by which we are met; by an astonishing paradox, this whimsicality is full of good sense; this dream overflows with realities; this improbable and chimerical romance contains the substance and the marrow of a rational and truly modern treatise on pedagogy. Sometimes we must read between the lines, add what experience has taught us since that day, transpose into an atmosphere of open democracy these pages, written under the old order of things, but even then quivering with the new world which they were bringing to light, and for which they prepared the way.

Reading "Émile" in the light of modern prejudices, we can see in it more than the author wittingly put into it; but not more than logic and the instinct of genius set down there.

To unfold the powers of children in due proportion to their age; not to transcend their ability; to arouse in them the sense of the observer and of the pioneer; to make them discoverers rather than imitators; to teach them accountability to themselves and not slavish dependence upon the words of others; to address ourselves more to the will than to custom, to the reason rather than to the memory; to substitute for verbal recitations lessons about things; to lead to theory by way of art; to assign to physical movements and exercises a prominent place, from the earliest hours of life up to perfect maturity; such are the

principles scattered broadcast in this book, and forming a happy counterpoise to the oddities of which Rousseau was perhaps most proud.

He takes the child in its cradle, almost before its birth; he desires that mothers should fulfil the sacred duty of nursing them at the breast. If there must be a nurse, he knows how to choose her, how she ought to be treated, how she should be fed. He watches over the movements of the new-born child, over its first playthings. All these counsels bear the stamp of good sense and of experience; or, rather, they result from a power of divination singular enough in a man who was not willing to take care of his own children. In this way, day by day, he follows up the physical and moral development of the little being, all whose ideas and feelings he analyzes, whom he guides with wisdom and with tact throughout the mazes of a life made up of convention and artifice.

We have carefully avoided suppressing the fictions of the gardener and of the mountebank; because they are characteristic of his manner, and because, after all, these pre-arranged scenes which, as they stand, are anything in the world rather than real teaching, contain, nevertheless, right notions, and opinions which may suggest to intelligent teachers processes in prudent education. Such teachers will not copy the form; they will not imitate the awkward clap-trap; but, yielding to the inspiration of the dominant idea, they will, in a way more in accordance with nature, manage to thrill with life the teaching of facts, and will aid the mind in giving birth to its ideas. This is the old method of Socrates, the eternal method of reason, the only method which really educates.

We have brought this volume to an end with the third book of "Émile." The fourth and fifth books which follow are not

within the domain of pedagogy. They contain admirable pages, which ought to be read; which occupy one of the foremost places in our literature; which deal with philosophy, with ethics, with theology; but they concern themselves with the manner of directing young men and women, and no longer with childhood. The author conducts his Émile even as far as to his betrothal; he devotes an entire book to the betrothed herself, Sophie, and closes his volume only after he has united them in marriage.

We will not go so far. We will leave Émile upon the confines of youth, at the time when he escapes from school, and when he is about beginning to feel that he is a man. At this difficult and critical period the teacher no longer suffices. Then, above all things, is needed all the influence of the family; the father's example, the mother's clear-sighted tenderness, worthy friendships, an environment of meritorious people, of upright minds animated by lofty ideas, who attract within their orbit this ardent and inquisitive being, eager for novelty, for action, and for independence.

Artifices and stratagems are then no longer good for anything; they are very soon laid open to the light. All that can be required of a teacher is that he shall have furnished his pupils with a sound and strong education, drawn from the sources of reason, experience, and nature; that he shall have prepared them to learn to form judgments, to make use of their faculties, to enter valiantly upon study and upon life. It seems to us that the pages of Rousseau here published may be a useful guide in the pursuit of such a result.

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Book First.

The first book, after some general remarks upon education, treats especially of early infancy; of the first years of life; of the care to be bestowed upon very young children; of the nursing of them; of the laws of health.

He makes education begin at birth; expresses himself on the subject of the habits to be given or to be avoided; discusses the use and meaning of tears, outcries, gestures, also the language that should be used with young children, so that, from their tenderest years, the inculcating of false ideas and the giving a wrong bent of mind may be avoided.

GENERAL REMARKS.

The Object of Education.

Coming from the hand of the Author of all things, everything is good; in the hands of man, everything degenerates. Man obliges one soil to nourish the productions of another, one tree to bear the fruits of another; he mingles and confounds climates, elements, seasons; he mutilates his dog, his horse, his slave. He overturns everything, disfigures everything; he loves deformity, monsters; he desires that nothing should be as nature made it, not even man himself. To please him, man must be broken in like a horse; man must be adapted to man's own fashion, like a tree in his garden.[1]

[1] It is useless to enlarge upon the absurdity of this theory, and upon the flagrant contradiction into which Rousseau allows himself to fall. If he is

Were it not for all this, matters would be still worse. No one wishes to be a half-developed being; and in the present condition of things, a man left to himself among others from his birth would be the most deformed among them all. Prejudices, authority, necessities, example, all the social institutions in which we are submerged, would stifle nature in him, and would put nothing in its place. In such a man nature would be like a shrub sprung up by chance in the midst of a highway, and jostled from all sides, bent in every direction, by the passers-by.

Plants are improved by cultivation, and men by education. If man were born large and strong, his size and strength would be useless to him until he had learned to use them. They would be prejudicial to him, by preventing others from thinking of assisting him; and left to himself he would die of wretchedness before he had known his own necessities. We pity the state of infancy; we do not perceive that the human race would have perished if man had not begun by being a child.

We are born weak, we need strength; we are born destitute of all things, we need assistance; we are born stupid, we need judgment. All that we have not at our birth, and that we need when grown up, is given us by education.

This education comes to us from nature itself, or from other men, or from circumstances. The internal development of our faculties and of our organs is the education nature gives us; the use we are taught to make of this development is the education we get from other men; and what we learn, by our own experience, about things that interest us, is the education of circumstances.

right, man ought to be left without education, and the earth without cultivation. This would not be even the savage state. But want of space forbids us to pause at each like statement of our author, who at once busies himself in nullifying it.

Each of us is therefore formed by three kinds of teachers. The pupil in whom their different lessons contradict one another is badly educated, and will never be in harmony with himself; the one in whom they all touch upon the same points and tend toward the same object advances toward that goal only, and lives accordingly. He alone is well educated.

Now of these three different educations, that of nature does not depend upon us; that of circumstances depends upon us only in certain respects; that of men is the only one of which we are really masters, and that solely because we think we are. For who can hope to direct entirely the speech and conduct of all who surround a child?

As soon, therefore, as education becomes an art, its success is almost impossible, since the agreement of circumstances necessary to this success is independent of personal effort. All that the utmost care can do is to approach more or less nearly our object; but, for attaining it, special good fortune is needed.

What is this object? That of nature itself, as has just been proved. Since the agreement of the three educations is necessary to their perfection, it is toward the one for which we ourselves can do nothing that we must direct both the others. But perhaps this word "nature" has too vague a meaning; we must here try to define it.

In the natural order of things, all men being equal, the vocation common to all is the state of manhood; and whoever is well trained for that, cannot fulfil badly any vocation which depends upon it. Whether my pupil be destined for the army, the church, or the bar, matters little to me. Before he can think of adopting the vocation of his parents, nature calls upon him to be a man. How to live is the business I wish to teach him. On leaving my hands he will

not, I admit, be a magistrate, a soldier, or a priest; first of all he will be a man. All that a man ought to be he can be, at need, as well as any one else can. Fortune will in vain alter his position, for he will always occupy his own.

Our real study is that of the state of man. He among us who best knows how to bear the good and evil fortunes of this life is, in my opinion, the best educated; whence it follows that true education consists less in precept than in practice. We begin to instruct ourselves when we begin to live; our education commences with the commencement of our life; our first teacher is our nurse. For this reason the word "education" had among the ancients another meaning which we no longer attach to it; it signified nutriment.

We must then take a broader view of things, and consider in our pupil man in the abstract, man exposed to all the accidents of human life. If man were born attached to the soil of a country, if the same season continued throughout the year, if every one held his fortune by such a tenure that he could never change it, the established customs of to-day would be in certain respects good. The child educated for his position, and never leaving it, could not be exposed to the inconveniences of another.

But seeing that human affairs are changeable, seeing the restless and disturbing spirit of this century, which overturns everything once in a generation, can a more senseless method be imagined than to educate a child as if he were never to leave his room, as if he were obliged to be constantly surrounded by his servants? If the poor creature takes but one step on the earth, if he comes down so much as one stair, he is ruined. This is not teaching him to endure pain; it is training him to feel it more keenly.

We think only of preserving the child: this is not enough. We ought to teach him to preserve himself when he is a man;

to bear the blows of fate; to brave both wealth and wretchedness; to live, if need be, among the snows of Iceland or upon the burning rock of Malta. In vain you take precautions against his dying,—he must die after all; and if his death be not indeed the result of those very precautions, they are none the less mistaken. It is less important to keep him from dying than it is to teach him how to live. To live is not merely to breathe, it is to act. It is to make use of our organs, of our senses, of our faculties, of all the powers which bear witness to us of our own existence. He who has lived most is not he who has numbered the most years, but he who has been most truly conscious of what life is. A man may have himself buried at the age of a hundred years, who died from the hour of his birth. He would have gained something by going to his grave in youth, if up to that time he had only lived.

The New-born Child.

THE new-born child needs to stretch and to move his limbs so as to draw them out of the torpor in which, rolled into a ball, they have so long remained. We do stretch his limbs, it is true, but we prevent him from moving them. We even constrain his head into a baby's cap. It seems as if we were afraid he might appear to be alive. The inaction, the constraint in which we keep his limbs, cannot fail to interfere with the circulation of the blood and of the secretions, to prevent the child from growing strong and sturdy, and to change his constitution. In regions where these extravagant precautions are not taken, the men are all large, strong, and well proportioned. Countries in which children are swaddled swarm with hunchbacks, with cripples, with persons crook-kneed, stunted, rickety, deformed in all kinds of ways. For fear that the bodies of children may be deformed by free

movements, we hasten to deform them by putting them into a press. Of our own accord we cripple them to prevent their laming themselves.

Must not such a cruel constraint have an influence upon their temper as well as upon their constitution? Their first feeling is a feeling of constraint and of suffering. To all their necessary movements they find only obstacles. More unfortunate than chained criminals, they make fruitless efforts, they fret themselves, they cry. Do you tell me that the first sounds they make are cries? I can well believe it; you thwart them from the time they are born. The first gifts they receive from you are chains, the first treatment they undergo is torment. Having nothing free but the voice, why should they not use it in complaints? They cry on account of the suffering you cause them; if you were pinioned in the same way, your own cries would be louder.

Whence arises this unreasonable custom of swaddling children? From an unnatural custom. Since the time when mothers, despising their first duty, no longer wish to nurse their own children at the breast, it has been necessary to intrust the little ones to hired women. These, finding themselves in this way the mothers of strange children, concerning whom the voice of nature is silent to them, seek only to spare themselves annoyance. A child at liberty would require incessant watching; but after he is well swaddled, they throw him into a corner without troubling themselves at all on account of his cries. Provided there are no proofs of the nurse's carelessness, provided that the nursling does not break his legs or his arms, what does it matter, after all, that he is pining away, or that he continues feeble for the rest of his life? His limbs are preserved at the expense of his life, and whatever happens, the nurse is held free from blame.

It is pretended that children, when left free, may put themselves into bad positions, and make movements liable to injure the proper conformation of their limbs. This is one of the weak arguments of our false wisdom, which no experience has ever confirmed. Of that multitude of children who, among nations more sensible than ourselves, are brought up in the full freedom of their limbs, not one is seen to wound or lame himself. They cannot give their movements force enough to make them dangerous; and when they assume a hurtful position, pain soon warns them to change it.

We have not yet brought ourselves to the point of swaddling puppies or kittens; do we see that any inconvenience results to them from this negligence? Children are heavier, indeed; but in proportion they are weaker. They can scarcely move themselves at all; how can they lame themselves? If laid upon the back they would die in that position, like the tortoise, without being able ever to turn themselves again.

[This want of intelligence in the care bestowed upon young children is seen particularly in those mothers who give themselves no concern about their own, do not themselves nurse them, intrust them to hireling nurses. This custom is fatal to all; first to the children and finally to families, where barrenness becomes the rule, where woman sacrifices to her own convenience the joys and the duties of motherhood.]

Would you recall every one to his highest duties? Begin with the mothers; you will be astonished at the changes you will effect. From this first depravity all others come in succession. The entire moral order is changed; natural feeling is extinguished in all hearts. Within our homes there is less cheerfulness; the touching sight of a growing family no longer attaches the husband or attracts the attention of strangers. The mother whose children are not seen is

less respected. There is no such thing as a family living together; habit no longer strengthens the ties of blood. There are no longer fathers and mothers and children and brothers and sisters. They all scarcely know one another; how then should they love one another? Each one thinks only of himself. When home is a melancholy, lonely place, we must indeed go elsewhere to enjoy ourselves.

But let mothers only vouchsafe to nourish their children,[1] and our manners will reform themselves; the feelings of nature will re-awaken in all hearts. The State will be repeopled; this chief thing, this one thing will bring all the rest into order again. The attractions of home life present the best antidote to bad morals. The bustling life of little children, considered so tiresome, becomes pleasant; it makes the father and the mother more necessary to one another, more dear to one another; it draws closer between them the conjugal tie. When the family is sprightly and animated, domestic cares form the dearest occupation of the wife and the sweetest recreation of the husband. Thus the correction of this one abuse would soon result in a general reform; nature would resume all her rights. When women are once more true mothers, men will become true fathers and husbands.

If mothers are not real mothers, children are not real children toward them. Their duties to one another are reciprocal, and if these be badly fulfilled on the one side, they will be neglected on the other side. The child ought to

[1] The voice of Rousseau was heard. The nursing of children by their own mothers, which had gone into disuse as vulgar and troublesome, became a fashion. Great ladies prided themselves upon returning to the usage of nature, and infants were brought in with the dessert to give an exhibition of maternal tenderness. This affectation died out, but in most families the good and wholesome custom of motherhood was retained. This page of Rousseau's contributed its share to the happy result.

love his mother before he knows that it is his duty to love her. If the voice of natural affection be not strengthened by habit and by care, it will grow dumb even in childhood; and thus the heart dies, so to speak, before it is born. Thus from the outset we are beyond the pale of nature.

There is an opposite way by which a woman goes beyond it; that is, when, instead of neglecting a mother's cares, she carries them to excess; when she makes her child her idol. She increases and fosters his weakness to prevent him from feeling it. Hoping to shelter him from the laws of nature, she wards from him shocks of pain. She does not consider how, for the sake of preserving him for a moment from some inconveniences, she is heaping upon his head future accidents and perils; nor how cruel is the caution which prolongs the weakness of childhood in one who must bear the fatigues of a grown-up man. The fable says that, to render her son invulnerable, Thetis plunged him into the Styx. This allegory is beautiful and clear. The cruel mothers of whom I am speaking do far otherwise; by plunging their children into effeminacy they open their pores to ills of every kind, to which, when grown up, they fall a certain prey.

Watch nature carefully, and follow the paths she traces out for you. She gives children continual exercise; she strengthens their constitution by ordeals of every kind; she teaches them early what pain and trouble mean. The cutting of their teeth gives them fever, sharp fits of colic throw them into convulsions, long coughing chokes them, worms torment them, repletion corrupts their blood, different leavens fermenting there cause dangerous eruptions. Nearly the whole of infancy is sickness and danger; half the children born into the world die before their eighth year. These trials past, the child has gained strength, and as soon as he can use life, its principle becomes more assured.

This is the law of nature. Why do you oppose her? Do you not see that in thinking to correct her you destroy her work and counteract the effect of all her cares? In your opinion, to do without what she is doing within is to redouble the danger. On the contrary, it is really to avert, to mitigate that danger. Experience teaches that more children who are delicately reared die than others. Provided we do not exceed the measure of their strength, it is better to employ it than to hoard it. Give them practice, then, in the trials they will one day have to endure. Inure their bodies to the inclemencies of the seasons, of climates, of elements; to hunger, thirst, fatigue; plunge them into the water of the Styx. Before the habits of the body are acquired we can give it such as we please without risk. But when once it has reached its full vigor, any alteration is perilous to its well-being. A child will endure changes which a man could not bear. The fibres of the former, soft and pliable, take without effort the bent we give them; those of man, more hardened, do not without violence change those they have received. We may therefore make a child robust without exposing his life or his health; and even if there were some risk we still ought not to hesitate. Since there are risks inseparable from human life, can we do better than to throw them back upon that period of life when they are least disadvantageous?

A child becomes more precious as he advances in age To the value of his person is added that of the cares he has cost us; if we lose his life, his own consciousness of death is added to our sense of loss. Above all things, then, in watching over his preservation we must think of the future. We must arm him against the misfortunes of youth before he has reached them. For, if the value of life increases up to the age when life becomes useful, what folly it is to spare the child

some troubles, and to heap them upon the age of reason! Are these the counsels of a master?

In all ages suffering is the lot of man. Even to the cares of self-preservation pain is joined. Happy are we, who in childhood are acquainted with only physical misfortunes—misfortunes far less cruel, less painful than others; misfortunes which far more rarely make us renounce life. We do not kill ourselves on account of the pains of gout; seldom do any but those of the mind produce despair.[1]

We pity the lot of infancy, and it is our own lot that we ought to pity. Our greatest misfortunes come to us from ourselves.

At birth a child cries; his earliest infancy is spent in crying. Sometimes he is tossed, he is petted, to appease him; sometimes he is threatened, beaten, to make him keep quiet. We either do as he pleases, or else we exact from him what we please; we either submit to his whims, or make him submit to ours. There is no middle course; he must either give or receive orders. Thus his first ideas are those of absolute rule and of slavery. Before he knows how to speak, he commands; before he is able to act, he obeys; and sometimes he is punished before he knows what his faults are, or rather, before he is capable of committing them. Thus do we early pour into his young heart the passions that are afterward imputed to nature; and, after having taken pains to make him wicked, we complain of finding him wicked.

A child passes six or seven years of his life in this manner in the hands of women, the victim of his own caprice and of theirs. After having made him learn this and that,—after

[1] This remark is not a just one. How often have we seen unhappy creatures disgusted with life because of some dreadful and incurable malady? It is true that suicide, being an act of madness, is more frequently caused by those troubles which imagination delights itself in magnifying up to the point of insanity.

having loaded his memory either with words he cannot understand, or with facts which are of no use to him,—after having stifled his natural disposition by the passions we have created, we put this artificial creature into the hands of a tutor who finishes the development of the artificial germs he finds already formed, and teaches him everything except to know himself, everything except to know how to live and how to make himself happy. Finally, when this enslaved child, this little tyrant, full of learning and devoid of sense, enfeebled alike in mind and body, is cast upon the world, he there by his unfitness, by his pride, and by all his vices, makes us deplore human wretchedness and perversity. We deceive ourselves; this is the man our whims have created. Nature makes men by a different process.

Do you then wish him to preserve his original form? Preserve it from the moment he enters the world. As soon as he is born take possession of him, and do not leave him until he is a man. Without this you will never succeed. As the mother is the true nurse, the father is the true teacher. Let them be of one mind as to the order in which their functions are fulfilled, as well as in regard to their plan; let the child pass from the hands of the one into the hands of the other. He will be better educated by a father who is judicious, even though of moderate attainments, than by the most skilful master in the world. For zeal will supplement talent better than talent can supply what only zeal can give.

A father, when he brings his children into existence and supports them, has, in so doing, fulfilled only a third part of his task. To the human race he owes men; to society, men fitted for society; to the State, citizens. Every man who can pay this triple debt, and does not pay it, is a guilty man; and if he pays it by halves, he is perhaps more guilty still.

He who cannot fulfil the duties of a father has no right to be a father. Not poverty, nor severe labor, nor human respect can release him from the duty of supporting his children and of educating them himself. Readers, you may believe my words. I prophesy to any one who has natural feeling and neglects these sacred duties,— that he will long shed bitter tears over this fault, and that for those tears he will find no consolation.[1]

[It being supposed that the father is unable or unwilling to charge himself personally with the education of his son, he must charge a third person with it; must seek out a master, a teacher for the child.]

The qualifications of a good tutor are very freely discussed. The first qualification I should require in him, and this one presupposes many others, is, that he shall not be capable of selling himself. There are employments so noble that we cannot fulfil them for money without showing ourselves unworthy to fulfil them. Such an employment is that of a soldier; such a one is that of a teacher. Who, then, shall educate my child? I have told you already,— yourself. I cannot! Then make for yourself a friend who can. I see no other alternative.

A teacher! what a great soul he ought to be! Truly, to form a man, one must be either himself a father, or else something more than human. And this is the office you calmly entrust to hirelings![2]

[1] This is an allusion to one of the most unfortunate episodes in the life of Rousseau,—his abandoning of the children whom Thérèse Levasseur bore him, and whom he sent to a foundling hospital because he felt within him neither courage to labor for their support, nor capacity to educate them. Sad practical defect in this teacher of theories of education!

[2] For the particular example of education which he supposes, Rousseau creates a tutor whom he consecrates absolutely, exclusively, to the work. He desires one so perfect that he calls him a prodigy. Let us not blame

The Earliest Education.

Children's first impressions are purely those of feeling; they perceive only pleasure and pain. Unable either to move about, or to grasp anything with their hands, they need a great deal of time to form sensations which represent, and so make them aware of objects outside of themselves. But, during all this time, while these objects are extending, and, as it were, receding from their eyes, assuming, to them, form and dimension, the constantly recurring sensations begin to subject the little creatures to the sway of habit. We see their eyes incessantly turning toward the light; and, if it comes to them from one side, unwittingly taking the direction of that side; so that their faces ought to be carefully turned toward the light, lest they become squint-eyed, or accustom themselves to look awry. They should, also, early accustom themselves to darkness, or else they will cry and scream as soon as they are left in the dark. Food and sleep, if too exactly proportioned, become necessary to them after the lapse of the same intervals; and soon the desire arises not from necessity, but from habit. Or rather, habit adds a new want to those of nature, and this must be prevented.

The only habit a child should be allowed to form is to contract no habits whatever. Let him not be carried upon one arm more than upon another; let him not be accustomed to

him for this. The ideal of those who assume the noble and difficult office of a teacher of childhood cannot be placed too high. As to the pupil, Rousseau imagines a child of average ability, in easy circumstances, and of robust health. He makes him an only son and an orphan, so that no family vicissitudes may disturb the logic of his plan.

All this may be summed up by saying that he considers the child in himself with regard to his individual development, and without regard to his relations to ordinary life. This at the same time renders his task easy, and deprives him of an important element of education.

put forth one hand rather than the other, or to use it oftener; nor to desire to eat, to sleep, to act in any way, at regular hours; nor to be unable to stay alone either by night or by day. Prepare long beforehand for the time when he shall freely use all his strength. Do this by leaving his body under the control of its natural bent, by fitting him to be always master of himself, and to carry out his own will in everything as soon as he has a will of his own.

Since the only kinds of objects presented to him are likely to make him either timid or courageous, why should not his education begin before he speaks or understands? I would habituate him to seeing new objects, though they be ugly, repulsive, or singular. But let this be by degrees, and from a distance, until he has become accustomed to them, and, from seeing them handled by others, shall at last handle them himself. If during his infancy he has seen without fear frogs, serpents, crawfishes, he will, when grown up, see without shrinking any animal that may be shown him. For one who daily sees frightful objects, there are none such.

All children are afraid of masks. I begin by showing Émile the mask of a pleasant face. By and by some one puts the mask upon his own face, so that the child can see it. I begin to laugh; every one else laughs, and the child with the rest. By degrees I familiarize him with less comely masks, and finally with really hideous ones. If I have managed the process well, he will, far from being frightened at the last mask, laugh at it as he laughed at the first. After that, I shall not fear his being frightened by any one with a mask.

When, in the farewell scene between Hector and Andromache, the little Astyanax, terrified at the plume floating from a helmet, fails to recognize his father, throws himself, crying, upon his nurse's breast, and wins from his mother a

smile bright with tears, what ought to be done to soothe his fear? Precisely what Hector does. He places the helmet on the ground, and then caresses his child. At a more tranquil moment, this should not have been all. They should have drawn near the helmet, played with its plumes, caused the child to handle them. At last the nurse should have lifted the helmet and laughingly set it on her own head — if, indeed, the hand of a woman dared touch the armor of Hector.

If I wish to familiarize Émile with the noise of fire-arms, I first burn some powder in a pistol. The quickly vanishing flame, the new kind of lightning, greatly pleases him. I repeat the process, using more powder. By degrees I put into the pistol a small charge, without ramming it down; then a larger charge; finally, I accustom him to the noise of a gun, to bombs, to cannon-shots, to the most terrific noises.

I have noticed that children are rarely afraid of thunder, unless, indeed, the thunder-claps are so frightful as actually to wound the organ of hearing. Otherwise, they fear it only when they have been taught that thunder sometimes wounds or kills. When reason begins to affright them, let habit reassure them. By a slow and well conducted process the man or the child is rendered fearless of everything.

In this outset of life, while memory and imagination are still inactive, the child pays attention only to what actually affects his senses. The first materials of his knowledge are his sensations. If, therefore, these are presented to him in suitable order, his memory can hereafter present them to his understanding in the same order. But as he attends to his sensations only, it will at first suffice to show him very clearly the connection between these sensations, and the objects which give rise to them. He is eager to touch everything, to handle everything. Do not thwart this restless

desire; it suggests to him a very necessary apprenticeship. It is thus he learns to feel the heat and coldness, hardness and softness, heaviness and lightness of bodies; to judge of their size, their shape, and all their sensible qualities, by looking, by touching, by listening; above all, by comparing the results of sight with those of touch, estimating with the eye the sensation a thing produces upon the fingers.

By movement alone we learn the existence of things which are not ourselves; and it is by our own movements alone that we gain the idea of extension.

Because the child has not this idea, he stretches out his hand indifferently to seize an object which touches him, or one which is a hundred paces distant from him. The effort he makes in doing this appears to you a sign of domination, an order he gives the object to come nearer, or to you to bring it to him. It is nothing of the kind. It means only that the object seen first within the brain, then upon the eye, is now seen at arm's length, and that he does not conceive of any distance beyond his reach. Be careful, then, to walk often with him, to transport him from one place to another, to let him feel the change of position, and, in this way to teach him how to judge of distances. When he begins to know them, change the plan; carry him only where it is convenient for you to do so, and not wherever it pleases him. For as soon as he is no longer deceived by the senses, his attempts arise from another cause. This change is remarkable and demands explanation.

The uneasiness arising from our wants expresses itself by signs whenever help in supplying these wants is needed; hence the cries of children. They cry a great deal, and this is natural. Since all their sensations are those of feeling, children enjoy them in silence, when the sensations are pleasant; otherwise they express them in their own language,

and ask relief. Now as long as children are awake they cannot be in a state of indifference; they either sleep or are moved by pleasure and pain.

All our languages are the result of art. Whether there is a natural language, common to all mankind, has long been a matter of investigation. Without doubt there is such a language, and it is the one that children utter before they know how to talk. This language is not articulate, but it is accentuated, sonorous, intelligible. The using of our own language has led us to neglect this, even so far as to forget it altogether. Let us study children, and we shall soon acquire it again from them. Nurses are our teachers in this language. They understand all their nurslings say, they answer them, they hold really connected dialogues with them. And, although they pronounce words, these words are entirely useless; the child understands, not the meaning of the words, but the accent which accompanies them.

To the language of the voice is added the no less forcible language of gesture. This gesture is not that of children's feeble hands; it is that seen in their faces. It is astonishing to see how much expression these immature countenances already have. From moment to moment, their features change with inconceivable quickness. On them you see the smile, the wish, the fear, spring into life, and pass away, like so many lightning flashes. Each time you seem to see a different countenance. They certainly have much more flexible facial muscles than ours. On the other hand, their dull eyes tell us almost nothing at all.

Such is naturally the character of their expression when all their wants are physical. Sensations are made known by grimaces, sentiments by looks.

As the first state of man is wretchedness and weakness, so his first utterances are complaints and tears. The child

feels his need and cannot satisfy it; he implores aid from others by crying. If he is hungry or thirsty, he cries; if he is too cold or too warm, he cries; if he wishes to move or to be kept at rest, he cries; if he wishes to sleep or to be moved about, he cries. The less control he has of his own mode of living, the oftener he asks those about him to change it. He has but one language, because he feels, so to speak, but one sort of discomfort. In the imperfect condition of his organs, he does not distinguish their different impressions; all ills produce in him only a sensation of pain.

From this crying, regarded as so little worthy of attention, arises the first relation of man to all that surrounds him; just here is forged the first link of that long chain which constitutes social order.

When the child cries, he is ill at ease; he has some want that he cannot satisfy. We examine into it, we search for the want, find it, and relieve it. When we cannot find it, or relieve it, the crying continues. We are annoyed by it; we caress the child to make him keep quiet, we rock him and sing to him, to lull him asleep. If he persists, we grow impatient; we threaten him; brutal nurses sometimes strike him. These are strange lessons for him upon his entrance into life.

The first crying of children is a prayer. If we do not heed it well, this crying soon becomes a command. They begin by asking our aid; they end by compelling us to serve them. Thus from their very weakness, whence comes, at first, their feeling of dependence, springs afterward the idea of empire, and of commanding others. But as this idea is awakened less by their own wants, than by the fact that we are serving them, those moral results whose immediate cause is not in nature, are here perceived. We therefore see why,

even at this early age, it is important to discern the hidden purpose which dictates the gesture or the cry.

When the child stretches forth his hand with an effort, but without a sound, he thinks he can reach some object, because he does not properly estimate its distance; he is mistaken. But if, while stretching out his hand, he complains and cries, he is no longer deceived as to the distance. He is commanding the object to come to him, or is directing you to bring it to him. In the first case, carry him to the object slowly, and with short steps; in the second case, do not even appear to understand him. It is worth while to habituate him early not to command people, for he is not their master; nor things, for they cannot understand him. So, when a child wants something he sees, and we mean to give it to him, it is better to carry him to the object than to fetch the object to him. From this practice of ours he will learn a lesson suited to his age, and there is no better way of suggesting this lesson to him.

Maxims to Keep us True to Nature.

Reason alone teaches us to know good and evil. Conscience, which makes us love the one and hate the other, is independent of reason, but cannot grow strong without its aid. Before reaching years of reason, we do good and evil unconsciously. There is no moral character in our actions, although there sometimes is in our feeling toward those actions of others which relate to us. A child likes to disturb everything he sees; he breaks, he shatters everything within his reach; he lays hold of a bird just as he would lay hold of a stone, and strangles it without knowing what he is doing.

Why is this? At first view, philosophy would account for it on the ground of vices natural to us — pride, the spirit of

domination, self-love, the wickedness of mankind. It would perhaps add, that the sense of his own weakness makes the child eager to do things requiring strength, and so prove to himself his own power. But see that old man, infirm and broken down, whom the cycle of human life brings back to the weakness of childhood. Not only does he remain immovable and quiet, but he wishes everything about him to be in the same condition. The slightest change disturbs and disquiets him; he would like to see stillness reigning everywhere. How could the same powerlessness, joined to the same passions, produce such different effects in the two ages, if the primary cause were not changed? And where can we seek for this difference of cause, unless it be in the physical condition of the two individuals? The active principle common to the two is developing in the one, and dying out in the other; the one is growing, and the other is wearing itself out; the one is tending toward life, and the other toward death. Failing activity concentrates itself in the heart of the old man; in the child it is superabounding, and reaches outward; he seems to feel within him life enough to animate all that surrounds him. Whether he makes or unmakes matters little to him. It is enough that he changes the condition of things, and that every change is an action. If he seems more inclined to destroy things, it is not out of perverseness, but because the action which creates is always slow; and that which destroys, being more rapid, better suits his natural sprightliness.

While the Author of nature gives children this active principle, he takes care that it shall do little harm; for he leaves them little power to indulge it. But no sooner do they look upon those about them as instruments which it is their business to set in motion, than they make use of them in following their own inclinations and in making up for their

own want of strength. In this way they become disagreeable, tyrannical, imperious, perverse, unruly; a development not arising from a natural spirit of domination, but creating such a spirit. For no very long experience is requisite in teaching how pleasant it is to act through others, and to need only move one's tongue to set the world in motion.

As we grow up, we gain strength, we become less uneasy and restless, we shut ourselves more within ourselves. The soul and the body put themselves in equilibrium, as it were, and nature requires no more motion than is necessary for our preservation.

But the wish to command outlives the necessity from which it sprang; power to control others awakens and gratifies self-love, and habit makes it strong. Thus need gives place to whim; thus do prejudices and opinions first root themselves within us.

The principle once understood, we see clearly the point at which we leave the path of nature. Let us discover what we ought to do, to keep within it.

Far from having too much strength, children have not even enough for all that nature demands of them. We ought, then, to leave them the free use of all natural strength which they cannot misuse. First maxim.

We must aid them, supplying whatever they lack in intelligence, in strength, in all that belongs to physical necessity. Second maxim.

In helping them, we must confine ourselves to what is really of use to them, yielding nothing to their whims or unreasonable wishes. For their own caprice will not trouble them unless we ourselves create it; it is not a natural thing. Third maxim.

We must study carefully their language and their signs, so that, at an age when they cannot dissemble, we may judge

which of their desires spring from nature itself, and which of them from opinion. Fourth maxim.

The meaning of these rules is, to allow children more personal freedom and less authority; to let them do more for themselves, and exact less from others. Thus accustomed betimes to desire only what they can obtain or do for themselves, they will feel less keenly the want of whatever is not within their own power.

Here there is another and very important reason for leaving children absolutely free as to body and limbs, with the sole precaution of keeping them from the danger of falling, and of putting out of their reach everything that can injure them.

Doubtless a child whose body and arms are free will cry less than one bound fast in swaddling clothes. He who feels only physical wants cries only when he suffers, and this is a great advantage. For then we know exactly when he requires help, and we ought not to delay one moment in giving him help, if possible.

But if you cannot relieve him, keep quiet; do not try to soothe him by petting him. Your caresses will not cure his colic; but he will remember what he has to do in order to be petted. And if he once discovers that he can, at will, busy you about him, he will have become your master; the mischief is done.

If children were not so much thwarted in their movements, they would not cry so much; if we were less annoyed by their crying, we would take less pains to hush them; if they were not so often threatened or caressed, they would be less timid or less stubborn, and more truly themselves as nature made them. It is not so often by letting children cry, as by hastening to quiet them, that we make them rupture themselves. The proof of this is that the children most neglected

are less subject than others to this infirmity. I am far from wishing them to be neglected, however. On the contrary, we ought to anticipate their wants, and not wait to be notified of these by the children's crying. Yet I would not have them misunderstand the cares we bestow on them. Why should they consider crying a fault, when they find that it avails so much? Knowing the value of their silence, they will be careful not to be lavish of it. They will, at last, make it so costly that we can no longer pay for it; and then it is that by crying without success they strain, weaken, and kill themselves.

The long crying fits of a child who is not compressed or ill, or allowed to want for anything, are from habit and obstinacy. They are by no means the work of nature, but of the nurse, who, because she cannot endure the annoyance, multiplies it, without reflecting that by stilling the child to-day, he is induced to cry the more to-morrow.

The only way to cure or prevent this habit is to pay no attention to it. No one, not even a child, likes to take unnecessary trouble.

They are stubborn in their attempts; but if you have more firmness than they have obstinacy, they are discouraged, and do not repeat the attempt. Thus we spare them some tears, and accustom them to cry only when pain forces them to it.

Nevertheless when they do cry from caprice or stubbornness, a sure way to prevent their continuing is, to turn their attention to some agreeable and striking object, and so make them forget their desire to cry. In this art most nurses excel, and when skilfully employed, it is very effective. But it is highly important that the child should not know of our intention to divert him, and that he should amuse himself without at all thinking we have him in mind. In this all nurses are unskilful.

All children are weaned too early. The proper time is indicated by their teething. This process is usually painful and distressing. By a mechanical instinct the child, at that time, carries to his mouth and chews everything he holds. We think we make the operation easier by giving him for a plaything some hard substance, such as ivory or coral. I think we are mistaken. Far from softening the gums, these hard bodies, when applied, render them hard and callous, and prepare the way for a more painful and distressing laceration. Let us always take instinct for guide. We never see puppies try their growing teeth upon flints, or iron, or bones, but upon wood, or leather, or rags,— upon soft materials, which give way, and on which the tooth impresses itself.

We no longer aim at simplicity, even where children are concerned. Golden and silver bells, corals, crystals, toys of every price, of every sort. What useless and mischievous affectations they are! Let there be none of them, — no bells, no toys.

A little twig covered with its own leaves and fruit, — a poppy-head, in which the seeds can be heard rattling,— a stick of liquorice he can suck and chew, these will amuse a child quite as well as the splendid baubles, and will not disadvantage him by accustoming him to luxury from his very birth.

Language.

From the time they are born, children hear people speak. They are spoken to not only before they understand what is said to them, but before they can repeat the sounds they hear. Their organs, still benumbed, adapt themselves only by degrees to imitating the sounds dictated to them, and it is not even certain that these sounds are borne to their ears at first as distinctly as to ours.

I do not disapprove of a nurse's amusing the child with songs, and with blithe and varied tones. But I do disapprove of her perpetually deafening him with a multitude of useless words, of which he understands only the tone she gives them.

I would like the first articulate sounds he must hear to be few in number, easy, distinct, often repeated. The words they form should represent only material objects which can be shown him. Our unfortunate readiness to content ourselves with words that have no meaning to us whatever, begins earlier than we suppose. Even as in his swaddling-clothes the child hears his nurse's babble, he hears in class the verbiage of his teacher. It strikes me that if he were to be so brought up that he could not understand it at all, he would be very well instructed.[1]

Reflections crowd upon us when we set about discussing the formation of children's language, and their baby talk itself. In spite of us, they always learn to speak by the same process, and all our philosophical speculations about it are entirely useless.

They seem, at first, to have a grammar adapted to their own age, although its rules of syntax are more general than ours. And if we were to pay close attention to them, we should be astonished at the exactness with which they follow certain analogies, very faulty if you will, but very regular, that are displeasing only because harsh, or because usage does not recognize them.

It is unbearable pedantry, and a most useless labor, to

[1] No doubt this sarcasm is applicable to those teachers who talk so as to say nothing. A teacher ought, on the contrary, to speak only so as to be understood by the child. He ought to adapt himself to the child's capacity; to employ no useless or conventional expressions; his language ought to arouse curiosity and to impart light.

attempt correcting in children every little fault against usage; they never fail themselves to correct these faults in time. Always speak correctly in their presence; order it so that they are never so happy with any one as with you; and rest assured their language will insensibly be purified by your own, without your having ever reproved them.

But another error, which has an entirely different bearing on the matter, and is no less easy to prevent, is our being over-anxious to make them speak, as if we feared they might not of their own accord learn to do so. Our injudicious haste has an effect exactly contrary to what we wish. On account of it they learn more slowly and speak more indistinctly. The marked attention paid to everything they utter makes it unnecessary for them to articulate distinctly. As they hardly condescend to open their lips, many retain throughout life an imperfect pronunciation and a confused manner of speaking, which makes them nearly unintelligible.

Children who are too much urged to speak have not time sufficient for learning either to pronounce carefully or to understand thoroughly what they are made to say. If, instead, they are left to themselves, they at first practise using the syllables they can most readily utter; and gradually attaching to these some meaning that can be gathered from their gestures, they give you their own words before acquiring yours. Thus they receive yours only after they understand them. Not being urged to use them, they notice carefully what meaning you give them; and, when they are sure of this, they adopt it as their own.

The greatest evil arising from our haste to make children speak before they are old enough is not that our first talks with them, and the first words they use, have no meaning to them, but that they have a meaning different from ours, without our being able to perceive it. Thus, while they seem

to be answering us very correctly, they are really addressing us without understanding us, and without our understanding them. To such ambiguous discourse is due the surprise we sometimes feel at their sayings, to which we attach ideas the children themselves have not dreamed of. This inattention of ours to the true meaning words have for children seems to me the cause of their first mistakes, and these errors, even after children are cured of them, influence their turn of mind for the remainder of their life.

The first developments of childhood occur almost all at once. The child learns to speak, to eat, to walk, nearly at the same time. This is, properly, the first epoch of his life. Before then he is nothing more than he was before he was born; he has not a sentiment, not an idea; he scarcely has sensations; he does not feel even his own existence.

Book Second.

The second book takes the child at about the fifth year, and conducts him to about the twelfth year. He is no longer the little child; he is the young boy. His education becomes more important. It consists not in studies, in reading or writing, or in duties, but in well-chosen plays, in ingenious recreations, in well-directed experiments.

There should be no exaggerated precautions, and, on the other hand, no harshness, no punishments. We must love the child, and encourage his playing. To make him realize his weakness and the narrow limits within which it can work, to keep the child dependent only on circumstances, will suffice, without ever making him feel the yoke of the master.

The best education is accomplished in the country. Teaching by means of things. Criticism of the ordinary method. Education of the senses by continually exercising them.

Avoid taking too many Precautions.

THIS is the second period of life, and the one at which, properly speaking, infancy ends; for the words *infans* and *puer* are not synonymous.[1] The first is included in the second, and means *one who cannot speak:* thus in Valerius Maximus we find the expression *puerum infantem.* But I shall continue to employ the word according to the usage of the French language, until I am describing the age for which there are other names.

[1] *Puer,* child; *infans,* one who does not speak.

When children begin to speak, they cry less often. This step in advance is natural; one language is substituted for another. As soon as they can utter their complaints in words, why should they cry, unless the suffering is too keen to be expressed by words? If they then continue to cry, it is the fault of those around them. After Émile has once said, "It hurts me," only acute suffering can force him to cry.

If the child is physically so delicate and sensitive that he naturally cries about nothing, I will soon exhaust the fountain of his tears, by making them ineffectual. So long as he cries, I will not go to him; as soon as he stops, I will run to him. Very soon his method of calling me will be to keep quiet, or at the utmost, to utter a single cry. Children judge of the meaning of signs by their palpable effect; they have no other rule. Whatever harm a child may do himself, he very rarely cries when alone, unless with the hope of being heard.

If he fall, if he bruise his head, if his nose bleed, if he cut his finger, I should, instead of bustling about him with a look of alarm, remain quiet, at least for a little while. The mischief is done; he must endure it; all my anxiety will only serve to frighten him more, and to increase his sensitiveness. After all, when we hurt ourselves, it is less the shock which pains us than the fright. I will spare him at least this last pang; for he will certainly estimate his hurt as he sees me estimate it. If he sees me run anxiously to comfort and to pity him, he will think himself seriously hurt; but if he sees me keep my presence of mind, he will soon recover his own, and will think the pain cured when he no longer feels it. At his age we learn our first lessons in courage; and by fearlessly enduring lighter sufferings, we gradually learn to bear the heavier ones.

Far from taking care that Émile does not hurt himself, I shall be dissatisfied if he never does, and so grows up unacquainted with pain. To suffer is the first and most necessary thing for him to learn. Children are little and weak, apparently that they may learn these important lessons. If a child fall his whole length, he will not break his leg; if he strike himself with a stick, he will not break his arm; if he lay hold of an edged tool, he does not grasp it tightly, and will not cut himself very badly.

Our pedantic mania for instructing constantly leads us to teach children what they can learn far better for themselves, and to lose sight of what we alone can teach them. Is there anything more absurd than the pains we take in teaching them to walk? As if we had ever seen one, who, through his nurse's negligence, did not know how to walk when grown! On the contrary, how many people do we see moving awkwardly all their lives because they have been badly taught how to walk!

Émile shall have no head-protectors, nor carriages, nor go-carts, nor leading-strings. Or at least from the time when he begins to be able to put one foot before the other, he shall not be supported, except over paved places; and he shall be hurried over these. Instead of letting him suffocate in the exhausted air indoors, let him be taken every day, far out into the fields. There let him run about, play, fall down a hundred times a day; the oftener the better, as he will the sooner learn to get up again by himself. The boon of freedom is worth many scars. My pupil will have many bruises, but to make amends for that, he will be always light-hearted. Though your pupils are less often hurt, they are continually thwarted, fettered; they are always unhappy. I doubt whether the advantage be on their side.

The development of their physical strength makes com-

plaint less necessary to children. When able to help themselves, they have less need of the help of others. Knowledge to direct their strength grows with that strength. At this second stage the life of the individual properly begins; he now becomes conscious of his own being. Memory extends this feeling of personal identity to every moment of his existence; he becomes really one, the same one, and consequently capable of happiness or of misery. We must therefore, from this moment, begin to regard him as a moral being.

Childhood is to be Loved.

ALTHOUGH the longest term of human life, and the probability, at any given age, of reaching this term, have been computed, nothing is more uncertain than the continuance of each individual life: very few attain the maximum. The greatest risks in life are at its beginning; the less one has lived, the less prospect he has of living.

Of all children born, only about half reach youth; and it is probable that your pupil may never attain to manhood. What, then, must be thought of that barbarous education which sacrifices the present to an uncertain future, loads the child with every description of fetters, and begins, by making him wretched, to prepare for him some far-away indefinite happiness he may never enjoy! Even supposing the object of such an education reasonable, how can we without indignation see the unfortunate creatures bowed under an insupportable yoke, doomed to constant labor like so many galley-slaves, without any certainty that all this toil will ever be of use to them! The years that ought to be bright and cheerful are passed in tears amid punishments, threats, and slavery. For his own good, the unhappy child is tortured;

and the death thus summoned will seize on him unperceived amidst all this melancholy preparation. Who knows how many children die on account of the extravagant prudence of a father or of a teacher? Happy in escaping his cruelty, it gives them one advantage; they leave without regret a life which they know only from its darker side.[1]

O men, be humane! it is your highest duty; be humane to all conditions of men, to every age, to everything not alien to mankind. What higher wisdom is there for you than humanity? Love childhood; encourage its sports, its pleasures, its lovable instincts. Who among us has not at times looked back with regret to the age when a smile was continually on our lips, when the soul was always at peace? Why should we rob these little innocent creatures of the enjoyment of a time so brief, so transient, of a boon so precious, which they cannot misuse? Why will you fill with bitterness and sorrow these fleeting years which can no more return to them than to you? Do you know, you fathers, the moment when death awaits your children? Do not store up for yourselves remorse, by taking from them the brief moments nature has given them. As soon as they can appreciate the delights of existence, let them enjoy it. At whatever hour God may call them, let them not die without having tasted life at all.

You answer, "It is the time to correct the evil tendencies of the human heart. In childhood, when sufferings are less keenly felt, they ought to be multiplied, so that fewer of

[1] Reading these lines, we are reminded of the admirable works of Dickens, the celebrated English novelist, who so touchingly depicts the sufferings of children made unhappy by the inhumanity of teachers, or neglected as to their need of free air, of liberty, of affection: David Copperfield, Hard Times, Nicholas Nickleby, Dombey and Son, Oliver Twist, Little Dorrit, and the like.

them will have to be encountered during the age of reason." But who has told you that it is your province to make this arrangement, and that all these fine instructions, with which you burden the tender mind of a child, will not one day be more pernicious than useful to him? Who assures you that you spare him anything when you deal him afflictions with so lavish a hand? Why do you cause him more unhappiness than he can bear, when you are not sure that the future will compensate him for these present evils? And how can you prove that the evil tendencies of which you pretend to cure him will not arise from your mistaken care rather than from nature itself! Unhappy foresight, which renders a creature actually miserable, in the hope, well or ill founded, of one day making him happy! If these vulgar reasoners confound license with liberty, and mistake a spoiled child for a child who is made happy, let us teach them to distinguish the two.

To avoid being misled, let us remember what really accords with our present abilities. Humanity has its place in the general order of things; childhood has its place in the order of human life. Mankind must be considered in the individual man, and childhood in the individual child. To assign each his place, and to establish him in it — to direct human passions as human nature will permit — is all we can do for his welfare. The rest depends on outside influences not under our control.

Neither Slaves nor Tyrants.

He alone has his own way who, to compass it, does not need the arm of another to lengthen his own. Consequently freedom, and not authority, is the greatest good. A man who desires only what he can do for himself is really free to do whatever he pleases. From this axiom, if it be applied

to the case of childhood, all the rules of education will follow.

A wise man understands how to remain in his own place; but a child, who does not know his, cannot preserve it. As matters stand, there are a thousand ways of leaving it. Those who govern him are to keep him in it, and this is not an easy task. He ought to be neither an animal nor a man, but a child. He should feel his weakness, and yet not suffer from it. He should depend, not obey; he should demand, not command. He is subject to others only by reason of his needs, and because others see better than he what is useful to him, what will contribute to his well-being or will impair it. No one, not even his father, has a right to command a child to do what is of no use to him whatever.

Accustom the child to depend only on circumstances, and as his education goes on, you will follow the order of nature. Never oppose to his imprudent wishes anything but physical obstacles, or punishments which arise from the actions themselves, and which he will remember when the occasion comes. It is enough to prevent his doing harm, without forbidding it. With him only experience, or want of power, should take the place of law. Do not give him anything because he asks for it, but because he needs it. When he acts, do not let him know that it is from obedience; and when another acts for him, let him not feel that he is exercising authority. Let him feel his liberty as much in your actions as in his own. Add to the power he lacks exactly enough to make him free and not imperious, so that, accepting your aid with a kind of humiliation, he may aspire to the moment when he can dispense with it, and have the honor of serving himself. For strengthening the body and promoting its growth, nature has means which ought never to be thwarted. A child ought not to be constrained to stay anywhere when he wishes to go

away, or to go away when he wishes to stay. When their will is not spoiled by our own fault, children do not wish for anything without good reason. They ought to leap, to run, to shout, whenever they will. All their movements are necessities of nature, which is endeavoring to strengthen itself. But we must take heed of those wishes they cannot themselves accomplish, but must fulfil by the hand of another. Therefore care should be taken to distinguish the real wants, the wants of nature, from those which arise from fancy or from the redundant life just mentioned.

I have already suggested what should be done when a child cries for anything. I will only add that, as soon as he can ask in words for what he wants, and, to obtain it sooner, or to overcome a refusal, reinforces his request by crying, it should never be granted him. If necessity has made him speak, you ought to know it, and at once to grant what he demands. But yielding to his tears is encouraging him to shed them: it teaches him to doubt your good will, and to believe that importunity has more influence over you than your own kindness of heart has.

If he does not believe you good, he will soon be bad; if he believes you weak, he will soon be stubborn. It is of great importance that you at once consent to what you do not intend to refuse him. Do not refuse often, but never revoke a refusal.

Above all things, beware of teaching the child empty formulas of politeness which shall serve him instead of magic words to subject to his own wishes all who surround him, and to obtain instantly what he likes. In the artificial education of the rich they are infallibly made politely imperious, by having prescribed to them what terms to use so that no one shall dare resist them. Such children have neither the tones nor the speech of suppliants; they are as arrogant

when they request as when they command, and even more so, for in the former case they are more sure of being obeyed. From the first it is readily seen that, coming from them, "If you please" means "It pleases me"; and that "I beg" signifies "I order you." Singular politeness this, by which they only change the meaning of words, and so never speak but with authority! For myself, I dread far less Émile's being rude than his being arrogant. I would rather have him say "Do this" as if requesting than "I beg you" as if commanding. I attach far less importance to the term he uses than to the meaning he associates with it.

Over-strictness and over-indulgence are equally to be avoided. If you let children suffer, you endanger their health and their life; you make them actually wretched. If you carefully spare them every kind of annoyance, you are storing up for them much unhappiness; you are making them delicate and sensitive to pain; you are removing them from the common lot of man, into which, in spite of all your care, they will one day return. To save them some natural discomforts, you contrive for them others which nature has not inflicted.

You will charge me with falling into the mistake of those fathers I have reproached for sacrificing their children's happiness to considerations of a far-away future that may never be. Not so; for the freedom I give my pupil will amply supply him with the slight discomforts to which I leave him exposed. I see the little rogues playing in the snow, blue with cold, and scarcely able to move their fingers. They have only to go and warm themselves, but they do nothing of the kind. If they are compelled to do so, they feel the constraint a hundred times more than they do the cold. Why then do you complain? Shall I make your child unhappy if I expose him only to those inconveniences he is perfectly

willing to endure? By leaving him at liberty, I do him service now; by arming him against the ills he must encounter, I do him service for the time to come. If he could choose between being my pupil or yours, do you think he would hesitate a moment?

Can we conceive of any creature's being truly happy outside of what belongs to its own peculiar nature? And if we would have a man exempt from all human misfortunes, would it not estrange him from humanity? Undoubtedly it would; for we are so constituted that to appreciate great good fortune we must be acquainted with slight misfortunes. If the body be too much at ease the moral nature becomes corrupted. The man unacquainted with suffering would not know the tender feelings of humanity or the sweetness of compassion; he would not be a social being; he would be a monster among his kind.

The surest way to make a child unhappy is to accustom him to obtain everything he wants to have. For, since his wishes multiply in proportion to the ease with which they are gratified, your inability to fulfil them will sooner or later oblige you to refuse in spite of yourself, and this unwonted refusal will pain him more than withholding from him what he demands. At first he will want the cane you hold; soon he will want your watch; afterward he will want the bird he sees flying, or the star he sees shining. He will want everything he sees, and without being God himself how can you content him?

Man is naturally disposed to regard as his own whatever is within his power. In this sense the principle of Hobbes is correct up to a certain point; multiply with our desires the means of satisfying them, and each of us will make himself master of everything. Hence the child who has only to wish in order to obtain his wish, thinks himself the owner of the

universe. He regards all men as his slaves, and when at last he must be denied something, he, believing everything possible when he commands it, takes refusal for an act of rebellion. At his age, incapable of reasoning, all reasons given seem to him only pretexts. He sees ill-will in everything; the feeling of imagined injustice embitters his temper; he begins to hate everybody, and without ever being thankful for kindness, is angry at any opposition whatever.

Who supposes that a child thus ruled by anger, a prey to furious passions, can ever be happy? He happy? He is a tyrant; that is, the vilest of slaves, and at the same time the most miserable of beings. I have seen children thus reared who wanted those about them to push the house down, to give them the weathercock they saw on a steeple, to stop the march of a regiment so that they could enjoy the drum-beat a little longer; and as soon as obedience to these demands was delayed they rent the air with their screams, and would listen to no one. In vain everybody tried eagerly to gratify them. The ease with which they found their wishes obeyed stimulated them to desire more, and to be stubborn about impossibilities. Everywhere they found only contradictions, impediments, suffering, and sorrow. Always complaining, always refractory, always angry, they spent the time in crying and fretting; were these creatures happy? Authority and weakness conjoined produce only madness and wretchedness. One of two spoiled children beats the table, and the other has the sea lashed.[1] They will have much to beat and to lash before they are satisfied with life.

[1] Here he means Xerxes, King of Persia, who had built an immense bridge of boats over the Hellespont to transport his army from Asia into Europe. A storm having destroyed this bridge, the all-powerful monarch, furious at the insubordination of the elements, ordered chains to be cast into the sea, and had the rebellious waves beaten with rods.

If these ideas of authority and of tyranny make them unhappy from their very childhood, how will it be with them when they are grown, and when their relations with others begin to be extended and multiplied?

Accustomed to seeing everything give way before them, how surprised they will be on entering the world to find themselves crushed beneath the weight of that universe they have expected to move at their own pleasure! Their insolent airs and childish vanity will only bring upon them mortification, contempt, and ridicule; they must swallow affront after affront; cruel trials will teach them that they understand neither their own position nor their own strength. Unable to do everything, they will think themselves unable to do anything. So many unusual obstacles dishearten them, so much contempt degrades them. They become base, cowardly, cringing, and sink as far below their real self as they had imagined themselves above it.

Let us return to the original order of things. Nature has made children to be loved and helped; has she made them to be obeyed and feared? Has she given them an imposing air, a stern eye, a harsh and threatening voice, so that they may inspire fear? I can understand why the roar of a lion fills other creatures with dread, and why they tremble at sight of his terrible countenance. But if ever there were an unbecoming, hateful, ridiculous spectacle, it is that of a body of magistrates in their robes of ceremony, and headed by their chief, prostrate before an infant in long clothes, who to their pompous harangue replies only by screams or by childish drivel![1]

[1] The feeling of a republican, of the "citizen of Geneva," justly shocked by monarchial superstitions. Louis XIV. and Louis XV. had had, in fact, from the days of their first playthings, the degrading spectacle of a universal servility prostrated before their cradle. The sentiment here uttered was still uncommon and almost unknown when Rousseau wrote it. He did much toward creating it and making it popular.

Considering infancy in itself, is there a creature on earth more helpless, more unhappy, more at the mercy of everything around him, more in need of compassion, of care, of protection, than a child? Does it not seem as if his sweet face and touching aspect were intended to interest every one who comes near him, and to urge them to assist his weakness? What then is more outrageous, more contrary to the fitness of things, than to see an imperious and headstrong child ordering about those around him, impudently taking the tone of a master toward those who, to destroy him, need only leave him to himself!

On the other hand, who does not see that since the weakness of infancy fetters children in so many ways, we are barbarous if we add to this natural subjection a bondage to our own caprices by taking from them the limited freedom they have, a freedom they are so little able to misuse, and from the loss of which we and they have so little to gain? As nothing is more ridiculous than a haughty child, so nothing is more pitiable than a cowardly child.

Since with years of reason civil bondage[1] begins, why anticipate it by slavery at home? Let us leave one moment of life exempt from a yoke nature has not laid upon us, and allow childhood the exercise of that natural liberty which keeps it safe, at least for a time, from the vices taught by slavery. Let the over-strict teacher and the over-indulgent parent both come with their empty cavils, and before they boast of their own methods let them learn the method of Nature herself.

[1] Civil bondage, as understood by Rousseau, consists in the laws and obligations of civilized life itself. He extols the state of nature as the ideal condition, the condition of perfect freedom, without seeing that, on the contrary, true liberty cannot exist without the protection of laws, while the state of nature is only the enslavement of the weak by the strong — the triumph of brute force.

Reasoning should not begin too soon.

LOCKE's great maxim was that we ought to reason with children, and just now this maxim is much in fashion. I think, however, that its success does not warrant its reputation, and I find nothing more stupid than children who have been so much reasoned with. Reason, apparently a compound of all other faculties, the one latest developed, and with most difficulty, is the one proposed as agent in unfolding the faculties earliest used! The noblest work of education is to make a reasoning man, and we expect to train a young child by making him reason! This is beginning at the end; this is making an instrument of a result. If children understood how to reason they would not need to be educated. But by addressing them from their tenderest years in a language they cannot understand, you accustom them to be satisfied with words, to find fault with whatever is said to them, to think themselves as wise as their teachers, to wrangle and rebel. And what we mean they shall do from reasonable motives we are forced to obtain from them by adding the motive of avarice, or of fear, or of vanity.

Nature intends that children shall be children before they are men. If we insist on reversing this order we shall have fruit early indeed, but unripe and tasteless, and liable to early decay; we shall have young savants and old children. Childhood has its own methods of seeing, thinking, and feeling. Nothing shows less sense than to try to substitute our own methods for these. I would rather require a child ten years old to be five feet tall than to be judicious. Indeed, what use would he have at that age for the power to reason? It is a check upon physical strength, and the child needs none.

In attempting to persuade your pupils to obedience you add to this alleged persuasion force and threats, or worse still, flattery and promises. Bought over in this way by interest, or constrained by force, they pretend to be convinced by reason. They see plainly that as soon as you discover obedience or disobedience in their conduct, the former is an advantage and the latter a disadvantage to them. But you ask of them only what is distasteful to them; it is always irksome to carry out the wishes of another, so by stealth they carry out their own. They are sure that if their disobedience is not known they are doing well; but they are ready, for fear of greater evils, to acknowledge, if found out, that they are doing wrong. As the reason for the duty required is beyond their capacity, no one can make them really understand it. But the fear of punishment, the hope of forgiveness, your importunity, their difficulty in answering you, extort from them the confession required of them. You think you have convinced them, when you have only wearied them out or intimidated them.

What results from this? First of all that, by imposing upon them a duty they do not feel as such, you set them against your tyranny, and dissuade them from loving you; you teach them to be dissemblers, deceitful, willfully untrue, for the sake of extorting rewards or of escaping punishments. Finally, by habituating them to cover a secret motive by an apparent motive, you give them the means of constantly misleading you, of concealing their true character from you, and of satisfying yourself and others with empty words when their occasion demands. You may say that the law, although binding on the conscience, uses constraint in dealing with grown men. I grant it; but what are these men but children spoiled by their education? This is precisely what ought to be prevented. With children use force, with men reason;

such is the natural order of things. The wise man requires no laws.

Well-Regulated Liberty.

TREAT your pupil as his age demands. From the first, assign him to his true place, and keep him there so effectually that he will not try to leave it. Then, without knowing what wisdom is, he will practise its most important lesson. Never, absolutely never, command him to do a thing, whatever it may be.[1] Do not let him even imagine that you claim any authority over him. Let him know only that he is weak and you are strong: that from his condition and yours he is necessarily at your mercy. Let him know this — learn it and feel it. Let him early know that upon his haughty neck is the stern yoke nature imposes upon man, the heavy yoke of necessity, under which every finite being must toil.

Let him discover this necessity in the nature of things; never in human caprice. Let the rein that holds him back be power, not authority. Do not forbid, but prevent, his doing what he ought not; and in thus preventing him use no explanations, give no reasons. What you grant him, grant at the first asking without any urging, any entreaty from him, and above all without conditions. Consent with pleasure and refuse unwillingly, but let every refusal be irrevocable. Let no importunity move you. Let the "No" once

[1] In this unconditional form the principle is inadmissible. Any one who has the rearing of children knows this. But the idea underlying the paradox ought to be recognized, for it is a just one. We ought not to command merely for the pleasure of commanding, but solely to interpret to the child the requirements of the case in hand. To command him for the sake of commanding is an abuse of power: it is a baseness which will end in disaster. On the other hand, we cannot leave it to circumstances to forbid what ought not to be done. Only, the command should be intelligible, reasonable, and unyielding. This is really what Rousseau means.

uttered be a wall of brass against which the child will have to exhaust his strength only five or six times before he ceases trying to overturn it.

In this way you will make him patient, even-tempered, resigned, gentle, even when he has not what he wants. For it is in our nature to endure patiently the decrees of fate, but not the ill-will of others. "There is no more," is an answer against which no child ever rebelled unless he believed it untrue. Besides, there is no other way; either nothing at all is to be required of him, or he must from the first be accustomed to perfect obedience. The worst training of all is to leave him wavering between his own will and yours, and to dispute incessantly with him as to which shall be master. I should a hundred times prefer his being master in every case.

It is marvellous that in undertaking to educate a child no other means of guiding him should have been devised than emulation, jealousy, envy, vanity, greed, vile fear, — all of them passions most dangerous, readiest to ferment, fittest to corrupt a soul, even before the body is full-grown. For each instruction too early put into a child's head, a vice is deeply implanted in his heart. Foolish teachers think they are doing wonders when they make a child wicked, in order to teach him what goodness is; and then they gravely tell us, "Such is man." Yes; such is the man you have made.

All means have been tried save one, and that the very one which insures success, namely, well-regulated freedom. We ought not to undertake a child's education unless we know how to lead him wherever we please solely by the laws of the possible and the impossible. The sphere of both being alike unknown to him, we may extend or contract it around him as we will. We may bind him down, incite him to action, restrain him by the leash of necessity alone, and he will not

murmur. We may render him pliant and teachable by the force of circumstances alone, without giving any vice an opportunity to take root within him. For the passions never awake to life, so long as they are of no avail.

Do not give your pupil any sort of lesson verbally: he ought to receive none except from experience. Inflict upon him no kind of punishment, for he does not know what being in fault means; never oblige him to ask pardon, for he does not know what it is to offend you.

His actions being without moral quality, he can do nothing which is morally bad, or which deserves either punishment or reproof.[1]

Already I see the startled reader judging of this child by those around us; but he is mistaken. The perpetual constraint under which you keep your pupils increases their liveliness. The more cramped they are while under your eye the more unruly they are the moment they escape it. They must, in fact, make themselves amends for the severe restraint you put upon them. Two school-boys from a city will do more mischief in a community than the young people of a whole village.

Shut up in the same room a little gentleman and a little peasant; the former will have everything upset and broken before the latter has moved from his place. Why is this? Because the one hastens to misuse a moment of liberty, and the other, always sure of his freedom, is never in a hurry to use it. And yet the children of villagers, often petted or

[1] This is not strictly true. The child early has the consciousness of right and wrong; and if it be true that neither chastisement nor reproof is to be abused, it is no less certain that conscience is early awake within him, and that it ought not to be neglected in a work so delicate as that of education: on condition, be it understood, that we act with simplicity, without pedantry, and that we employ example more than lectures. Rousseau says this admirably a few pages farther on.

thwarted, are still very far from the condition in which I should wish to keep them.

Proceed Slowly.

MAY I venture to state here the greatest, the most important, the most useful rule in all education? It is, not to gain time, but to lose it. Forgive the paradox, O my ordinary reader! It must be uttered by any one who reflects, and whatever you may say, I prefer paradoxes to prejudices. The most perilous interval of human life is that between birth and the age of twelve years. At that time errors and vices take root without our having any means of destroying them; and when the instrument is found, the time for uprooting them is past. If children could spring at one bound from the mother's breast to the age of reason, the education given them now-a-days would be suitable; but in the due order of nature they need one entirely different. They should not use the mind at all, until it has all its faculties. For while it is blind it cannot see the torch you present to it; nor can it follow on the immense plain of ideas a path which, even for the keenest eyesight, reason traces so faintly.

The earliest education ought, then, to be purely negative. It consists not in teaching truth or virtue, but in shielding the heart from vice and the mind from error. If you could do nothing at all, and allow nothing to be done; if you could bring up your pupil sound and robust to the age of twelve years, without his knowing how to distinguish his right hand from his left, the eyes of his understanding would from the very first open to reason. Without a prejudice or a habit, there would be in him nothing to counteract the effect of your care. Before long he would become in your

hands the wisest of men; and beginning by doing nothing, you would have accomplished a marvel in education.

Reverse the common practice, and you will nearly always do well. Parents and teachers desiring to make of a child not a child, but a learned man, have never begun early enough to chide, to correct, to reprimand, to flatter, to promise, to instruct, to discourse reason to him. Do better than this: be reasonable yourself, and do not argue with your pupil, least of all, to make him approve what he dislikes. For if you persist in reasoning about disagreeable things, you make reasoning disagreeable to him, and weaken its influence beforehand in a mind as yet unfitted to understand it. Keep his organs, his senses, his physical strength, busy; but, as long as possible, keep his mind inactive. Guard against all sensations arising in advance of judgment, which estimates their true value. Keep back and check unfamiliar impressions, and be in no haste to do good for the sake of preventing evil. For the good is not real unless enlightened by reason. Regard every delay as an advantage; for much is gained if the critical period be approached without losing anything. Let childhood have its full growth. If indeed a lesson must be given, avoid it to-day, if you can without danger delay it until to-morrow.

Another consideration which proves this method useful is the peculiar bent of the child's mind. This ought to be well understood if we would know what moral government is best adapted to him. Each has his own cast of mind, in accordance with which he must be directed; and if we would succeed, he must be ruled according to this natural bent and no other. Be judicious: watch nature long, and observe your pupil carefully before you say a word to him. At first leave the germ of his character free to disclose itself. Repress it as little as possible, so that you may the better see all there is of it.

Do you think this season of free action will be time lost to him? On the contrary, it will be employed in the best way possible. For by this means you will learn not to lose a single moment when time is more precious; whereas, if you begin to act before you know what ought to be done, you act at random. Liable to deceive yourself, you will have to retrace your steps, and will be farther from your object than if you had been less in haste to reach it. Do not then act like a miser, who, in order to lose nothing, loses a great deal. At the earlier age sacrifice time which you will recover with interest later on. The wise physician does not give directions at first sight of his patient, but studies the sick man's temperament, before prescribing. He begins late with his treatment, but cures the man: the over-hasty physician kills him.

Remember that, before you venture undertaking to form a man, you must have made yourself a man; you must find in yourself the example you ought to offer him. While the child is yet without knowledge there is time to prepare everything about him so that his first glance shall discover only what he ought to see. Make everybody respect you; begin by making yourself beloved, so that everybody will try to please you. You will not be the child's master unless you are master of everything around him, and this authority will not suffice unless founded on esteem for virtue.

There is no use in exhausting your purse by lavishing money: I have never observed that money made any one beloved. You must not be miserly or unfeeling, or lament the distress you can relieve; but you will open your coffers in vain if you do not open your heart; the hearts of others will be forever closed to you. You must give your time, your care, your affection, yourself. For whatever you may do, your money certainly is not yourself. Tokens of interest

and of kindness go farther and are of more use than any gifts whatever. How many unhappy persons, how many sufferers, need consolation far more than alms! How many who are oppressed are aided rather by protection than by money!

Reconcile those who are at variance; prevent lawsuits; persuade children to filial duty and parents to gentleness. Encourage happy marriages; hinder disturbances; use freely the interest of your pupil's family on behalf of the weak who are denied justice and oppressed by the powerful. Boldly declare yourself the champion of the unfortunate. Be just, humane, beneficent. Be not content with giving alms; be charitable. Kindness relieves more distress than money can reach. Love others, and they will love you; serve them, and they will serve you; be their brother, and they will be your children.

Blame others no longer for the mischief you yourself are doing. Children are less corrupted by the harm they see than by that you teach them.

Always preaching, always moralizing, always acting the pedant, you give them twenty worthless ideas when you think you are giving them one good one. Full of what is passing in your own mind, you do not see the effect you are producing upon theirs.

In the prolonged torrent of words with which you incessantly weary them, do you think there are none they may misunderstand? Do you imagine that they will not comment in their own way upon your wordy explanations, and find in them a system adapted to their own capacity, which, if need be, they can use against you?

Listen to a little fellow who has just been under instruction. Let him prattle, question, blunder, just as he pleases, and you will be surprised at the turn your reasonings have

taken in his mind. He confounds one thing with another; he reverses everything; he tires you, sometimes worries you, by unexpected objections. He forces you to hold your peace, or to make him hold his. And what must he think of this silence, in one so fond of talking? If ever he wins this advantage and knows the fact, farewell to his education. He will no longer try to learn, but to refute what you say.

Be plain, discreet, reticent, you who are zealous teachers. Be in no haste to act, except to prevent others from acting.

Again and again I say, postpone even a good lesson if you can, for fear of conveying a bad one. On this earth, meant by nature to be man's first paradise, beware lest you act the tempter by giving to innocence the knowledge of good and evil. Since you cannot prevent the child's learning from outside examples, restrict your care to the task of impressing these examples on his mind in suitable forms.

Violent passions make a striking impression on the child who notices them, because their manifestations are well-defined, and forcibly attract his attention. Anger especially has such stormy indications that its approach is unmistakable. Do not ask, "Is not this a fine opportunity for the pedagogue's moral discourse?" Spare the discourse: say not a word: let the child alone. Amazed at what he sees, he will not fail to question you. It will not be hard to answer him, on account of the very things that strike his senses. He sees an inflamed countenance, flashing eyes, threatening gestures, he hears unusually excited tones of voice; all sure signs that the body is not in its usual condition. Say to him calmly, unaffectedly, without any mystery, "This poor man is sick; he has a high fever." You may take this occasion to give him, in few words, an idea of maladies and of their effects; for these, being natural, are trammels of that necessity to which he has to feel himself subject.

From this, the true idea, will he not early feel repugnance at giving way to excessive passion, which he regards as a disease? And do you not think that such an idea, given at the appropriate time, will have as good an effect as the most tiresome sermon on morals? Note also the future consequences of this idea; it will authorize you, if ever necessity arises, to treat a rebellious child as a sick child, to confine him to his room, and even to his bed, to make him undergo a course of medical treatment; to make his growing vices alarming and hateful to himself. He cannot consider as a punishment the severity you are forced to use in curing him. So that if you yourself, in some hasty moment, are perhaps stirred out of the coolness and moderation it should be your study to preserve, do not try to disguise your fault, but say to him frankly, in tender reproach, "My boy, you have hurt me."

I do not intend to enter fully into details, but to lay down some general maxims and to illustrate difficult cases. I believe it impossible, in the very heart of social surroundings, to educate a child up to the age of twelve years, without giving him some ideas of the relations of man to man, and of morality in human actions. It will suffice if we put off as long as possible the necessity for these ideas, and when they must be given, limit them to such as are immediately applicable. We must do this only lest he consider himself master of everything, and so injure others without scruple, because unknowingly. There are gentle, quiet characters who, in their early innocence, may be led a long way without danger of this kind. But others, naturally violent, whose wildness is precocious, must be trained into men as early as may be, that you may not be obliged to fetter them outright.

The Idea of Property.

Our first duties are to ourselves; our first feelings are concentrated upon ourselves; our first natural movements have reference to our own preservation and well-being. Thus our first idea of justice is not as due from us, but to us. One error in the education of to-day is, that by speaking to children first of their duties and never of their rights, we commence at the wrong end, and tell them of what they cannot understand, and what cannot interest them.

If therefore I had to teach one of these I have mentioned, I should reflect that a child never attacks persons, but things; he soon learns from experience to respect his superiors in age and strength. But things do not defend themselves. The first idea to be given him, therefore, is rather that of property than that of liberty; and in order to understand this idea he must have something of his own. To speak to him of his clothes, his furniture, his playthings, is to tell him nothing at all; for though he makes use of these things, he knows neither how nor why he has them. To tell him they are his because they have been given to him is not much better, for in order to give, we must have. This is an ownership dating farther back than his own, and we wish him to understand the principle of ownership itself. Besides, a gift is a conventional thing, and the child cannot as yet understand what a conventional thing is. You who read this, observe how in this instance, as in a hundred thousand others, a child's head is crammed with words which from the start have no meaning to him, but which we imagine we have taught him.

We must go back, then, to the origin of ownership, for thence our first ideas of it should arise. The child living in the country will have gained some notion of what field labor is,

having needed only to use his eyes and his abundant leisure. Every age in life, and especially his own, desires to create, to imitate, to produce, to manifest power and activity. Only twice will it be necessary for him to see a garden cultivated, seed sown, plants reared, beans sprouting, before he will desire to work in a garden himself.

In accordance with principles already laid down I do not at all oppose this desire, but encourage it. I share his taste; I work with him, not for his pleasure, but for my own: at least he thinks so. I become his assistant gardener; until his arms are strong enough I work the ground for him. By planting a bean in it, he takes possession of it; and surely this possession is more sacred and more to be respected than that assumed by Nuñez de Balboa of South America in the name of the king of Spain, by planting his standard on the shores of the Pacific Ocean.

He comes every day to water the beans, and rejoices to see them thriving. I add to his delight by telling him "This belongs to you." In explaining to him what I mean by "belongs," I make him feel that he has put into this plot of ground his time, his labor, his care, his bodily self; that in it is a part of himself which he may claim back from any one whatever, just as he may draw his own arm back if another tries to hold it against his will.

One fine morning he comes as usual, running, watering-pot in hand. But oh, what a sight! What a misfortune! The beans are uprooted, the garden bed is all in disorder: the place actually no longer knows itself. What has become of my labor, the sweet reward of all my care and toil? Who has robbed me of my own? Who has taken my beans away from me? The little heart swells with the bitterness of its first feeling of injustice. His eyes overflow with tears; his distress rends the air with moans and cries. We com-

passionate his troubles, share his indignation, make inquiries, sift the matter thoroughly. At last we find that the gardener has done the deed: we send for him.

But we find that we have reckoned without our host. When the gardener hears what we are complaining of, he complains more than we.

"What! So it was you, gentlemen, who ruined all my labor! I had planted some Maltese melons, from seed given me as a great rarity: I hoped to give you a grand treat with them when they were ripe. But for the sake of planting your miserable beans there, you killed my melons after they had actually sprouted; and there are no more to be had. You have done me more harm than you can remedy, and you have lost the pleasure of tasting some delicious melons."

JEAN JACQUES. "Excuse us, my good Robert. You put into them your labor, your care. I see plainly that we did wrong to spoil your work: but we will get you some more Maltese seed, and we will not till any more ground without finding out whether some one else has put his hand to it before us."

ROBERT. "Oh well, gentlemen, you may as well end the business; for there's no waste land. What I work was improved by my father, and it's the same with everybody hereabout. All the fields you see were taken up long ago."

ÉMILE. "Mr. Robert, do you often lose your melon-seed?"

ROBERT. "Pardon, my young master: we don't often have young gentlemen about that are careless like you. Nobody touches his neighbor's garden; everybody respects other people's work, to make sure of his own."

ÉMILE. "But I haven't any garden."

ROBERT. "What's that to me? If you spoil mine, I won't let you walk in it any more; for you are to understand that I'm not going to have all my pains for nothing."

JEAN JACQUES. "Can't we arrange this matter with honest Robert? Just let my little friend and me have one corner of your garden to cultivate, on condition that you have half the produce."

ROBERT. "I will let you have it without that condition; but remember, I will root up your beans if you meddle with my melons."

In this essay on the manner of teaching fundamental notions to children it may be seen how the idea of property naturally goes back to the right which the first occupant acquired by labor. This is clear, concise, simple, and always within the comprehension of the child. From this to the right of holding property, and of transferring it, there is but one step, and beyond this we are to stop short.

It will also be evident that the explanation I have included in two pages may, in actual practice, be the work of an entire year. For in the development of moral ideas, we cannot advance too slowly, or establish them too firmly at every step. I entreat you, young teachers, to think of the example I have given, and to remember that your lessons upon every subject ought to be rather in actions than in words; for children readily forget what is said or done to them.

As I have said, such lessons ought to be given earlier or later, as the disposition of the child, gentle or turbulent, hastens or retards the necessity for giving them. In employing them, we call in an evidence that cannot be misunderstood. But that in difficult cases nothing important may be omitted, let us give another illustration.

Your little meddler spoils everything he touches; do not be vexed, but put out of his reach whatever he can spoil. He breaks the furniture he uses. Be in no hurry to give him any more; let him feel the disadvantages of doing without it. He breaks the windows in his room; let the wind blow on

him night and day. Have no fear of his taking cold; he had better take cold than be a fool.

Do not fret at the inconvenience he causes you, but make him feel it first of all. Finally, without saying anything about it, have the panes of glass mended. He breaks them again. Change your method: say to him coolly and without anger, "Those windows are mine; I took pains to have them put there, and I am going to make sure that they shall not be broken again." Then shut him up in some dark place where there are no windows. At this novel proceeding, he begins to cry and storm: but nobody listens to him. He soon grows tired of this, and changes his tone; he complains and groans. A servant is sent, whom the rebel entreats to set him free. Without trying to find any excuse for utter refusal, the servant answers, "I have windows to take care of, too," and goes away. At last, after the child has been in durance for several hours, long enough to tire him and to make him remember it, some one suggests an arrangement by which you shall agree to release him, and he to break no more windows. He sends to beseech you to come and see him; you come; he makes his proposal. You accept it immediately, saying, "Well thought of; that will be a good thing for both of us. Why didn't you think of this capital plan before?" Then, without requiring any protestations, or confirmation of his promise, you gladly caress him and take him to his room at once, regarding this compact as sacred and inviolable as if ratified by an oath. What an idea of the obligation, and the usefulness, of an engagement will he not gain from this transaction! I am greatly mistaken if there is an unspoiled child on earth who would be proof against it, or who would ever after think of breaking a window purposely.

Falsehood. The Force of Example.

We are now within the domain of morals, and the door is open to vice. Side by side with conventionalities and duties spring up deceit and falsehood. As soon as there are things we ought not to do, we desire to hide what we ought not to have done. As soon as one interest leads us to promise, a stronger one may urge us to break the promise. Our chief concern is how to break it and still go unscathed. It is natural to find expedients; we dissemble and we utter falsehood. Unable to prevent this evil, we must nevertheless punish it. Thus the miseries of our life arise from our mistakes.

I have said enough to show that punishment, as such, should not be inflicted upon children, but should always happen to them as the natural result of their own wrong-doing. Do not, then, preach to them against falsehood, or punish them confessedly on account of a falsehood. But if they are guilty of one, let all its consequences fall heavily on their heads. Let them know what it is to be disbelieved even when they speak the truth, and to be accused of faults in spite of their earnest denial. But let us inquire what falsehood is, in children.

There are two kinds of falsehood; that of fact, which refers to things already past, and that of right, which has to do with the future. The first occurs when we deny doing what we have done, and in general, when we knowingly utter what is not true. The other occurs when we promise what we do not mean to perform, and, in general, when we express an intention contrary to the one we really have. These two sorts of untruth may sometimes meet in the same case; but let us here discuss their points of difference.

One who realizes his need of help from others, and con-

stantly receives kindness from them, has nothing to gain by deceiving them. On the contrary, it is evidently his interest that they should see things as they are, lest they make mistakes to his disadvantage. It is clear, then, that the falsehood of fact is not natural to children. But the law of obedience makes falsehood necessary; because, obedience being irksome, we secretly avoid it whenever we can, and just in proportion as the immediate advantage of escaping reproof or punishment outweighs the remoter advantage to be gained by revealing the truth.

Why should a child educated naturally and in perfect freedom, tell a falsehood? What has he to hide from you? You are not going to reprove or punish him, or exact anything from him. Why should he not tell you everything as frankly as to his little playmate? He sees no more danger in the one case than in the other.

The falsehood of right is still less natural to children, because promises to do or not to do are conventional acts, foreign to our nature and infringements of our liberty. Besides, all the engagements of children are in themselves void, because, as their limited vision does not stretch beyond the present, they know not what they do when they bind themselves. It is hardly possible for a child to tell a lie in making a promise. For, considering only how to overcome a present difficulty, all devices that have no immediate effect become alike to him. In promising for a time to come he actually does not promise at all, as his still dormant imagination cannot extend itself over two different periods of time. If he could escape a whipping or earn some sugarplums by promising to throw himself out of the window tomorrow, he would at once promise it. Therefore the laws pay no regard to engagements made by children; and when some fathers and teachers, more strict than this, require the

fulfilling of such engagements, it is only in things the child ought to do without promising.

As the child in making a promise is not aware what he is doing, he cannot be guilty of falsehood in so doing: but this is not the case when he breaks a promise. For he well remembers having made the promise; what he cannot understand is, the importance of keeping it. Unable to read the future, he does not foresee the consequences of his actions; and when he violates engagements he does nothing contrary to what might be expected of his years.

It follows from this that all the untruths spoken by children are the fault of those who instruct them; and that endeavoring to teach them how to be truthful is only teaching them how to tell falsehoods. We are so eager to regulate, to govern, to instruct them, that we never find means enough to reach our object. We want to win new victories over their minds by maxims not based upon fact, by unreasonable precepts; we would rather they should know their lessons and tell lies than to remain ignorant and speak the truth.

As for us, who give our pupils none but practical teaching, and would rather have them good than knowing, we shall not exact the truth from them at all, lest they disguise it; we will require of them no promises they may be tempted to break. If in my absence some anonymous mischief has been done, I will beware of accusing Émile, or of asking "Was it you?"[1] For what would that be but teaching him to deny it? If his naturally troublesome disposition obliges me to

[1] Nothing is more injudicious than such a question, especially when the child is in fault. In that case, if he thinks you know what he has done, he will see that you are laying a snare for him, and this opinion cannot fail to set him against you. If he thinks you do not know he will say to himself, "Why should I disclose my fault?" And thus the first temptation to falsehood is the result of your imprudent question. — [Note by J. J. ROUSSEAU.]

make some agreement with him, I will plan so well that any such proposal shall come from him and never from me. Thus, whenever he is bound by an engagement he shall have an immediate and tangible interest in fulfilling it. And if he ever fails in this, the falsehood shall bring upon him evil results which he sees must arise from the very nature of things, and never from the vengeance of his tutor. Far from needing recourse to such severe measures, however, I am almost sure that Émile will be long in learning what a lie is, and upon finding it out will be greatly amazed, not understanding what is to be gained by it. It is very plain that the more I make his welfare independent of either the will or the judgment of others, the more I uproot within him all interest in telling falsehoods.

When we are less eager to instruct we are also less eager to exact requirements from our pupil, and can take time to require only what is to the purpose. In that case, the child will be developed, just because he is not spoiled. But when some blockhead teacher, not understanding what he is about, continually forces the child to promise things, making no distinctions, allowing no choice, knowing no limit, the little fellow, worried and weighed down with all these obligations, neglects them, forgets them, at last despises them; and considering them mere empty formulas, turns the giving and the breaking of them into ridicule. If then you want to make him faithful to his word, be discreet in requiring him to give it.

The details just entered upon in regard to falsehood may apply in many respects to all duties which, when enjoined upon children, become to them not only hateful but impracticable. In order to seem to preach virtue we make vices attractive, and actually impart them by forbidding them. If we would have the children religious, we tire them out taking

them to church. By making them mumble prayers incessantly we make them sigh for the happiness of never praying at all. To inspire charity in them, we make them give alms, as if we disdained doing it ourselves. It is not the child, but his teacher, who ought to do the giving. However much you love your pupil, this is an honor you ought to dispute with him, leading him to feel that he is not yet old enough to deserve it.

Giving alms is the act of one who knows the worth of his gift, and his fellow-creature's need of the gift. A child who knows nothing of either can have no merit in bestowing. He gives without charity or benevolence: he is almost ashamed to give at all, as, judging from your example and his own, only children give alms, and leave it off when grown up. Observe, that we make the child bestow only things whose value he does not know: pieces of metal, which he carries in his pocket, and which are good for nothing else. A child would rather give away a hundred gold pieces than a single cake. But suggest to this free-handed giver the idea of parting with what he really prizes — his playthings, his sugar-plums, or his luncheon; you will soon find out whether you have made him really generous.

To accomplish the same end, resort is had to another expedient, that of instantly returning to the child what he has given away, so that he habitually gives whatever he knows will be restored to him. I have rarely met with other than these two kinds of generosity in children, namely, the giving either of what is no use to themselves, or else of what they are certain will come back to them.

"Do this," says Locke, "that they may be convinced by experience that he who gives most generously has always the better portion." This is making him liberal in appearance and miserly in reality. He adds, that children will thus acquire the habit of generosity.

Yes; a miser's generosity, giving an egg to gain an ox. But when called upon to be generous in earnest, good-bye to the habit; they soon cease giving when the gift no longer comes back to them. We ought to keep in view the habit of mind rather than that of the hands. Like this virtue are all others taught to children; and their early years are spent in sadness, that we may preach these sterling virtues to them! Excellent training this!

Lay aside all affectation, you teachers; be yourselves good and virtuous, so that your example may be deeply graven on your pupils' memory until such time as it finds lodgment in their heart. Instead of early requiring acts of charity from my pupil I would rather do them in his presence, taking from him all means of imitating me, as if I considered it an honor not due to his age. For he should by no means be in the habit of thinking a man's duties the same as a child's. Seeing me assist the poor, he questions me about it and, if occasion serve, I answer, "My boy, it is because, since poor people are willing there should be rich people, the rich have promised to take care of those who have no money or cannot earn a living by their labor."

"And have you promised it too?" inquires he.

"Of course; the money that comes into my hands is mine to use only upon this condition, which its owner has to carry out."

After this conversation, and we have seen how a child may be prepared to understand it, other children besides Émile would be tempted to imitate me by acting like a rich man. In this case I would at least see that it should not be done ostentatiously. I would rather have him rob me of my right, and conceal the fact of his generosity. It would be a stratagem natural at his age, and the only one I would pardon in him.

The only moral lesson suited to childhood and the most

important at any age is, never to injure any one. Even the principle of doing good, if not subordinated to this, is dangerous, false, and contradictory. For who does not do good? Everybody does, even a wicked man who makes one happy at the expense of making a hundred miserable: and thence arise all our calamities. The most exalted virtues are negative: they are hardest to attain, too, because they are unostentatious, and rise above even that gratification dear to the heart of man, — sending another person away pleased with us. If there be a man who never injures one of his fellow-creatures, what good must he achieve for them! What fearlessness, what vigor of mind he requires for it! Not by reasoning about this principle, but by attempting to carry it into practice, do we find out how great it is, how hard to fulfil.

The foregoing conveys some faint idea of the precautions I would have you employ in giving children the instructions we sometimes cannot withhold without risk of their injuring themselves or others, and especially of contracting bad habits of which it will by and by be difficult to break them. But we may rest assured that in children rightly educated the necessity will seldom arise; for it is impossible that they should become intractable, vicious, deceitful, greedy, unless the vices which make them so are sowed in their hearts. For this reason what has been said on this point applies rather to exceptional than to ordinary cases. But such exceptional cases become common in proportion as children have more frequent opportunity to depart from their natural state and to acquire the vices of their seniors. Those brought up among men of the world absolutely require earlier teaching in these matters than those educated apart from such surroundings. Hence this private education is to be preferred, even if it do no more than allow childhood leisure to grow to perfection.

Negative or Temporizing Education.

EXACTLY contrary to the cases just described are those whom a happy temperament exalts above their years. As there are some men who never outgrow childhood, so there are others who never pass through it, but are men almost from their birth. The difficulty is that these exceptional cases are rare and not easily distinguished; besides, all mothers capable of understanding that a child can be a prodigy, have no doubt that their own are such. They go even farther than this: they take for extraordinary indications the sprightliness, the bright childish pranks and sayings, the shrewd simplicity of ordinary cases, characteristic of that time of life, and showing plainly that a child is only a child. Is it surprising that, allowed to speak so much and so freely, unrestrained by any consideration of propriety, a child should occasionally make happy replies? If he did not, it would be even more surprising; just as if an astrologer, among a hundred false predictions, should never hit upon a single true one. "They lie so often," said Henry IV., "that they end by telling the truth." To be a wit, one need only utter a great many foolish speeches. Heaven help men of fashion, whose reputation rests upon just this foundation!

The most brilliant thoughts may enter a child's head, or rather, the most brilliant sayings may fall from his lips, just as the most valuable diamonds may fall into his hands, without his having any right either to the thoughts or to the diamonds. At his age, he has no real property of any kind. A child's utterances are not the same to him as to us; he does not attach to them the same ideas. If he has any ideas at all on the subject, they have neither order nor coherence in his mind; in all his thoughts nothing is certain or stable. If you watch your supposed prodigy attentively, you

will sometimes find him a well-spring of energy, clear-sighted, penetrating the very marrow of things. Much oftener the same mind appears commonplace, dull, and as if enveloped in a dense fog. Sometimes he outruns you, and sometimes he stands still. At one moment you feel like saying, "He is a genius," and at another, "He is a fool." You are mistaken in either case: he is a child; he is an eaglet that one moment beats the air with its wings, and the next moment falls back into the nest.

In spite of appearances, then, treat him as his age demands, and beware lest you exhaust his powers by attempting to use them too freely. If this young brain grows warm, if you see it beginning to seethe, leave it free to ferment, but do not excite it, lest it melt altogether into air. When the first flow of spirits has evaporated, repress and keep within bounds the rest, until, as time goes on, the whole is transformed into life-giving warmth and real power. Otherwise you will lose both time and pains; you will destroy your own handiwork, and after having thoughtlessly intoxicated yourself with all these inflammable vapors, you will have nothing left but the dregs.

Nothing has been more generally or certainly observed than that dull children make commonplace men. In childhood it is very difficult to distinguish real dullness from that misleading apparent dullness which indicates a strong character. At first it seems strange that the two extremes should meet in indications so much alike; and yet such is the case. For at an age when man has no real ideas at all, the difference between one who has genius and one who has not is, that the latter entertains only mistaken ideas, and the former, encountering only such, admits none at all. The two are therefore alike in this, that the dullard is capable of nothing, and the other finds nothing to suit him. The only means of distin-

guishing them is chance, which may bring to the genius some ideas he can comprehend, while the dull mind is always the same.

During his childhood the younger Cato was at home considered an idiot. No one said anything of him beyond that he was silent and headstrong. It was only in the antechamber of Sulla that his uncle learned to know him. If he had never crossed its threshold, he might have been thought a fool until he was grown. If there had been no such person as Cæsar, this very Cato, who read the secret of Cæsar's fatal genius, and from afar foresaw his ambitious designs, would always have been treated as a visionary.[1] Those who judge of children so hastily are very liable to be mistaken. They are often more childish than the children themselves.

Concerning the Memory.

RESPECT children, and be in no haste to judge their actions, good or evil. Let the exceptional cases show themselves such for some time before you adopt special methods of dealing with them. Let nature be long at work before you attempt to supplant her, lest you thwart her work. You say you know how precious time is, and do not wish to lose it. Do you not know that to employ it badly is to waste it still more, and that a child badly taught is farther from being wise than one not taught at all? You are troubled at seeing him spend his early years in doing nothing. What! is it nothing to be happy? Is it nothing to skip, to play, to run

[1] He refers to Cato, surnamed of Utica, from the African city in which he ended his own life. When a child, he was often invited by his brother to the house of the all-powerful Sulla. The cruelties of the tyrant roused the boy to indignation, and it was necessary to watch him lest he should attempt to kill Sulla. It was in the latter's antechamber that the scene described by Plutarch occurred.

about all day long? Never in all his life will he be so busy as now. Plato, in that work of his considered so severe, the "Republic," would have children accustomed to festivals, games, songs, and pastimes; one would think he was satisfied with having carefully taught them how to enjoy themselves. And Seneca, speaking of the Roman youth of old, says, "They were always standing; nothing was taught them that they had to learn when seated." Were they of less account when they reached manhood? Have no fear, then, of this supposed idleness. What would you think of a man who, in order to use his whole life to the best advantage, would not sleep? You would say, "The man has no sense; he does not enjoy life, but robs himself of it. To avoid sleep, he rushes on his death." The two cases are parallel, for childhood is the slumber of reason.

Apparent quickness in learning is the ruin of children. We do not consider that this very quickness proves that they are learning nothing. Their smooth and polished brain reflects like a mirror the objects presented to it, but nothing abides there, nothing penetrates it. The child retains the words; the ideas are reflected; they who hear understand them, but he himself does not understand them at all.

Although memory and reason are two essentially different faculties, the one is never really developed without the other. Before the age of reason, the child receives not ideas, but images. There is this difference between the two, that images are only absolute representations of objects of sense, and ideas are notions of objects determined by their relations. An image may exist alone in the mind that represents it, but every idea supposes other ideas. When we imagine, we only see; when we conceive of things, we compare them. Our sensations are entirely passive, whereas all our perceptions or ideas spring from an active principle which judges.

I say then that children, incapable of judging, really have no memory. They retain sounds, shapes, sensations; but rarely ideas, and still more rarely the relations of ideas to one another. If this statement is apparently refuted by the objection that they learn some elements of geometry, it is not really true; that very fact confirms my statement. It shows that, far from knowing how to reason themselves, they cannot even keep in mind the reasonings of others. For if you investigate the method of these little geometricians, you discover at once that they have retained only the exact impression of the diagram and the words of the demonstration. Upon the least new objection they are puzzled. Their knowledge is only of the sensation; nothing has become the property of their understanding. Even their memory is rarely more perfect than their other faculties: for when grown they have nearly always to learn again as realities things whose names they learned in childhood.

However, I am far from thinking that children have no power of reasoning whatever.[1] I observe, on the contrary, that in things they understand, things relating to their present and manifest interests, they reason extremely well. We are,

[1] While writing this I have reflected a hundred times that in an extended work it is impossible always to use the same words in the same sense. No language is rich enough to furnish terms and expressions to keep pace with the possible modifications of our ideas. The method which defines all the terms, and substitutes the definition for the term, is fine, but impracticable; for how shall we then avoid travelling in a circle? If definitions could be given without using words, they might be useful. Nevertheless, I am convinced that, poor as our language is, we can make ourselves understood, not by always attaching the same meaning to the same words, but by so using each word that its meaning shall be sufficiently determined by the ideas nearly related to it, and so that each sentence in which a word is used shall serve to define the word. Sometimes I say that children are incapable of reasoning, and sometimes I make them reason extremely well; I think that my ideas do not contradict each other, though I cannot escape the inconvenient contradictions of my mode of expression.

however, liable to be misled as to their knowledge, attributing to them what they do not have, and making them reason about what they do not understand. Again, we make the mistake of calling their attention to considerations by which they are in no wise affected, such as their future interests, the happiness of their coming manhood, the opinion people will have of them when they are grown up. Such speeches, addressed to minds entirely without foresight, are absolutely unmeaning. Now all the studies forced upon these poor unfortunates deal with things like this, utterly foreign to their minds. You may judge what attention such subjects are likely to receive.

On the Study of Words.

PEDAGOGUES, who make such an imposing display of what they teach, are paid to talk in another strain than mine, but their conduct shows that they think as I do. For after all, what do they teach their pupils? Words, words, words. Among all their boasted subjects, none are selected because they are useful; such would be the sciences of things, in which these professors are unskilful. But they prefer sciences we seem to know when we know their nomenclature, such as heraldry, geography, chronology, languages; studies so far removed from human interests, and particularly from the child, that it would be wonderful if any of them could be of the least use at any time in life.

It may cause surprise that I account the study of languages one of the useless things in education. But remember I am speaking of the studies of earlier years, and whatever may be said, I do not believe that any child except a prodigy, will ever learn two languages by the time he is twelve or fifteen.[1]

[1] Another exaggeration: the idea is not to teach children to speak another language as perfectly as their own. There are three different

I admit that if the study of languages were only that of words, that is, of forms, and of the sounds which express them, it might be suitable for children. But languages, by changing their signs, modify also the ideas they represent. Minds are formed upon languages; thoughts take coloring from idioms. Reason alone is common to all. In each language the mind has its peculiar conformation, and this may be in part the cause or the effect of national character. The fact that every nation's language follows the vicissitudes of that nation's morals, and is preserved or altered with them, seems to confirm this theory.

Of these different forms, custom gives one to the child, and it is the only one he retains until the age of reason. In order to have two, he must be able to compare ideas; and how can he do this when he is scarcely able to grasp them? Each object may for him have a thousand different signs, but each idea can have but one form; he can therefore learn to speak only one language. It is nevertheless maintained that he learns several; this I deny. I have seen little prodigies who thought they could speak six or seven: I have heard them speak German in Latin, French, and Italian idioms successively. They did indeed use five or six vocabularies, but they never spoke anything but German. In short, you may give children as many synonyms as you please, and you will change only their words, and not their language; they will never know more than one.

objects to be attained in studying languages. First, this study is meant to render easy by comparison and practice the knowledge and free use of the mother tongue. Second, it is useful as intellectual gymnastics, developing attention, reflection, reasoning, and taste. This result is to be expected particularly from the study of the ancient languages. Third, it lowers the barriers separating nations, and furnishes valuable means of intercourse which science, industries, and commerce cannot afford to do without. The French have not always shown wisdom in ignoring the language of their neighbors or their rivals.

To hide this inability we, by preference, give them practice in the dead languages, of which there are no longer any unexceptionable judges. The familiar use of these tongues having long been lost, we content ourselves with imitating what we find of them in books, and call this speaking them. If such be the Greek and Latin of the masters, you may judge what that of the children is. Scarcely have they learned by heart the rudiments, without in the least understanding them, before they are taught to utter a French discourse in Latin words; and, when further advanced, to string together in prose, phrases from Cicero and cantos from Virgil. Then they imagine they are speaking Latin, and who is there to contradict them?[1]

In any study, words that represent things are nothing without the ideas of the things they represent. We, however, limit children to these signs, without ever being able to make them understand the things represented. We think we are teaching a child the description of the earth, when he is merely learning maps. We teach him the names of cities, countries, rivers; he has no idea that they exist anywhere but on the map we use in pointing them out to him. I recollect seeing somewhere a text-book on geography which began thus: "What is the world? A pasteboard globe." Precisely such is the geography of children. I will venture to say that after two years of globes and cosmography no child of ten, by rules they give him, could find the way from Paris to St. Denis. I maintain that not one of them, from a plan of his father's garden, could trace out its windings without going astray. And yet these are the knowing creatures who can tell you exactly where Pekin, Ispahan, Mexico, and all the countries of the world are.

[1] From this passage, it is plain that the objections lately raised by intelligent persons against the abuse of Latin conversations and verses are not of recent date, after all.

I hear it suggested that children ought to be engaged in studies in which only the eye is needed. This might be true if there were studies in which their eyes were not needed; but I know of none such.

A still more ridiculous method obliges children to study history, supposed to be within their comprehension because it is only a collection of facts.[1] But what do we mean by facts? Do we suppose that the relations out of which historic facts grow are so easily understood that the minds of children grasp such ideas without difficulty? Do we imagine that the true understanding of events can be separated from that of their causes and effects? and that the historic and the moral are so far asunder that the one can be understood without the other? If in men's actions you see only purely external and physical changes, what do you learn from history? Absolutely nothing; and the subject, despoiled of all interest, no longer gives you either pleasure or instruction. If you intend to estimate actions by their moral relations, try to make your pupils understand these relations, and you will discover whether history is adapted to their years.

If there is no science in words, there is no study especially adapted to children. If they have no real ideas, they have no real memory; for I do not call that memory which retains only impressions. Of what use is it to write on their minds a catalogue of signs that represent nothing to them? In learning the things represented, would they not also learn

[1] There is indeed a faulty method of teaching history, by giving children a dry list of facts, names, and dates. On the other hand, to offer them theories upon the philosophy of history is quite as unprofitable. Yet it is not an absurd error, but a duty, to teach them the broad outlines of history, to tell them of deeds of renown, of mighty works accomplished, of men celebrated for the good or the evil they have done; to interest them in the past of humanity, be it melancholy or glorious. By abuse of logic Rousseau, in protesting against one excess, falls into another.

the signs? Why do you give them the useless trouble of learning them twice? Besides, you create dangerous prejudices by making them suppose that science consists of words meaningless to them. The first mere word with which the child satisfies himself, the first thing he learns on the authority of another person, ruins his judgment. Long must he shine in the eyes of unthinking persons before he can repair such an injury to himself.

No; nature makes the child's brain so yielding that it receives all kinds of impressions; not that we may make his childhood a distressing burden to him by engraving on that brain dates, names of kings, technical terms in heraldry, mathematics, geography, and all such words, unmeaning to him and unnecessary to persons at any age in life. But all ideas that he can understand, and that are of use to him, all that conduce to his happiness and that will one day make his duties plain, should early write themselves there indelibly, to guide him through life as his condition and his intellect require.

The memory of which a child is capable is far from inactive, even without the use of books. All he sees and hears impresses him, and he remembers it. He keeps a mental register of people's sayings and doings. Everything around him is the book from which he is continually but unconsciously enriching his memory against the time his judgment can benefit by it. If we intend rightly to cultivate this chief faculty of the mind, we must choose these objects carefully, constantly acquainting him with such as he ought to understand, and keeping back those he ought not to know. In this way we should endeavor to make his mind a storehouse of knowledge, to aid in his education in youth, and to direct him at all times. This method does not, it is true, produce phenomenal children, nor does it make the reputation of their

teachers; but it produces judicious, robust men, sound in body and in mind, who, although not admired in youth, will make themselves respected in manhood.

Émile shall never learn anything by heart, not even fables such as those of La Fontaine, simple and charming as they are. For the words of fables are no more the fables themselves than the words of history are history itself. How can we be so blind as to call fables moral lessons for children? We do not reflect that while these stories amuse they also mislead children, who, carried away by the fiction, miss the truth conveyed; so that what makes the lesson agreeable also makes it less profitable. Men may learn from fables, but children must be told the bare truth; if it be veiled, they do not trouble themselves to lift the veil.[1]

Since nothing ought to be required of children merely in proof of their obedience, it follows that they can learn nothing of which they cannot understand the actual and immediate advantage, whether it be pleasant or useful. Otherwise, what motive will induce them to learn it? The art of conversing with absent persons, and of hearing from them, of communicating to them at a distance, without the aid of another, our feelings, intentions, and wishes, is an art whose value may be explained to children of almost any age whatever. By

[1] Rousseau here analyzes several of La Fontaine's fables, to show the immorality and the danger of their "ethics." He dwells particularly upon the fable of the Fox and the Crow. In this he is right; the morality of the greater part of these fables leaves much to be desired. But there is nothing to prevent the teacher from making the application. The memory of a child is pliable and vigorous; not to cultivate it would be doing him great injustice. We need not say that a true teacher not only chooses, but by his instructions explains and rectifies everything he requires his pupil to read or to learn by heart. With this reservation one cannot but admire this aversion of Rousseau's for parrot-learning, word-worship, and exclusive cultivation of the memory. In a few pages may here be found a complete philosophy of teaching, adapted to the regeneration of a people.

what astonishing process has this useful and agreeable art become so irksome to them? They have been forced to learn it in spite of themselves, and to use it in ways they cannot understand. A child is not anxious to perfect the instrument used in tormenting him; but make the same thing minister to his pleasures, and you cannot prevent him from using it.

Much attention is paid to finding out the best methods of teaching children to read. We invent printing-offices and charts; we turn a child's room into a printer's establishment.[1] Locke proposes teaching children to read by means of dice; a brilliant contrivance indeed, but a mistake as well. A better thing than all these, a thing no one thinks of, is the desire to learn. Give a child this desire, and you will not need dice or reading lotteries; any device will serve as well. If, on the plan I have begun to lay down, you follow rules exactly contrary to those most in fashion, you will not attract and bewilder your pupil's attention by distant places, climates, and ages of the world, going to the ends of the earth and into the very heavens themselves, but will make a point of keeping it fixed upon himself and what immediately concerns him; and by this plan you will find him capable of perception, memory, and even reasoning; this is the order of nature.[2] In proportion as a creature endowed with sensa-

[1] Rousseau here alludes to the typographical lottery invented by Louis Dumas, a French author of the eighteenth century. It was an imitation of a printing-office, and was intended to teach, in an agreeable way, not only reading, but even grammar and spelling. There may be good features in all these systems, but we certainly cannot save the child all trouble; we ought to let him understand that work must be in earnest. Besides, as moralists and teachers, we ought not to neglect giving children some kinds of work demanding application. They will be in better spirits for recreation hours after study.

[2] It is well to combine the two methods; to keep the child occupied with what immediately concerns him, and to interest him also in what is more remote, whether in space or in time. He ought not to become too positive,

tion becomes active, it acquires discernment suited to its powers, and the surplus of strength needed to preserve it is absolutely necessary in developing that speculative faculty which uses the same surplus for other ends. If, then, you mean to cultivate your pupil's understanding, cultivate the strength it is intended to govern. Give him constant physical exercise; make his body sound and robust, that you may make him wise and reasonable. Let him be at work doing something; let him run, shout, be always in motion; let him be a man in vigor, and he will the sooner become one in reason.

You would indeed make a mere animal of him by this method if you are continually directing him, and saying, "Go; come; stay; do this; stop doing that." If your head is always to guide his arm, his own head will be of no use to him. But recollect our agreement; if you are a mere pedant, there is no use in your reading what I write.

To imagine that physical exercise injures mental operations is a wretched mistake; the two should move in unison, and one ought to regulate the other.

My pupil, or rather nature's pupil, trained from the first to depend as much as possible on himself, is not continually running to others for advice. Still less does he make a display of his knowledge. On the other hand, he judges, he foresees, he reasons, upon everything that immediately concerns him; he does not prate, but acts. He is little informed as to what is going on in the world, but knows very well what he ought to do, and how to do it. Incessantly in motion, he cannot avoid observing many things, and knowing many effects. He early gains a wide experience, and takes his les-

nor yet should he be chimerical. The "order of nature" itself has provided for this, by making the child inquisitive about things around him, and at the same time about things far away.

sons from nature, not from men. He instructs himself all the better for discovering nowhere any intention of instructing him. Thus, at the same time, body and mind are exercised. Always carrying out his own ideas, and not another person's, two processes are simultaneously going on within him. As he grows robust and strong, he becomes intelligent and judicious.

In this way he will one day have those two excellences, — thought incompatible indeed, but characteristic of nearly all great men, — strength of body and strength of mind, the reason of a sage and the vigor of an athlete.

I am recommending a difficult art to you, young teacher, — the art of governing without rules, and of doing everything by doing nothing at all. I grant, that at your age, this art is not to be expected of you. It will not enable you, at the outset, to exhibit your shining talents, or to make yourself prized by parents; but it is the only one that will succeed. To be a sensible man, your pupil must first have been a little scapegrace. The Spartans were educated in this way; not tied down to books, but obliged to steal their dinners;[1] and did this produce men inferior in understanding? Who does not remember their forcible, pithy sayings? Trained to conquer, they worsted their enemies in every kind of encounter; and the babbling Athenians dreaded their sharp speeches quite as much as their valor.

In stricter systems of education, the teacher commands and thinks he is governing the child, who is, after all, the real master. What you exact from him he employs as means to get from you what he wants. By one hour of diligence he

[1] This expresses rather too vehemently a true idea. Do not try to impart a rigid education whose apparent correctness hides grave defects. Allow free course to the child's instinctive activity and turbulence; let nature speak; do not crave reserve and fastidiousness at the expense of frankness and vigor of mind. This is what the writer really means.

can buy a week's indulgence. At every moment you have to make terms with him. These bargains, which you propose in your way, and which he fulfils in his own way, always turn out to the advantage of his whims, especially when you are so careless as to make stipulations which will be to his advantage whether he carries out his share of the bargain or not. Usually, the child reads the teacher's mind better than the teacher reads his. This is natural; for all the sagacity the child at liberty would use in self-preservation he now uses to protect himself from a tyrant's chains; while the latter, having no immediate interest in knowing the child's mind, follows his own advantage by leaving vanity and indolence unrestrained.

Do otherwise with your pupil. Let him always suppose himself master, while you really are master. No subjection is so perfect as that which retains the appearance of liberty; for thus the will itself is made captive. Is not the helpless, unknowing child at your mercy? Do you not, so far as he is concerned, control everything around him? Have you not power to influence him as you please? Are not his work, his play, his pleasure, his pain, in your hands, whether he knows it or not?

Doubtless he ought to do only what he pleases; but your choice ought to control his wishes. He ought to take no step that you have not directed; he ought not to open his lips without your knowing what he is about to say.

In this case he may, without fear of debasing his mind, devote himself to exercises of the body. Instead of sharpening his wits to escape an irksome subjection, you will observe him wholly occupied in finding out in everything around him that part best adapted to his present well-being. You will be amazed at the subtilty of his contrivances for appropriating to himself all the objects within the reach of his

understanding, and for enjoying everything without regard to other people's opinions.

By thus leaving him free, you will not foster his caprices. If he never does anything that does not suit him, he will soon do only what he ought to do. And, although his body be never at rest, still, if he is caring for his present and perceptible interests, all the reason of which he is capable will develop far better and more appropriately than in studies purely speculative.

As he does not find you bent on thwarting him, does not distrust you, has nothing to hide from you, he will not deceive you or tell you lies. He will fearlessly show himself to you just as he is. You may study him entirely at your ease, and plan lessons for him which he will all unconsciously receive.

He will not pry with suspicious curiosity into your affairs, and feel pleasure when he finds you in fault. This is one of our most serious disadvantages. As I have said, one of a child's first objects is to discover the weaknesses of those who have control of him. This disposition may produce ill-nature, but does not arise from it, but from their desire to escape an irksome bondage. Oppressed by the yoke laid upon them, children endeavor to shake it off; and the faults they find in their teachers yield them excellent means for doing this. But they acquire the habit of observing faults in others, and of enjoying such discoveries. This source of evil evidently does not exist in Émile. Having no interest to serve by discovering my faults, he will not look for them in me, and will have little temptation to seek them in other people.

This course of conduct seems difficult because we do not reflect upon it; but taking it altogether, it ought not to be so. I am justified in supposing that you know enough to under-

stand the business you have undertaken; that you know the natural progress of the human mind; that you understand studying mankind in general and in individual cases; that among all the objects interesting to his age that you mean to show your pupil, you know beforehand which of them will influence his will.

Now if you have the appliances, and know just how to use them, are you not master of the operation?

You object that children have caprices, but in this you are mistaken. These caprices result from faulty discipline, and are not natural. The children have been accustomed either to obey or to command, and I have said a hundred times that neither of these two things is necessary. Your pupil will therefore have only such caprices as you give him, and it is just you should be punished for your own faults. But do you ask how these are to be remedied? It can still be done by means of better management and much patience.

Physical Training.

MAN'S first natural movements are for the purpose of comparing himself with whatever surrounds him and finding in each thing those sensible qualities likely to affect himself. His first study is, therefore, a kind of experimental physics relating to his own preservation. From this, before he has fully understood his place here on earth, he is turned aside to speculative studies. While yet his delicate and pliable organs can adapt themselves to the objects upon which they are to act, while his senses, still pure, are free from illusion, it is time to exercise both in their peculiar functions, and to learn the perceptible relations between ourselves and outward things. Since whatever enters the human understanding enters by the senses, man's primitive reason is a reason

of the senses, serving as foundation for the reason of the intellect. Our first teachers in philosophy are our own feet, hands, and eyes. To substitute books for these is teaching us not to reason, but to use the reason of another; to believe a great deal, and to know nothing at all.

In practising an art we must begin by procuring apparatus for it; and to use this apparatus to advantage, we must have it solid enough to bear use. In learning to think, we must therefore employ our members, our senses, our organs, all which are the apparatus of our understanding. And to use them to the best advantage, the body which furnishes them must be sound and robust. Our reason is therefore so far from being independent of the body, that a good constitution renders mental operations easy and accurate. In indicating how the long leisure of childhood ought to be employed, I am entering into particulars which may be thought ridiculous. "Pretty lessons," you will tell me, "which you yourself criticize for teaching only what there is no need of learning! Why waste time in instructions which always come of their own accord, and cost neither care nor trouble? What child of twelve does not know all you are going to teach yours, and all that his masters have taught him besides?"

Gentlemen, you are mistaken. I am teaching my pupil a very tedious and difficult art, which yours certainly have not acquired, — that of being ignorant. For the knowledge of one who gives himself credit for knowing only what he really does know reduces itself to a very small compass. You are teaching science: very good; I am dealing with the instrument by which science is acquired. All who have reflected upon the mode of life among the ancients attribute to gymnastic exercises that vigor of body and mind which so notably distinguishes them from us moderns. Montaigne's

support of this opinion shows that he had fully adopted it; he returns to it again and again, in a thousand ways. Speaking of the education of a child, he says, "We must make his mind robust by hardening his muscles; inure him to pain by accustoming him to labor; break him by severe exercise to the keen pangs of dislocation, of colic, of other ailments." The wise Locke,[1] the excellent Rollin,[2] the learned Fleury,[3] the pedantic de Crouzas,[4] so different in everything else, agree exactly on this point of abundant physical exercise for children. It is the wisest lesson they ever taught, but the one that is and always will be most neglected.

Clothing.

As to clothing, the limbs of a growing body should be entirely free. Nothing should cramp their movements or their growth; nothing should fit too closely or bind the body; there should be no ligatures whatever. The present French dress cramps and disables even a man, and is especially injurious to children. It arrests the circulation of the humors; they stagnate from an inaction made worse by a sedentary life. This corruption of the humors brings on the scurvy, a disease becoming every day more common among us, but unknown to the ancients, protected from it by their dress and their mode of life. The hussar dress does not remedy this

[1] An English philosopher, who died in 1704. He wrote a very celebrated "Treatise on the Education of Children."

[2] A celebrated professor, Rector of the University of Paris, who died in 1741. He left a number of works on education.

[3] An abbé of the seventeenth century who wrote a much valued "History of the Church," and a "Treatise on the Method and Choice of Studies." He was tutor to Count Vermandois, natural son to Louis XIV.

[4] A professor of mathematics, born at Lausanne, tutor to Prince Frederick of Hesse Cassel.

inconvenience, but increases it, since, to save the child a few ligatures, it compresses the entire body. It would be better to keep children in frocks as long as possible, and then put them into loosely fitting clothes, without trying to shape their figures and thereby spoil them. Their defects of body and of mind nearly all spring from the same cause: we are trying to make men of them before their time.

Of bright and dull colors, the former best please a child's taste; such colors are also most becoming to them; and I see no reason why we should not in such matters consult these natural coincidences. But the moment a material is preferred because it is richer, the child's mind is corrupted by luxury, and by all sorts of whims. Preferences like this do not spring up of their own accord. It is impossible to say how much choice of dress and the motives of this choice influence education. Not only do thoughtless mothers promise children fine clothes by way of reward, but foolish tutors threaten them with coarser and simpler dress as punishment. "If you do not study your lessons, if you do not take better care of your clothes, you shall be dressed like that little rustic." This is saying to him, "Rest assured that a man is nothing but what his clothes make him; your own worth depends on what you wear." Is it surprising that sage lessons like this so influence young men that they care for nothing but ornament, and judge of merit by outward appearance only?

Generally, children are too warmly clothed, especially in their earlier years. They should be inured to cold rather than heat; severe cold never incommodes them when they encounter it early. But the tissue of their skin, as yet yielding and tender, allows too free passage to perspiration, and exposure to great heat invariably weakens them. It has been observed that more children die in August than in any

other month. Besides, if we compare northern and southern races, we find that excessive cold, rather than excessive heat, makes man robust. In proportion as the child grows and his fibres are strengthened, accustom him gradually to withstand heat; and by degrees you will without risk train him to endure the glowing temperature of the torrid zone.

Sleep.

CHILDREN need a great deal of sleep because they take a great deal of exercise. The one acts as corrective to the other, so that both are necessary. As nature teaches us, night is the time for rest. Constant observation shows that sleep is softer and more profound while the sun is below the horizon. The heated air does not so perfectly tranquillize our tired senses. For this reason the most salutary habit is to rise and to go to rest with the sun. In our climate man, and animals generally, require more sleep in winter than in summer. But our mode of life is not so simple, natural, and uniform that we can make this regular habit a necessity. We must without doubt submit to regulations; but it is most important that we should be able to break them without risk when occasion requires. Do not then imprudently soften your pupil by letting him lie peacefully asleep without ever being disturbed. At first let him yield without restraint to the law of nature, but do not forget that in our day we must be superior to this law; we must be able to go late to rest and rise early, to be awakened suddenly, to be up all night, without discomfort. By beginning early, and by always proceeding slowly, we form the constitution by the very practices which would ruin it if it were already established.

It is important that your pupil should from the first be accustomed to a hard bed, so that he may find none uncomfortable.

Generally, a life of hardship, when we are used to it, gives us a far greater number of agreeable sensations than does a life of ease, which creates an infinite number of unpleasant ones. One too delicately reared can find sleep only upon a bed of down; one accustomed to bare boards can find it anywhere. No bed is hard to him who falls asleep as soon as his head touches the pillow. The best bed is the one which brings the best sleep. Throughout the day no slaves from Persia, but Émile and I, will prepare our beds. When we are tilling the ground we shall be making them soft for our slumber.

Exercise of the Senses.

A CHILD has not a man's stature, strength, or reason; but he sees and hears almost or quite as well. His sense of taste is as keen, though he does not enjoy it as a pleasure.

Our senses are the first powers perfected in us. They are the first that should be cultivated and the only ones forgotten, or at least, the most neglected.

To exercise the senses is not merely to use them, but to learn how to judge correctly by means of them; we may say, to learn how to feel. For we cannot feel, or hear, or see, otherwise than as we have been taught.

There is a kind of exercise, purely natural and mechanical, that renders the body robust without injuring the mind. Of this description are swimming, running, leaping, spinning tops, and throwing stones. All these are well enough; but have we nothing but arms and legs? Have we not eyes and ears as well? and are they of no use while the others are employed? Use, then, not only your bodily strength, but all the senses which direct it. Make as much of each as possible, and verify the impressions of one by those of another. Measure, count, weigh, and compare. Use no strength till

after you have calculated the resistance it will meet. Be careful to estimate the effect before you use the means. Interest the child in never making any useless or inadequate trials of strength. If you accustom him to forecast the effect of every movement, and to correct his errors by experience, is it not certain that the more he does the better his judgment will be?

If the lever he uses in moving a heavy weight be too long, he will expend too much motion; if too short, he will not have power enough. Experience will teach him to choose one exactly suitable. Such practical knowledge, then, is not beyond his years. If he wishes to carry a burden exactly as heavy as his strength will bear, without the test of first lifting it, must he not estimate its weight by the eye? If he understands comparing masses of the same material but of different size, let him choose between masses of the same size but of different material. This will oblige him to compare them as to specific gravity. I have seen a well-educated young man who, until he had tried the experiment, would not believe that a pail full of large chips weighs less than it does when full of water.

The Sense of Touch.

We have not equal control of all our senses. One of them, the sense of touch, is in continual action so long as we are awake. Diffused over the entire surface of the body, it serves as a perpetual sentinel to warn us of what is likely to harm us. By the constant use of this sense, voluntary or otherwise, we gain our earliest experience. It therefore stands less in need of special cultivation. We observe however, that the blind have a more delicate and accurate touch than we, because, not having sight to guide them, they depend upon touch for the judgments we form with the aid

of sight. Why then do we not train ourselves to walk, like them, in the dark, to recognize by the touch all bodies we can reach, to judge of objects around us, in short, to do by night and in the dark all they do in daytime without eye-sight? So long as the sun shines, we have the advantage of them; but they can guide us in darkness. We are blind during half our life-time, with this difference, that the really blind can always guide themselves, whereas we dare not take a step in the dead of night. You may remind me that we have artificial light. What! must we always use machines? Who can insure their being always at hand when we need them? For my part, I prefer that Émile, instead of keeping his eyes in a chandler's shop, should have them at the ends of his fingers.

As much as possible, let him be accustomed to play about at night. This advice is more important than it would seem. For men, and sometimes for animals, night has naturally its terrors. Rarely do wisdom, or wit, or courage, free us from paying tribute to these terrors. I have seen reasoners, free-thinkers, philosophers, soldiers, who were utterly fearless in broad daylight, tremble like women at the rustle of leaves by night. Such terrors are supposed to be the result of nursery tales. The real cause is the same thing which makes the deaf distrustful, and the lower classes superstitious; and that is, ignorance of objects and events around us.

The cause of the evil, once found, suggests the remedy. In everything, habit benumbs the imagination; new objects alone quicken it again. Every-day objects keep active not the imagination, but the memory; whence the saying "Ab assuetis non fit passio."[1] For only the imagination can set on fire our passions. If, therefore, you wish to cure any one of the fear of darkness, do not reason with him. Take him

[1] "Passion is not born of familiar things."

into the dark often, and you may be sure that will do him more good than philosophical arguments. When at work on the roofs of houses, slaters do not feel their heads swim; and those accustomed to darkness do not fear it at all.

There will be one advantage of our plays in the dark. But if you mean them to be successful, you must make them as gay as possible. Darkness is of all things the most gloomy; so do not shut your child up in a dungeon. When he goes into the dark make him laugh; when he leaves it make him laugh again; and all the time he is there, let the thought of what he is enjoying, and what he will find there when he returns, protect him from the shadowy terrors which might otherwise inhabit it.

I have heard some propose to teach children not to be afraid at night, by surprising them. This is a bad plan, and its effect is contrary to the one sought: it only makes them more timid than before. Neither reason nor habit can accustom us to a present danger, the nature and extent of which we do not know, nor can they lessen our dread of unexpected things however often we meet with them. But how can we guard our pupil against such accidents? I think the following is the best plan. I will tell my Émile, "If any one attacks you at night, you are justified in defending yourself; for your assailant gives you no notice whether he means to hurt you or only to frighten you. As he has taken you at a disadvantage, seize him boldly, no matter what he may seem to be. Hold him fast, and if he offers any resistance, hit him hard and often. Whatever he may say or do, never let go until you know exactly who he is. The explanation will probably show you that there is nothing to be afraid of; and if you treat a practical joker in this way, he will not be likely to try the same thing again."

Although, of all our senses, touch is the one most con-

stantly used, still, as I have said, its conclusions are the most rude and imperfect. This is because it is always used at the same time with sight; and because the eye attains its object sooner than the hand; the mind nearly always decides without appealing to touch. On the other hand, the decisions of touch, just because they are so limited in their range, are the most accurate. For as they extend no farther than our arm's length, they correct the errors of other senses, which deal with distant objects, and scarcely grasp these objects at all, whereas all that the touch perceives it perceives thoroughly. Besides, if to nerve-force we add muscular action, we form a simultaneous impression, and judge of weight and solidity as well as of temperature, size, and shape. Thus touch, which of all our senses best informs us concerning impressions made upon us by external things, is the one oftenest used, and gives us most directly the knowledge necessary to our preservation.

The Sense of Sight.

THE sense of touch confines its operations to a very narrow sphere around us, but those of sight extend far beyond; this sense is therefore liable to be mistaken. With a single glance a man takes in half his own horizon, and in these myriad impressions, and judgments resulting from them, how is it credible that there should be no mistakes? Sight, therefore, is the most defective of all our senses, precisely because it is most far-reaching, and because its operations, by far preceding all others, are too immediate and too vast to receive correction from them. Besides, the very illusions of perspective are needed to make us understand extension, and to help us in comparing its parts. If there were no false appearances, we could see nothing at a distance; if there

were no gradations in size, we could form no estimate of distance, or rather there would be no distance at all. If of two trees the one a hundred paces away seemed as large and distinct as the other, ten paces distant, we should place them side by side. If we saw all objects in their true dimensions, we should see no space whatever; everything would appear to be directly beneath our eye.

For judging of the size and distance of objects, sight has only one measure, and that is the angle they form with our eye. As this is the simple effect of a compound cause, the judgment we form from it leaves each particular case undecided or is necessarily imperfect. For how can I by the sight alone tell whether the angle which makes one object appear smaller than another is caused by the really lesser magnitude of the object or by its greater distance from me?

An opposite method must therefore be pursued. Instead of relying on one sensation only, we must repeat it, verify it by others, subordinate sight to touch, repressing the impetuosity of the first by the steady, even pace of the second. For lack of this caution we measure very inaccurately by the eye, in determining height, length, depth, and distance. That this is not due to organic defect, but to careless use, is proved by the fact that engineers, surveyors, architects, masons, and painters generally have a far more accurate eye than we, and estimate measures of extension more correctly. Their business gives them experience that we neglect to acquire, and thus they correct the ambiguity of the angle by means of appearances associated with it, which enable them to determine more exactly the relation of the two things producing the angle.

Children are easily led into anything that allows unconstrained movement of the body. There are a thousand ways of interesting them in measuring, discovering, and estimating

distances. "Yonder is a very tall cherry-tree; how can we manage to get some cherries? Will the ladder in the barn do? There is a very wide brook; how can we cross it? Would one of the planks in the yard be long enough? We want to throw a line from our windows and catch some fish in the moat around the house; how many fathoms long ought the line to be? I want to put up a swing between those two trees; would four yards of rope be enough for it? They say that in the other house our room will be twenty-five feet square; do you think that will suit us? Will it be larger than this? We are very hungry; which of those two villages yonder can we reach soonest, and have our dinner?"

As the sense of sight is the one least easily separated from the judgments of the mind, we need a great deal of time for learning how to see. We must for a long time compare sight with touch, if we would accustom our eye to report forms and distances accurately.

Without touch and without progressive movement, the keenest eye-sight in the world could give us no idea of extent. To an oyster the entire universe must be only a single point. Only by walking, feeling, counting, and measuring, do we learn to estimate distances.

If we always measure them, however, our eye, depending on this, will never gain accuracy. Yet the child ought not to pass too soon from measuring to estimating. It will be better for him, after comparing by parts what he cannot compare as wholes, finally to substitute for measured aliquot parts others, obtained by the eye alone. He should train himself in this manner of measuring instead of always measuring with the hand. I prefer that the very first operations of this kind should be verified by actual measurements, so that he may correct the mistakes arising from false appearances by a better judgment. There are natural

measures, nearly the same everywhere, such as a man's pace, the length of his arm, or his height. When the child is calculating the height of the story of a house, his tutor may serve as a unit of measure. In estimating the altitude of a steeple, he may compare it with that of the neighboring houses. If he wants to know how many leagues there are in a given journey, let him reckon the number of hours spent in making it on foot. And by all means do none of this work for him; let him do it himself.

We cannot learn to judge correctly of the extent and size of bodies without also learning to recognize their forms, and even to imitate them. For such imitation is absolutely dependent on the laws of perspective, and we cannot estimate extent from appearances without some appreciation of these laws.

Drawing.

All children, being natural imitators, try to draw. I would have my pupil cultivate this art, not exactly for the sake of the art itself, but to render the eye true and the hand flexible. In general, it matters little whether he understands this or that exercise, provided he acquires the mental insight, and the manual skill furnished by the exercise. I should take care, therefore, not to give him a drawing-master, who would give him only copies to imitate, and would make him draw from drawings only. He shall have no teacher but nature, no models but real things. He shall have before his eyes the originals, and not the paper which represents them. He shall draw a house from a real house, a tree from a tree, a human figure from the man himself. In this way he will accustom himself to observe bodies and their appearances, and not mistake for accurate imitations those

that are false and conventional. I should even object to his drawing anything from memory, until by frequent observations the exact forms of the objects had clearly imprinted themselves on his imagination, lest, substituting odd and fantastic shapes for the real things, he might loose the knowledge of proportion and a taste for the beauties of nature. I know very well that he will go on daubing for a long time without making anything worth noticing, and will be long in mastering elegance of outline, and in acquiring the deft stroke of a skilled draughtsman. He may never learn to discern picturesque effects, or draw with superior skill. On the other hand, he will have a more correct eye, a truer hand, a knowledge of the real relations of size and shape in animals, plants, and natural bodies, and practical experience of the illusions of perspective. This is precisely what I intend; not so much that he shall imitate objects as that he shall know them. I would rather have him show me an acanthus than a finished drawing of the foliation of a capital.

Yet I would not allow my pupil to have the enjoyment of this or any other exercise all to himself. By sharing it with him I will make him enjoy it still more. He shall have no competitor but myself; but I will be that competitor continually, and without risk of jealousy between us. It will only interest him more deeply in his studies. Like him I will take up the pencil, and at first I will be as awkward as he. If I were an Apelles, even, I will make myself a mere dauber.

I will begin by sketching a man just as a boy would sketch one on a wall, with a dash for each arm, and with fingers larger than the arms. By and by one or the other of us will discover this disproportion. We shall observe that a leg has thickness, and that this thickness is not the same

everywhere; that the length of the arm is determined by its proportion to the body; and so on. As we go on I will do no more than keep even step with him, or will excel him by so little that he can always easily overtake and even surpass me. We will get colors and brushes; we will try to imitate not only the outline but the coloring and all the other details of objects. We will color; we will paint; we will daub; but in all our daubing we shall be continually peering into nature, and all we do shall be done under the eye of that great teacher.

If we had difficulty in finding decorations for our room, we have now all we could desire. I will have our drawings framed, so that we can give them no finishing touches; and this will make us both careful to do no negligent work. I will arrange them in order around our room, each drawing repeated twenty or thirty times, and each repetition showing the author's progress, from the representation of a house by an almost shapeless attempt at a square, to the accurate copy of its front elevation, profile, proportions, and shading. The drawings thus graded must be interesting to ourselves, curious to others, and likely to stimulate further effort. I will inclose the first and rudest of these in showy gilded frames, to set them off well; but as the imitation improves, and when the drawing is really good, I will add only a very simple black frame. The picture needs no ornament but itself, and it would be a pity that the bordering should receive half the attention.

Both of us will aspire to the honor of a plain frame, and if either wishes to condemn the other's drawing, he will say it ought to have a gilt frame. Perhaps some day these gilded frames will pass into a proverb with us, and we shall be interested to observe how many men do justice to themselves by framing themselves in the very same way.

Geometry.

I HAVE said that geometry is not intelligible to children; but it is our own fault. We do not observe that their method is different from ours, and that what is to us the art of reasoning should be to them only the art of seeing. Instead of giving them our method, we should do better to take theirs. For in our way of learning geometry, imagination really does as much as reason. When a proposition is stated, we have to imagine the demonstration; that is, we have to find upon what proposition already known the new one depends, and from all the consequences of this known principle select just the one required. According to this method the most exact reasoner, if not naturally inventive, must be at fault. And the result is that the teacher, instead of making us discover demonstrations, dictates them to us; instead of teaching us to reason, he reasons for us, and exercises only our memory.

Make the diagrams accurate; combine them, place them one upon another, examine their relations, and you will discover the whole of elementary geometry by proceeding from one observation to another, without using either definitions or problems, or any form of demonstration than simple superposition. For my part, I do not even pretend to teach Émile geometry; he shall teach it to me. I will look for relations, and he shall discover them. I will look for them in a way that will lead him to discover them. In drawing a circle, for instance, I will not use a compass, but a point at the end of a cord which turns on a pivot. Afterward, when I want to compare the radii of a semi-circle, Émile will laugh at me and tell me that the same cord, held with the same tension, cannot describe unequal distances.

When I want to measure an angle of sixty degrees, I will

describe from the apex of the angle not an arc only, but an entire circle; for with children nothing must be taken for granted. I find that the portion intercepted by the two sides of the angle is one-sixth of the whole circumference. Afterward, from the same centre, I describe another and a larger circle, and find that this second arc is one-sixth of the new circumference. Describing a third concentric circle, I test it in the same way, and continue the process with other concentric circles, until Émile, vexed at my stupidity, informs me that every arc, great or small, intercepted by the sides of this angle, will be one-sixth of the circumference to which it belongs. You see we are almost ready to use the instruments intelligently.

In order to prove the angles of a triangle equal to two right angles, a circle is usually drawn. I, on the contrary, will call Émile's attention to this in the circle, and then ask him, "Now, if the circle were taken away, and the straight lines were left, would the size of the angles be changed?"

It is not customary to pay much attention to the accuracy of figures in geometry; the accuracy is taken for granted, and the demonstration alone is regarded. Émile and I will pay no heed to the demonstration, but aim to draw exactly straight and even lines; to make a square perfect and a circle round. To test the exactness of the figure we will examine it in all its visible properties, and this will give us daily opportunity of finding out others. We will fold the two halves of a circle on the line of the diameter, and the halves of a square on its diagonal, and then examine our two figures to see which has its bounding lines most nearly coincident, and is therefore best constructed. We will debate as to whether this equality of parts exists in all parallelograms, trapeziums, and like figures. Sometimes we will endeavor to guess at the result of the experiment before we make it,

and sometimes to find out the reasons why it should result as it does.

Geometry for my pupil is only the art of using the rule and compass well. It should not be confounded with drawing, which uses neither of these instruments. The rule and compass are to be kept under lock and key, and he shall be allowed to use them only occasionally, and for a short time, lest he fall into the habit of daubing. But sometimes, when we go for a walk, we will take our diagrams with us, and talk about what we have done or would like to do.

Hearing.

What has been said as to the two senses most continually employed and most important may illustrate the way in which I should exercise the other senses. Sight and touch deal alike with bodies at rest and bodies in motion. But as only the vibration of the air can arouse the sense of hearing, noise or sound can be made only by a body in motion. If everything were at rest, we could not hear at all. At night, when we move only as we choose, we have nothing to fear except from other bodies in motion. We therefore need quick ears to judge from our sensations whether the body causing them is large or small, distant or near, and whether its motion is violent or slight. The air, when in agitation, is subject to reverberations which reflect it back, produce echoes, and repeat the sensation, making the sonorous body heard elsewhere than where it really is. In a plain or valley, if you put your ear to the ground, you can hear the voices of men and the sound of horses' hoofs much farther than when standing upright. As we have compared sight with touch, let us also compare it with hearing, and consider which of the two impressions, leaving the same body at the same time, soonest

reaches its organ. When we see the flash of a cannon there is still time to avoid the shot; but as soon as we hear the sound there is not time; the ball has struck. We can estimate the distance of thunder by the interval between the flash and the thunderbolt. Make the child understand such experiments; try those that are within his own power, and discover others by inference. But it would be better he should know nothing about these things than that you should tell him all he is to know about them.

We have an organ that corresponds to that of hearing, that is, the voice. Sight has nothing like this, for though we can produce sounds, we cannot give off colors. We have therefore fuller means of cultivating hearing, by exercising its active and passive organs upon one another.

The Voice.

MAN has three kinds of voice: the speaking or articulate voice, the singing or melodious voice, and the pathetic or accented voice, which gives language to passion and animates song and speech. A child has these three kinds of voice as well as a man, but he does not know how to blend them in the same way. Like his elders he can laugh, cry, complain, exclaim, and groan. But he does not know how to blend these inflections with the two other voices. Perfect music best accomplishes this blending; but children are incapable of such music, and there is never much feeling in their singing. In speaking, their voice has little energy, and little or no accent.

Our pupil will have even a simpler and more uniform mode of speaking, because his passions, not yet aroused, will not mingle their language with his. Do not, therefore, give him dramatic parts to recite, nor teach him to declaim. He will have too much sense to emphasize words he cannot understand, and to express feelings he has never known.

Teach him to speak evenly, clearly, articulately, to pronounce correctly and without affectation, to understand and use the accent demanded by grammar and prosody. Train him to avoid a common fault acquired in colleges, of speaking louder than is necessary; have him speak loud enough to be understood; let there be no exaggeration in anything.

Aim, also, to render his voice in singing, even, flexible, and sonorous. Let his ear be sensitive to time and harmony, but to nothing more. Do not expect of him, at his age, imitative and theatrical music. It would be better if he did not even sing words. If he wished to sing them, I should try to invent songs especially for him, such as would interest him, as simple as his own ideas.

The Sense of Taste.

Of our different sensations, those of taste generally affect us most. We are more interested in judging correctly of substances that are to form part of our own bodies than of those which merely surround us. We are indifferent to a thousand things, as objects of touch, of hearing, or of sight; but there is almost nothing to which our sense of taste is indifferent. Besides, the action of this sense is entirely physical and material. Imagination and imitation often give a tinge of moral character to the impressions of all the other senses; but to this it appeals least of all, if at all. Generally, also, persons of passionate and really sensitive temperament, easily moved by the other senses, are rather indifferent in regard to this. This very fact, which seems in some measure to degrade the sense of taste, and to make excess in its indulgence more contemptible, leads me, however, to conclude that the surest way to influence children is by means of their appetite. Gluttony, as a motive, is far better

than vanity; for gluttony is a natural appetite depending directly on the senses, and vanity is the result of opinion, is subject to human caprice and to abuse of all kinds. Gluttony is the passion of childhood, and cannot hold its own against any other; it disappears on the slightest occasion.

Believe me, the child will only too soon leave off thinking of his appetite; for when his heart is occupied, his palate will give him little concern. When he is a man, a thousand impulsive feelings will divert his mind from gluttony to vanity; for this last passion alone takes advantage of all others, and ends by absorbing them all. I have sometimes watched closely those who are especially fond of dainties; who, as soon as they awoke, were thinking of what they should eat during the day, and could describe a dinner with more minuteness than Polybius uses in describing a battle; and I have always found that these supposed men were nothing but children forty years old, without any force or steadiness of character. Gluttony is the vice of men who have no stamina. The soul of a gourmand has its seat in his palate alone; formed only for eating, stupid, incapable, he is in his true place only at the table; his judgment is worthless except in the matter of dishes. As he values these far more highly than others in which we are interested, as well as he, let us without regret leave this business of the palate to him.

It is weak precaution to fear that gluttony may take root in a child capable of anything else. As children, we think only of eating; but in youth, we think of it no more. Everything tastes good to us, and we have many other things to occupy us.

Yet I would not use so low a motive injudiciously, or reward a good action with a sugar-plum. Since childhood is

or should be altogether made up of play and frolic, I see no reason why exercise purely physical should not have a material and tangible reward. If a young Majorcan, seeing a basket in the top of a tree, brings it down with a stone from his sling, why should he not have the recompense of a good breakfast, to repair the strength used in earning it?

A young Spartan, braving the risk of a hundred lashes, stole into a kitchen, and carried off a live fox-cub, which concealed under his coat, scratched and bit him till the blood came. To avoid the disgrace of detection, the child allowed the creature to gnaw his entrails, and did not lift an eyelash or utter a cry.[1] Was it not just that, as a reward, he was allowed to devour the beast that had done its best to devour him?

A good meal ought never to be given as a reward; but why should it not sometimes be the result of the pains taken to secure it? Émile will not consider the cake I put upon a stone as a reward for running well; he only knows that he cannot have the cake unless he reaches it before some other person does.

This does not contradict the principle before laid down as to simplicity in diet. For to please a child's appetite we need not arouse it, but merely satisfy it; and this may be done with the most ordinary things in the world, if we do not take pains to refine his taste. His continual appetite, arising from his rapid growth, is an unfailing sauce, which supplies the place of many others. With a little fruit, or some of the dainties made from milk, or a bit of pastry rather more of a rarity than the every-day bread, and, more than all, with some tact in bestowing, you may lead an army of children to the world's end without giving them any taste for highly spiced food, or running any risk of cloying their palate.

[1] Recorded as illustrating Spartan education.

Besides, whatever kind of diet you give children, provided they are used only to simple and common articles of food, let them eat, run, and play as much as they please, and you may rest assured they will never eat too much, or be troubled with indigestion. But if you starve them half the time, and they can find a way to escape your vigilance, they will injure themselves with all their might, and eat until they are entirely surfeited.

Unless we dictate to our appetite other rules than those of nature, it will never be inordinate. Always regulating, prescribing, adding, retrenching, we do everything with scales in hand. But the scales measure our own whims, and not our digestive organs.

To return to my illustrations; among country folk the larder and the orchard are always open, and nobody, young or old, knows what indigestion means.

Result. The Pupil at the Age of Ten or Twelve.

Supposing that my method is indeed that of nature itself, and that I have made no mistakes in applying it, I have now conducted my pupil through the region of sensations to the boundaries of childish reason. The first step beyond should be that of a man. But before beginning this new career, let us for a moment cast our eyes over what we have just traversed. Every age and station in life has a perfection, a maturity, all its own. We often hear of a full-grown man; in contemplating a full-grown child we shall find more novelty, and perhaps no less pleasure.

The existence of finite beings is so barren and so limited that when we see only what is, it never stirs us to emotion. Real objects are adorned by the creations of fancy, and without this charm yield us but a barren satisfaction, ex-

tending no farther than to the organ that perceives them, and the heart is left cold. The earth, clad in the glories of autumn, displays a wealth which the wondering eye enjoys, but which arouses no feeling within us; it springs less from sentiment than from reflection. In spring the landscape is still almost bare; the forests yield no shade; the verdure is only beginning to bud; and yet the heart is deeply moved at the sight. We feel within us a new life, when we see nature thus revive; delightful images surround us; the companions of pleasure, gentle tears, ever ready to spring at the touch of tender feelings, brim our eyes. But upon the panorama of the vintage season, animated and pleasant though it be, we have no tears to bestow. Why is there this difference? It is because imagination joins to the sight of spring-time that of following seasons. To the tender buds the eye adds the flowers, the fruit, the shade, sometimes also the mysteries that may lie hid in them. Into a single point of time our fancy gathers all the year's seasons yet to be, and sees things less as they really will be than as it would choose to have them. In autumn, on the contrary, there is nothing but bare reality. If we think of spring then, the thought of winter checks us, and beneath snow and hoar-frost the chilled imagination dies.

The charm we feel in looking upon a lovely childhood rather than upon the perfection of mature age, arises from the same source. If the sight of a man in his prime gives us like pleasure, it is when the memory of what he has done leads us to review his past life and bring up his younger days. If we think of him as he is, or as he will be in old age, the idea of declining nature destroys all our pleasure. There can be none in seeing a man rapidly drawing near the grave; the image of death is a blight upon everything.

But when I imagine a child of ten or twelve, sound,

vigorous, well developed for his age, it gives me pleasure, whether on account of the present or of the future. I see him impetuous, sprightly, animated, free from anxiety or corroding care, living wholly in his own present, and enjoying a life full to overflowing. I foresee what he will be in later years, using the senses, the intellect, the bodily vigor, every day unfolding within him. When I think of him as a child, he delights me; when I think of him as a man, he delights me still more. His glowing pulses seem to warm my own; I feel his life within myself, and his sprightliness renews my youth. His form, his bearing, his countenance, manifest self-confidence and happiness. Health glows in his face; his firm step is a sign of bodily vigor. His complexion, still delicate, but not insipid, has in it no effeminate softness, for air and sun have already given him the honorable stamp of his sex. His still rounded muscles are beginning to show signs of growing expressiveness. His eyes, not yet lighted with the fire of feeling, have all their natural serenity. Years of sorrow have never made them dim, nor have his cheeks been furrowed by unceasing tears. His quick but decided movements show the sprightliness of his age, and his sturdy independence; they bear testimony to the abundant physical exercise he has enjoyed. His bearing is frank and open, but not insolent or vain. His face, never glued to his books, is never downcast; you need not tell him to raise his head, for neither fear nor shame has ever made it droop.

Make room for him among you, and examine him, gentlemen. Question him with all confidence, without fear of his troubling you with idle chatter or impertinent queries. Do not be afraid of his taking up all your time, or making it impossible for you to get rid of him. You need not expect brilliant speeches that I have taught him, but only the frank and simple truth without preparation, ornament, or vanity.

When he tells you what he has been thinking or doing, he will speak of the evil as freely as of the good, not in the least embarrassed by its effect upon those who hear him. He will use words in all the simplicity of their original meaning.

We like to prophesy good of children, and are always sorry when a stream of nonsense comes to disappoint hopes aroused by some chance repartee. My pupil seldom awakens such hopes, and will never cause such regrets: for he never utters an unnecessary word, or wastes breath in babble to which he knows nobody will listen. If his ideas have a limited range, they are nevertheless clear. If he knows nothing by heart, he knows a great deal from experience. If he does not read ordinary books so well as other children, he reads the book of nature far better. His mind is in his brain, and not at his tongue's end. He has less memory than judgment. He can speak only one language, but he understands what he says: and if he does not say it as well as another, he can do things far better than they can.

He does not know the meaning of custom or routine. What he did yesterday does not in any wise affect his actions of to-day. He never follows a rigid formula, or gives way in the least to authority or to example. Everything he does and says is after the natural fashion of his age. Expect of him, therefore, no formal speeches or studied manners, but always the faithful expression of his own ideas, and a conduct arising from his own inclinations.

You will find he has a few moral ideas in relation to his own concerns, but in regard to men in general, none at all. Of what use would these last be to him, since a child is not yet an active member of society? Speak to him of liberty, of property, even of things done by common consent, and he may understand you. He knows why his own things belong

to him and those of another person do not, and beyond this he knows nothing. Speak to him of duty and obedience, and he will not know what you mean. Command him to do a thing, and he will not understand you. But tell him that if he will do you such and such a favor, you will do the same for him whenever you can, and he will readily oblige you; for he likes nothing better than to increase his power, and to lay you under obligations he knows to be inviolable. Perhaps, too, he enjoys being recognized as somebody and accounted worth something. But if this last be his motive, he has already left the path of nature, and you have not effectually closed the approaches to vanity.

If he needs help, he will ask it of the very first person he meets, be he monarch or man-servant; to him one man is as good as another.

By his manner of asking, you can see that he feels you do not owe him anything; he knows that what he asks is really a favor to him, which humanity will induce you to grant. His expressions are simple and laconic. His voice, his look, his gesture, are those of one equally accustomed to consent or to refusal. They show neither the cringing submission of a slave, nor the imperious tone of a master; but modest confidence in his fellow-creatures, and the noble and touching gentleness of one who is free, but sensitive and feeble, asking aid of another, also free, but powerful and kind. If you do what he asks, he does not thank you, but feels that he has laid himself under obligation. If you refuse, he will not complain or insist; he knows it would be of no use. He will not say, "I was refused," but "It was impossible." And, as has been already said, we do not often rebel against an acknowledged necessity.

Leave him at liberty and by himself, and without saying a word, watch what he does, and how he does it. Knowing

perfectly well that he is free, he will do nothing from mere thoughtlessness, or just to show that he can do it; for is he not aware that he is always his own master? He is alert, nimble, and active; his movements have all the agility of his years; but you will not see one that has not some definite aim. No matter what he may wish to do, he will never undertake what he cannot do, for he has tested his own strength, and knows exactly what it is. The means he uses are always adapted to the end sought, and he rarely does anything without being assured he will succeed in it. His eye will be attentive and critical, and he will not ask foolish questions about everything he sees. Before making any inquiries he will tire himself trying to find a thing out for himself. If he meets with unexpected difficulties, he will be less disturbed by them than another child, and less frightened if there is danger. As nothing has been done to arouse his still dormant imagination, he sees things only as they are, estimates danger accurately, and is always self-possessed. He has so often had to give way to necessity that he no longer rebels against it. Having borne its yoke ever since he was born, he is accustomed to it, and is ready for whatever may come.

Work and play are alike to him; his plays are his occupations, and he sees no difference between the two. He throws himself into everything with charming earnestness and freedom, which shows the bent of his mind and the range of his knowledge. Who does not enjoy seeing a pretty child of this age, with his bright expression of serene content, and laughing, open countenance, playing at the most serious things, or deeply occupied with the most frivolous amusements? He has reached the maturity of childhood, has lived a child's life, not gaining perfection at the cost of his happiness, but developing the one by means of the other.

While acquiring all the reasoning power possible to his

age, he has been as happy and as free as his nature allowed. If the fatal scythe is to cut down in him the flower of our hopes, we shall not be obliged to lament at the same time his life and his death. Our grief will not be embittered by the recollection of the sorrows we have made him feel. We shall be able to say, "At least, he enjoyed his childhood; we robbed him of nothing that nature gave him."

In regard to this early education, the chief difficulty is, that only far-seeing men can understand it, and that a child so carefully educated seems to an ordinary observer only a young scapegrace.

A tutor usually considers his own interests rather than those of his pupil. He devotes himself to proving that he loses no time and earns his salary. He teaches the child such accomplishments as can be readily exhibited when required, without regard to their usefulness or worthlessness, so long as they are showy. Without selecting or discerning, he charges the child's memory with a vast amount of rubbish. When the child is to be examined, the tutor makes him display his wares; and, after thus giving satisfaction, folds up his pack again, and goes his way.

My pupil is not so rich; he has no pack at all to display; he has nothing but himself. Now a child, like a man, cannot be seen all at once. What observer can at the first glance seize upon the child's peculiar traits? Such observers there are, but they are uncommon; and among a hundred thousand fathers you will not find one such.

Book Third.

The third book has to do with the youth as he is between the ages of twelve and fifteen. At this time his strength is proportionately greatest, and this is the most important period in his life. It is the time for labor and study; not indeed for studies of all kinds, but for those whose necessity the student himself feels. The principle that ought to guide him now is that of utility. All the master's talent consists in leading him to discover what is really useful to him. Language and history offer him little that is interesting. He applies himself to studying natural phenomena, because they arouse his curiosity and afford him means of overcoming his difficulties. He makes his own instruments, and invents what apparatus he needs.

He does not depend upon another to direct him, but follows where his own good sense points the way. Robinson Crusoe on his island is his ideal, and this book furnishes the reading best suited to his age. He should have some manual occupation, as much on account of the uncertain future as for the sake of satisfying his own constant activity.

Side by side with the body the mind is developed by a taste for reflection, and is finally prepared for studies of a higher order. With this period childhood ends and youth begins.

The Age of Study.

ALTHOUGH up to the beginning of youth life is, on the whole, a period of weakness, there is a time during this earlier age when our strength increases beyond what our wants require, and the growing animal, still absolutely weak, becomes relatively strong. His wants being as yet partly undeveloped, his present strength is more than sufficient to provide for those

of the present. As a man, he would be very weak; as a child, he is very strong.

Whence arises this weakness of ours but from the inequality between our desires and the strength we have for fulfilling them? Our passions weaken us, because the gratification of them requires more than our natural strength.

If we have fewer desires, we are so much the stronger. Whoever can do more than his wishes demand has strength to spare; he is strong indeed. Of this, the third stage of childhood, I have now to speak. I still call it childhood for want of a better term to express the idea; for this age, not yet that of puberty, approaches youth.

At the age of twelve or thirteen the child's physical strength develops much faster than his wants. He braves without inconvenience the inclemency of climate and seasons, scarcely feeling it at all. Natural heat serves him instead of clothing, appetite instead of sauce. When he is drowsy, he lies down on the ground and falls asleep. Thus he finds around him everything he needs; not governed by caprices, his desires extend no farther than his own arms can reach. Not only is he sufficient for himself, but, at this one time in all his life, he has more strength than he really requires.

What then shall he do with this superabundance of mental and physical strength, which he will hereafter need, but endeavor to employ it in ways which will at some time be of use to him, and thus throw this surplus vitality forward into the future? The robust child shall make provision for his weaker manhood. But he will not garner it in barns, or lay it up in coffers that can be plundered. To be real owner of this treasure, he must store it up in his arms, in his brain, in himself. The present, then, is the time to labor, to receive instruction, and to study; nature so ordains, not I.

Human intelligence has its limits. We can neither know

everything, nor be thoroughly acquainted with the little that other men know. Since the reverse of every false proposition is a truth, the number of truths, like the number of errors, is inexhaustible. We have to select what is to be taught as well as the time for learning it. Of the kinds of knowledge within our power some are false, some useless, some serve only to foster pride. Only the few that really conduce to our well-being are worthy of study by a wise man, or by a youth intended to be a wise man. The question is, not what may be known, but what will be of the most use when it is known. From these few we must again deduct such as require a ripeness of understanding and a knowledge of human relations which a child cannot possibly acquire; such as, though true in themselves, incline an inexperienced mind to judge wrongly of other things.

This reduces us to a circle small indeed in relation to existing things, but immense when we consider the capacity of the child's mind. How daring was the hand that first ventured to lift the veil of darkness from our human understanding! What abysses, due to our unwise learning, yawn around the unfortunate youth! Tremble, you who are to conduct him by these perilous ways, and to lift for him the sacred veil of nature. Be sure of your own brain and of his, lest either, or perhaps both, grow dizzy at the sight. Beware of the glamour of falsehood and of the intoxicating fumes of pride. Always bear in mind that ignorance has never been harmful, that error alone is fatal, and that our errors arise, not from what we do not know, but from what we think we do know.[1]

[1] This might be carried too far, and is to be admitted with some reservations. Ignorance is never alone; its companions are always error and presumption. No one is so certain that he knows, as he who knows nothing; and prejudice of all kinds is the form in which our ignorance is clothed.

The Incentive of Curiosity.

same instinct animates all the different faculties of man. To the activity of the body, striving to develop itself, succeeds the activity of the mind, endeavoring to instruct itself. Children are at first only restless; afterwards they are inquisitive. Their curiosity, rightly trained, is the incentive of the age we are now considering. We must always distinguish natural inclinations from those that have their source in opinion.

There is a thirst for knowledge which is founded only upon a desire to be thought learned, and another, springing from our natural curiosity concerning anything which nearly or remotely interests us. Our desire for happiness is inborn; and as it can never be fully satisfied, we are always seeking ways to increase what we have. This first principle of curiosity is natural to the heart of man, but is developed only in proportion to our passions and to our advance in knowledge. Call your pupil's attention to the phenomena of nature, and you will soon render him inquisitive. But if you would keep this curiosity alive, do not be in haste to satisfy it. Ask him questions that he can comprehend, and let him solve them. Let him know a thing because he has found it out for himself, and not because you have told him of it. Let him not learn science, but discover it for himself. If once you substitute authority for reason, he will not reason any more; he will only be the sport of other people's opinions.

When you are ready to teach this child geography, you get together your globes and your maps; and what machines they are! Why, instead of using all these representations, do you not begin by showing him the object itself, so as to let him know what you you are talking of?

On some beautiful evening take the child to walk with you, in a place suitable for your purpose, where in the unobstructed horizon the setting sun can be plainly seen. Take a careful observation of all the objects marking the spot at which it goes down. When you go for an airing next day, return to this same place before the sun rises. You can see it announce itself by arrows of fire. The brightness increases; the east seems all aflame; from its glow you anticipate long beforehand the coming of day. Every moment you imagine you see it. At last it really does appear, a brilliant point which rises like a flash of lightning, and instantly fills all space. The veil of shadows is cast down and disappears. We know our dwelling-place once more, and find it more beautiful than ever. The verdure has taken on fresh vigor during the night; it is revealed with its brilliant net-work of dew-drops, reflecting light and color to the eye, in the first golden rays of the new-born day. The full choir of birds, none silent, salute in concert the Father of life. Their warbling, still faint with the languor of a peaceful awakening, is now more lingering and sweet than at other hours of the day. All this fills the senses with a charm and freshness which seems to touch our inmost soul. No one can resist this enchanting hour, or behold with indifference a spectacle so grand, so beautiful, so full of all delight.

Carried away by such a sight, the teacher is eager to impart to the child his own enthusiasm, and thinks to arouse it by calling attention to what he himself feels. What folly! The drama of nature lives only in the heart; to see it, one must feel it. The child sees the objects, but not the relations that bind them together; he can make nothing of their harmony. The complex and momentary impression of all these sensations requires an experience he has never gained,

and feelings he has never known. If he has never crossed the desert and felt its burning sands scorch his feet, the stifling reflection of the sun from its rocks oppress him, how can he fully enjoy the coolness of a beautiful morning? How can the perfume of flowers, the cooling vapor of the dew, the sinking of his footstep in the soft and pleasant turf, enchant his senses? How can the singing of birds delight him, while the accents of love and pleasure are yet unknown? How can he see with transport the rise of so beautiful a day, unless imagination can paint all the transports with which it may be filled? And lastly, how can he be moved by the beautiful panorama of nature, if he does not know by whose tender care it has been adorned?

Do not talk to the child about things he cannot understand. Let him hear from you no descriptions, no eloquence, no figurative language, no poetry. Sentiment and taste are just now out of the question. Continue to be clear, unaffected, and dispassionate; the time for using another language will come only too soon.

Educated in the spirit of our principles, accustomed to look for resources within himself, and to have recourse to others only when he finds himself really helpless, he will examine every new object for a long time without saying a word. He is thoughtful, and not disposed to ask questions. Be satisfied, therefore, with presenting objects at appropriate times and in appropriate ways. When you see his curiosity fairly at work, ask him some laconic question which will suggest its own answer.

On this occasion, having watched the sunrise from beginning to end with him, having made him notice the mountains and other neighboring objects on the same side, and allowed him to talk about them just as he pleases, be silent for a few minutes, as if in deep thought, and then say to him, "I

think the sun set over there, and now it has risen over here. How can that be so?" Say no more; if he asks questions, do not answer them: speak of something else. Leave him to himself, and he will be certain to think the matter over.

To give the child the habit of attention and to impress him deeply with any truth affecting the senses, let him pass several restless days before he discovers that truth. If the one in question does not thus impress him, you may make him see it more clearly by reversing the problem. If he does not know how the sun passes from its setting to its rising, he at least does know how it travels from its rising to its setting; his eyes alone teach him this. Explain your first question by the second. If your pupil be not absolutely stupid, the analogy is so plain that he cannot escape it. This is his first lesson in cosmography.

As we pass slowly from one sensible idea to another, familiarize ourselves for a long time with each before considering the next, and do not force our pupil's attention; it will be a long way from this point to a knowledge of the sun's course and of the shape of the earth. But as all the apparent motions of the heavenly bodies are upon the same principle, and the first observation prepares the way for all the rest, less effort, if more time, is required to pass from the daily rotation of the earth to the calculation of eclipses than to understand clearly the phenomena of day and night.

Since the sun (apparently) revolves about the earth, it describes a circle, and we already know that every circle must have a centre. This centre, being in the heart of the earth, cannot be seen; but we may mark upon the surface two opposite points that correspond to it. A rod passing through these three points, and extending from one side of the heavens to the other, shall be the axis of the earth, and of the sun's apparent daily motion. A spherical top, turning

on its point, shall represent the heavens revolving on their axis; the two extremities of the top are the two poles. The child will be interested in knowing one of them, which I will show him near the tail of Ursa Minor.

This will serve to amuse us for one night. By degrees we shall grow familiar with the stars, and this will awaken a desire to know the planets and to watch the constellations.

We have seen the sun rise at midsummer; we will also watch its rising at Christmas or some other fine day in winter. For be it known that we are not at all idle, and that we make a joke of braving the cold. I take care to make this second observation in the same place as the first; and after some conversation to pave the way for it. One or the other of us will be sure to exclaim, "How queer that is! the sun does not rise where it used to rise! Here are our old landmarks, and now it is rising over yonder. Then there must be one east for summer, and another for winter." Now, young teacher, your way is plain. These examples ought to suffice you for teaching the sphere very understandingly, by taking the world for your globe, and the real sun instead of your artificial sun.

Things Rather than their Signs.

In general, never show the representation of a thing unless it be impossible to show the thing itself; for the sign absorbs the child's attention, and makes him lose sight of the thing signified.

The armillary sphere[1] seems to me poorly designed and in bad proportion. Its confused circles and odd figures, giving

[1] The armillary sphere is a group of pasteboard or copper circles, to illustrate the orbits of the planets, and their position in relation to the earth, which is represented by a small wooden ball.

it the look of a conjurer's apparatus, are enough to frighten a child. The earth is too small; the circles are too many and too large. Some of them, the colures,[1] for instance, are entirely useless. Every circle is larger than the earth. The pasteboard gives them an appearance of solidity which creates the mistaken impression that they are circular masses which really exist. When you tell the child that these are imaginary circles, he understands neither what he sees nor what you mean.

Shall we never learn to put ourselves in the child's place? We do not enter into his thoughts, but suppose them exactly like our own. Constantly following our own method of reasoning, we cram his mind not only with a concatenation of truths, but also with extravagant notions and errors.

In the study of the sciences it is an open question whether we ought to use synthesis or analysis. It is not always necessary to choose either. In the same process of investigation we can sometimes both resolve and compound, and while the child thinks he is only analyzing, we can direct him by the methods teachers usually employ. By thus using both we make each prove the other. Starting at the same moment from two opposite points and never imagining that one road connects them, he will be agreeably surprised to find that what he supposed to be two paths finally meet as one.

I would, for example, take geography at these two extremes, and add to the study of the earth's motions the measurement of its parts, beginning with our own dwelling-place. While the child, studying the sphere, is transported into the heavens, bring him back to the measurement of the earth, and first show him his own home.

The two starting-points in his geography shall be the town

[1] The imaginary circles traced on the celestial sphere, and figured in the armillary sphere by metallic circles, are called *colures*.

in which he lives, and his father's house in the country. Afterward shall come the places lying between these two; then the neighboring rivers; lastly, the aspect of the sun, and the manner of finding out where the east is. This last is the point of union. Let him make himself a map of all these details; a very simple map, including at first only two objects, then by degrees the others, as he learns their distance and position. You see now what an advantage we have gained beforehand, by making his eyes serve him instead of a compass.

Even with this it may be necessary to direct him a little, but very little, and without appearing to do so at all. When he makes mistakes, let him make them; do not correct them. Wait in silence until he can see and correct them himself. Or, at most, take a good opportunity to set in motion something which will direct his attention to them. If he were never to make mistakes, he could not learn half so well. Besides, the important thing is, not that he should know the exact topography of the country, but that he should learn how to find it out by himself. It matters little whether he has maps in his mind or not, so that he understands what they represent, and has a clear idea of how they are made.

Mark the difference between the learning of your pupils and the ignorance of mine. They know all about maps, and he can make them. Our maps will serve as new decorations for our room.

Imparting a Taste for Science.

Bear in mind always that the life and soul of my system is, not to teach the child many things, but to allow only correct and clear ideas to enter his mind. I do not care if he knows nothing, so long as he is not mistaken. To guard

him from errors he might learn, I furnish his mind with truths only. Reason and judgment enter slowly; prejudices crowd in; and he must be preserved from these last. Yet if you consider science in itself, you launch upon an unfathomable and boundless sea, full of unavoidable dangers. When I see a man carried away by his love for knowledge, hastening from one alluring science to another, without knowing where to stop, I think I see a child gathering shells upon the seashore. At first he loads himself with them; then, tempted by others, he throws these away, and gathers more. At last, weighed down by so many, and no longer knowing which to choose, he ends by throwing all away, and returning empty-handed.

In our early years time passed slowly; we endeavored to lose it, for fear of misusing it. The case is reversed; now we have not time enough for doing all that we find useful. Bear in mind that the passions are drawing nearer, and that as soon as they knock at the door, your pupil will have eyes and ears for them alone. The tranquil period of intelligence is so brief, and has so many other necessary uses, that only folly imagines it long enough to make the child a learned man. The thing is, not to teach him knowledge, but to give him a love for it, and a good method of acquiring it when this love has grown stronger. Certainly this is a fundamental principle in all good education.

Now, also, is the time to accustom him gradually to concentrate attention on a single object. This attention, however, should never result from constraint, but from desire and pleasure. Be careful that it shall not grow irksome, or approach the point of weariness. Leave any subject just before he grows tired of it; for the learning it matters less to him than the never being obliged to learn anything against his will. If he himself questions you, answer so as

to keep alive his curiosity, not to satisfy it altogether. Above all, when you find that he makes inquiries, not for the sake of learning something, but to talk at random and annoy you with silly questions, pause at once, assured that he cares nothing about the matter, but only to occupy your time with himself. Less regard should be paid to what he says than to the motive which leads him to speak. This caution, heretofore unnecessary, is of the utmost importance as soon as a child begins to reason.

There is a chain of general truths by which all sciences are linked to common principles and successively unfolded. This chain is the method of philosophers, with which, for the present, we have nothing to do. There is another, altogether different, which shows each object as the cause of another, and always points out the one following. This order, which, by a perpetual curiosity, keeps alive the attention demanded by all, is the one followed by most men, and of all others necessary with children. When, in making our maps, we found out the place of the east, we were obliged to draw meridians. The two points of intersection between the equal shadows of night and morning furnish an excellent meridian for an astronomer thirteen years old. But these meridians disappear; it takes time to draw them; they oblige us to work always in the same place: so much care, so much annoyance, will tire him out at last. We have seen and provided for this beforehand.

I have again begun upon tedious and minute details. Readers, I hear your murmurs, and disregard them. I will not sacrifice to your impatience the most useful part of this book. Do what you please with my tediousness, as I have done as I pleased in regard to your complaints.

The Juggler.

For some time my pupil and I had observed that different bodies, such as amber, glass, and wax, when rubbed, attract straws, and that others do not attract them. By accident we discovered one that has a virtue more extraordinary still, — that of attracting at a distance, and without being rubbed, iron filings and other bits of iron. This peculiarity amused us for some time before we saw any use in it. At last we found out that it may be communicated to iron itself, when magnetized to a certain degree. One day we went to a fair, where a juggler, with a piece of bread, attracted a duck made of wax, and floating on a bowl of water. Much surprised, we did not however say, "He is a conjurer," for we knew nothing about conjurers. Continually struck by effects whose causes we do not know, we were not in haste to decide the matter, and remained in ignorance until we found a way out of it.

When we reached home we had talked so much of the duck at the fair that we thought we would endeavor to copy it. Taking a perfect needle, well magnetized, we inclosed it in white wax, modelled as well as we could do it into the shape of a duck, so that the needle passed entirely through the body, and with its larger end formed the duck's bill. We placed the duck upon the water, applied to the beak the handle of a key, and saw, with a delight easy to imagine, that our duck would follow the key precisely as the one at the fair had followed the piece of bread. We saw that some time or other we might observe the direction in which the duck turned when left to itself upon the water. But absorbed at that time by another object, we wanted nothing more.

That evening, having in our pockets bread prepared for the occasion, we returned to the fair. As soon as the mounte-

bank had performed his feat, my little philosopher, scarcely able to contain himself, told him that the thing was not hard to do, and that he could do it himself. He was taken at his word. Instantly he took from his pocket the bread in which he had hidden the bit of iron. Approaching the table his heart beat fast; almost tremblingly, he presented the bread. The duck came toward it and followed it; the child shouted and danced for joy. At the clapping of hands, and the acclamations of all present, his head swam, and he was almost beside himself. The juggler was astonished, but embraced and congratulated him, begging that we would honor him again by our presence on the following day, adding that he would take care to have a larger company present to applaud our skill. My little naturalist, filled with pride, began to prattle; but I silenced him, and led him away loaded with praises. The child counted the minutes until the morrow with impatience that made me smile. He invited everybody he met; gladly would he have had all mankind as witnesses of his triumph. He could scarcely wait for the hour agreed upon, and, long before it came, flew to the place appointed. The hall was already full, and on entering, his little heart beat fast. Other feats were to come first; the juggler outdid himself, and there were some really wonderful performances. The child paid no attention to these. His excitement had thrown him into a perspiration; he was almost breathless, and fingered the bread in his pocket with a hand trembling with impatience.

At last his turn came, and the master pompously announced the fact. Rather bashfully the boy drew near and held forth his bread. Alas for the changes in human affairs! The duck, yesterday so tame, had grown wild. Instead of presenting its bill, it turned about and swam away, avoiding the bread and the hand which presented it, as carefully as it had

before followed them. After many fruitless attempts, each received with derision, the child complained that a trick was played on him, and defied the juggler to attract the duck.

The man, without a word, took a piece of bread and presented it to the duck, which instantly followed it, and came towards his hand. The child took the same bit of bread; but far from having better success, he saw the duck make sport of him by whirling round and round as it swam about the edge of the basin. At last he retired in great confusion, no longer daring to encounter the hisses which followed.

Then the juggler took the bit of bread the child had brought, and succeeded as well with it as with his own. In the presence of the entire company he drew out the needle, making another joke at our expense ; then, with the bread thus disarmed, he attracted the duck as before. He did the same thing with a piece of bread which a third person cut off in the presence of all; again, with his glove, and with the tip of his finger. At last, going to the middle of the room, he declared in the emphatic tone peculiar to his sort, that the duck would obey his voice quite as well as his gesture. He spoke, and the duck obeyed him; commanded it to go to the right, and it went to the right; to return, and it did so; to turn, and it turned itself about. Each movement was as prompt as the command. The redoubled applause was a repeated affront to us. We stole away unmolested, and shut ourselves up in our room, without proclaiming our success far and wide as we had meant to do.

There was a knock at our door next morning; I opened it, and there stood the mountebank, who modestly complained of our conduct. What had he done to us that we should try to throw discredit on his performances and take away his livelihood? What is so wonderful in the art of attracting a wax duck, that the honor should be worth the price of an honest

man's living? "Faith, gentlemen, if I had any other way of earning my bread, I should boast very little of this way. You may well believe that a man who has spent his life in practising this pitiful trade understands it much better than you, who devote only a few minutes to it. If I did not show you my best performances the first time, it was because a man ought not to be such a fool as to parade everything he knows. I always take care to keep my best things for a fit occasion; and I have others, too, to rebuke young and thoughtless people. Besides, gentlemen, I am going to teach you, in the goodness of my heart, the secret which puzzled you so much, begging that you will not abuse your knowledge of it to injure me, and that another time you will use more discretion."

Then he showed us his apparatus, and we saw, to our surprise, that it consisted only of a powerful magnet moved by a child concealed beneath the table. The man put up his machine again; and after thanking him and making due apologies, we offered him a present. He refused, saying, "No, gentlemen, I am not so well pleased with you as to accept presents from you. You cannot help being under an obligation to me, and that is revenge enough. But, you see, generosity is to be found in every station in life; I take pay for my performances, not for my lessons."

As he was going out, he reprimanded me pointedly and aloud. "I willingly pardon this child," said he; "he has offended only through ignorance. But you, sir, must have known the nature of his fault; why did you allow him to commit such a fault? Since you live together, you, who are older, ought to have taken the trouble of advising him; the authority of your experience should have guided him. When he is old enough to reproach you for his childish errors,

he will certainly blame you for those of which you did not warn him." [1]

He went away, leaving us greatly abashed. I took upon myself the blame of my easy compliance, and promised the child that, another time, I would sacrifice it to his interest, and warn him of his faults before they were committed. For a time was coming when our relations would be changed, and the severity of the tutor must succeed to the complaisance of an equal. This change should be gradual; everything must be foreseen, and that long beforehand.

The following day we returned to the fair, to see once more the trick whose secret we had learned. We approached our juggling Socrates with deep respect, hardly venturing to look at him. He overwhelmed us with civilities, and seated us with a marked attention which added to our humiliation. He performed his tricks as usual, but took pains to amuse himself for a long time with the duck trick, often looking at us with a rather defiant air. We understood it perfectly, and did not breathe a syllable. If my pupil had even dared to open his mouth, he would have deserved to be annihilated.

All the details of this illustration are far more important than they appear. How many lessons are here combined in one! How many mortifying effects does the first feeling of vanity bring upon us! Young teachers, watch carefully its first manifestation. If you can thus turn it into humiliation and disgrace, be assured that a second lesson will not soon be necessary.

"What an amount of preparation!" you will say. True; and all to make us a compass to use instead of a meridian line!

[1] Rousseau here informs his readers that even these reproaches are expected, he having dictated them beforehand to the mountebank; all this scene has been arranged to deceive the child. What a refinement of artifice in this passionate lover of the natural!

Having learned that a magnet acts through other bodies, we were all impatience until we had made an apparatus like the one we had seen, — a hollow table-top with a very shallow basin adjusted upon it and filled with water, a duck rather more carefully made, and so on. Watching this apparatus attentively and often, we finally observed that the duck, when at rest, nearly always turned in the same direction. Following up the experiment by examining this direction, we found it to be from south to north. Nothing more was necessary; our compass was invented, or might as well have been. We had begun to study physics.

Experimental Physics.

THE earth has different climates, and these have different temperatures. As we approach the poles the variation of seasons is more perceptible, — all bodies contract with cold and expand with heat. This effect is more readily measured in liquids, and is particularly noticeable in spirituous liquors. This fact suggested the idea of the thermometer. The wind strikes our faces; air is therefore a body, a fluid; we feel it though we cannot see it. Turn a glass vessel upside down in water, and the water will not fill it unless you leave a vent for the air; therefore air is capable of resistance. Sink the glass lower, and the water rises in the air-filled region of the glass, although it does not entirely fill that space. Air is therefore to some extent compressible. A ball filled with compressed air bounds much better than when filled with anything else: air is therefore elastic. When lying at full length in the bath, raise the arm horizontally out of the water, and you feel it burdened by a great weight: air is therefore heavy. Put air in equilibrium with other bodies, and you can measure its weight. From these observations were

constructed the barometer, the siphon, the air-gun, and the air-pump. All the laws of statics and hydrostatics were discovered by experiments as simple as these. I would not have my pupil study them in a laboratory of experimental physics. I dislike all that array of machines and instruments. The parade of science is fatal to science itself. All those machines frighten the child; or else their singular forms divide and distract the attention he ought to give to their effects.

I would make all our own machines, and not begin by making the instrument before the experiment has been tried. But after apparently lighting by chance on the experiment, I should by degrees invent instruments for verifying it. These instruments should not be so perfect and exact as our ideas of what they should be and of the operations resulting from them.

For the first lesson in statics, instead of using balances, I put a stick across the back of a chair, and when evenly balanced, measure its two portions. I add weights to each part, sometimes equal, sometimes unequal. Pushing it to or fro as may be necessary, I finally discover that equilibrium results from a reciprocal proportion between the amount of weight and the length of the levers. Thus my little student of physics can rectify balances without having ever seen them.

When we thus learn by ourselves instead of learning from others, our ideas are far more definite and clear. Besides, if our reason is not accustomed to slavish submission to authority, this discovering relations, linking one idea to another, and inventing apparatus, renders us much more ingenious. If, instead, we take everything just as it is given to us, we allow our minds to sink down into indifference; just as a man who always lets his servants dress him and wait on him, and his horses carry him about, loses finally not only the vigor

but even the use of his limbs. Boileau boasted that he had taught Racine to rhyme with difficulty. There are many excellent labor-saving methods for studying science; but we are in sore need of one to teach us how to learn them with more effort of our own.

The most manifest value of these slow and laborious researches is, that amid speculative studies they maintain the activity and suppleness of the body, by training the hands to labor, and creating habits useful to any man. So many instruments are invented to aid in our experiments and to supplement the action of our senses, that we neglect to use the senses themselves. If the graphometer measures the size of an angle for us, we need not estimate it ourselves. The eye which measured distances with precision intrusts this work to the chain; the steelyard saves me the trouble of measuring weights by the hand. The more ingenious our apparatus, the more clumsy and awkward do our organs become. If we surround ourselves with instruments, we shall no longer find them within ourselves.

But when, in making the apparatus, we employ the skill and sagacity required in doing without them, we do not lose, but gain. By adding art to nature, we become more ingenious and no less skilful. If, instead of keeping a child at his books, I keep him busy in a workshop, his hands labor to his mind's advantage: while he regards himself only as a workman he is growing into a philosopher. This kind of exercise has other uses, of which I will speak hereafter; and we shall see how philosophic amusements prepare us for the true functions of manhood.

I have already remarked that purely speculative studies are rarely adapted to children, even when approaching the period of youth; but without making them enter very deeply into systematic physics, let all the experiments be connected by

some kind of dependence by which the child can arrange them in his mind and recall them at need. For we cannot without something of this sort retain isolated facts or even reasonings long in memory.

In investigating the laws of nature, always begin with the most common and most easily observed phenomena, and accustom your pupil not to consider these phenomena as reasons, but as facts. Taking a stone, I pretend to lay it upon the air; opening my hand, the stone falls. Looking at Émile, who is watching my motions, I say to him, "Why did the stone fall?"

No child will hesitate in answering such a question, not even Émile, unless I have taken great care that he shall not know how. Any child will say that the stone falls because it is heavy. "And what does heavy mean?" "Whatever falls is heavy." Here my little philosopher is really at a stand. Whether this first lesson in experimental physics aids him in understanding that subject or not, it will always be a practical lesson.

Nothing to be Taken upon Authority. Learning from the Pupil's own Necessities.

As the child's understanding matures, other important considerations demand that we choose his occupations with more care. As soon as he understands himself and all that relates to him well enough and broadly enough to discern what is to his advantage and what is becoming in him, he can appreciate the difference between work and play, and to regard the one solely as relaxation from the other. Objects really useful may then be included among his studies, and he will pay more attention to them than if amusement alone were concerned. The ever-present law of necessity early teaches us

to do what we dislike, to escape evils we should dislike even more. Such is the use of foresight from which, judicious or injudicious, springs all the wisdom or all the unhappiness of mankind.

We all long for happiness, but to acquire it we ought first to know what it is. To the natural man it is as simple as his mode of life; it means health, liberty, and the necessaries of life, and freedom from suffering. The happiness of man as a moral being is another thing, foreign to the present question. I cannot too often repeat that only objects purely physical can interest children, especially those who have not had their vanity aroused and their nature corrupted by the poison of opinion.

When they provide beforehand for their own wants, their understanding is somewhat developed, and they are beginning to learn the value of time. We ought then by all means to accustom and to direct them to its employment to useful ends, these being such as are useful at their age and readily understood by them. The subject of moral order and the usages of society should not yet be presented, because children are not in a condition to understand such things. To force their attention upon things which, as we vaguely tell them, will be for their good, when they do not know what this good means, is foolish. It is no less foolish to assure them that such things will benefit them when grown; for they take no interest in this supposed benefit, which they cannot understand.

Let the child take nothing for granted because some one says it is so. Nothing is good to him but what he feels to be good. You think it far sighted to push him beyond his understanding of things, but you are mistaken. For the sake of arming him with weapons he does not know how to use, you take from him one universal among men, common sense: you teach him to allow himself always to be led,

never to be more than a machine in the hands of others. If you will have him docile while he is young, you will make him a credulous dupe when he is a man. You are continually saying to him, "All I require of you is for your own good, but you cannot understand it yet. What does it matter to me whether you do what I require or not? You are doing it entirely for your own sake." With such fine speeches you are paving the way for some kind of trickster or fool, — some visionary babbler or charlatan, — who will entrap him or persuade him to adopt his own folly.

A man may be well acquainted with things whose utility a child cannot comprehend; but is it right, or even possible, for a child to learn what a man ought to know? Try to teach the child all that is useful to him now, and you will keep him busy all the time. Why would you injure the studies suitable to him at his age by giving him those of an age he may never attain? "But," you say, "will there be time for learning what he ought to know when the time to use it has already come?" I do not know; but I am sure that he cannot learn it sooner. For experience and feeling are our real teachers, and we never understand thoroughly what is best for us except from the circumstances of our case. A child knows that he will one day be a man. All the ideas of manhood that he can understand give us opportunities of teaching him; but of those he cannot understand he should remain in absolute ignorance. This entire book is only a continued demonstration of this principle of education.

Finding out the East. The Forest of Montmorency.

I DO not like explanatory lectures; young people pay very little attention to them, and seldom remember them.

Things! things! I cannot repeat often enough that we attach too much importance to words. Our babbling education produces nothing but babblers.

Suppose that while we are studying the course of the sun, and the manner of finding where the east is, Émile all at once interrupts me, to ask, "What is the use of all this?" What an opportunity for a fine discourse! How many things I could tell him of in answering this question, especially if anybody were by to listen! I could mention the advantages of travel and of commerce; the peculiar products of each climate; the manners of different nations; the use of the calendar; the calculation of seasons in agriculture; the art of navigation, and the manner of travelling by sea, following the true course without knowing where we are. I might take up politics, natural history, astronomy, even ethics and international law, by way of giving my pupil an exalted idea of all these sciences, and a strong desire to learn them. When I have done, the boy will not have understood a single idea out of all my pedantic display. He would like to ask again, "What is the use of finding out where the east is?" but dares not, lest I might be angry. He finds it more to his interest to pretend to understand what he has been compelled to hear. This is not at all an uncommon case in superior education, so-called.

But our Émile, brought up more like a rustic, and carefully taught to think very slowly, will not listen to all this. He will run away at the first word he does not understand, and play about the room, leaving me to harangue all by myself. Let us find a simpler way; this scientific display does him no good.

We were noticing the position of the forest north of Montmorency, when he interrupted me with the eager question, "What is the use of knowing that?" "You may be

right," said I; "we must take time to think about it; and if there is really no use in it, we will not try it again, for we have enough to do that is of use." We went at something else, and there was no more geography that day.

The next morning I proposed a walk before breakfast. Nothing could have pleased him better; children are always ready to run about, and this boy had sturdy legs of his own. We went into the forest, and wandered over the fields; we lost ourselves, having no idea where we were; and when we intended to go home, could not find our way. Time passed; the heat of the day came on; we were hungry. In vain did we hurry about from place to place; we found everywhere nothing but woods, quarries, plains, and not a landmark that we knew. Heated, worn out with fatigue, and very hungry, our running about only led us more and more astray. At last we sat down to rest and to think the matter over. Émile, like any other child, did not think about it; he cried. He did not know that we were near the gate of Montmorency, and that only a narrow strip of woodland hid it from us. But to him this narrow strip of woodland was a whole forest; one of his stature would be lost to sight among bushes.

After some moments of silence I said to him, with a troubled air,

"My dear Émile, what shall we do to get away from here?"

Émile. [*In a profuse perspiration, and crying bitterly.*] I don't know. I'm tired. I'm hungry. I'm thirsty. I can't do anything.

Jean Jacques. Do you think I am better off than you, or that I would mind crying too, if crying would do for my breakfast? There is no use in crying; the thing is, to find our way. Let me see your watch; what time is it?

Émile. It is twelve o'clock, and I haven't had my breakfast.

JEAN JACQUES. That is true. It is twelve o'clock, and I haven't had my breakfast, either.

ÉMILE. Oh, how hungry you must be!

JEAN JACQUES. The worst of it is that my dinner will not come here to find me. Twelve o'clock? it was just this time yesterday that we noticed where Montmorency is. Could we see where it is just as well from this forest?

ÉMILE. Yes; but yesterday we saw the forest, and we cannot see the town from this place.

JEAN JACQUES. That is a pity. I wonder if we could find out where it is without seeing it?

ÉMILE. Oh, my dear friend!

JEAN JACQUES. Did not we say that this forest is—

ÉMILE. North of Montmorency.

JEAN JACQUES. If that is true, Montmorency must be—

ÉMILE. South of the forest.

JEAN JACQUES. There is a way of finding out the north at noon.

ÉMILE. Yes; by the direction of our shadows.

JEAN JACQUES. But the south?

ÉMILE. How can we find that?

JEAN JACQUES. The south is opposite the north.

ÉMILE. That is true; all we have to do is to find the side opposite the shadows. Oh, there's the south! there's the south! Montmorency must surely be on that side; let us look on that side.

JEAN JACQUES. Perhaps you are right. Let us take this path through the forest.

ÉMILE. [*Clapping his hands, with a joyful shout.*] Oh, I see Montmorency; there it is, just before us, in plain sight. Let us go to our breakfast, our dinner; let us run fast. Astronomy is good for something!

Observe that even if he does not utter these last words,

they will be in his mind. It matters little so long as it is not I who utter them. Rest assured that he will never in his life forget this day's lesson. Now if I had only made him imagine it all indoors, my lecture would have been entirely forgotten by the next day. We should teach as much as possible by actions, and say only what we cannot do.

Robinson Crusoe.

In his legitimate preference for teaching by the eye and hand and by real things, and in his aversion to the barren and erroneous method of teaching from books alone, Rousseau, constantly carried away by the passionate ardor of his nature, rushes into an opposite extreme, and exclaims, "I hate books; they only teach us to talk about what we do not understand." Then, checked in the full tide of this declamation by his own good sense, he adds: —

Since we must have books, there is one which, to my mind, furnishes the finest of treatises on education according to nature. My Émile shall read this book before any other; it shall for a long time be his entire library, and shall always hold an honorable place. It shall be the text on which all our discussions of natural science shall be only commentaries. It shall be a test for all we meet during our progress toward a ripened judgment, and so long as our taste is unspoiled, we shall enjoy reading it. What wonderful book is this? Aristotle? Pliny? Buffon? No; it is "Robinson Crusoe."

The story of this man, alone on his island, unaided by his fellow-men, without any art or its implements, and yet providing for his own preservation and subsistence, even contriving to live in what might be called comfort, is interesting to persons of all ages. It may be made delightful to children in a thousand ways. Thus we make the desert island, which I used at the outset for a comparison, a reality.

This condition is not, I grant, that of man in society; and to all appearance Émile will never occupy it; but from it he ought to judge of all others. The surest way to rise above prejudice, and to judge of things in their true relations, is to put ourselves in the place of an isolated man, and decide as he must concerning their real utility.

Disencumbered of its less profitable portions, this romance from its beginning, the shipwreck of Crusoe on the island, to its end, the arrival of the vessel which takes him away, will yield amusement and instruction to Émile during the period now in question. I would have him completely carried away by it, continually thinking of Crusoe's fort, his goats, and his plantations. I would have him learn, not from books, but from real things, all he would need to know under the same circumstances. He should be encouraged to play Robinson Crusoe; to imagine himself clad in skins, wearing a great cap and sword, and all the array of that grotesque figure, down to the umbrella, of which he would have no need If he happens to be in want of anything, I hope he will contrive something to supply its place. Let him look carefully into all that his hero did, and decide whether any of it was unnecessary, or might have been done in a better way. Let him notice Crusoe's mistakes and avoid them under like circumstances. He will very likely plan for himself surroundings like Crusoe's, — a real castle in the air, natural at his happy age when we think ourselves rich if we are free and have the necessaries of life. How useful this hobby might be made if some man of sense would only suggest it and turn it to good account! The child, eager to build a storehouse for his island, would be more desirous to learn than his master would be to teach him. He would be anxious to know everything he could make use of, and nothing besides. You would not need to guide, but to restrain him.

Here Rousseau insists upon giving a child some trade, no matter what his station in life may be; and in 1762 he uttered these prophetic words, remarkable indeed, when we call to mind the disorders at the close of that century: —

You trust to the present condition of society, without reflecting that it is subject to unavoidable revolutions, and that you can neither foresee nor prevent what is to affect the fate of your own children. The great are brought low, the poor are made rich, the king becomes a subject. Are the blows of fate so uncommon that you can expect to escape them? We are approaching a crisis, the age of revolutions. Who can tell what will become of you then? All that man has done man may destroy. No characters but those stamped by nature are ineffaceable; and nature did not make princes, or rich men, or nobles.

This advice was followed. In the highest grades of society it became the fashion to learn some handicraft. It is well known that Louis XVI. was proud of his skill as a locksmith. Among the exiles of a later period, many owed their living to the trade they had thus learned.

To return to Émile: Rousseau selects for him the trade of a joiner, and goes so far as to employ him and his tutor in that kind of labor for one or more days of every week under a master who pays them actual wages for their work.

Judging from Appearances. The Broken Stick.

If I have thus far made myself understood, you may see how, with regular physical exercise and manual labor, I am at the same time giving my pupil a taste for reflection and meditation. This will counterbalance the indolence which might result from his indifference to other men and from the dormant state of his passions. He must work like a peasant and think like a philosopher, or he will be as idle as a savage.

The great secret of education is to make physical and mental exercises serve as relaxation for each other. At first our pupil had nothing but sensations, and now he has ideas. Then he only perceived, but now he judges. For from comparison of many successive or simultaneous sensations, with the judgments based on them, arises a kind of mixed or complex sensation which I call an idea.

The different manner in which ideas are formed gives each mind its peculiar character. A mind is solid if it shape its ideas according to the true relations of things; superficial, if content with their apparent relations; accurate, if it behold things as they really are; unsound, if it understand them incorrectly; disordered, if it fabricate imaginary relations, neither apparent nor real; imbecile, if it do not compare ideas at all. Greater or less mental power in different men consists in their greater or less readiness in comparing ideas and discovering their relations.

From simple as well as complex sensations, we form judgments which I will call simple ideas. In a sensation the judgment is wholly passive, only affirming that we feel what we feel. In a preception or idea, the judgment is active; it brings together, compares, and determines relations not determined by the senses. This is the only point of difference, but it is important. Nature never deceives us; it is always we who deceive ourselves.

I see a child eight years old helped to some frozen custard. Without knowing what it is, he puts a spoonful in his mouth, and feeling the cold sensation, exclaims, "Ah, that burns!" He feels a keen sensation; he knows of none more so than heat, and thinks that is what he now feels. He is of course mistaken; the chill is painful, but does not burn him; and the two sensations are not alike, since, after encountering both, we never mistake one for the other. It is not, there-

fore, the sensation which misleads him, but the judgment based on it.

It is the same when any one sees for the first time a mirror or optical apparatus; or enters a deep cellar in midwinter or midsummer; or plunges his hand, either very warm or very cold, into tepid water; or rolls a little ball between two of his fingers held crosswise. If he is satisfied with describing what he perceives or feels, keeping his judgment in abeyance, he cannot be mistaken. But when he decides upon appearances, his judgment is active; it compares, and infers relations it does not perceive; and it may then be mistaken. He will need experience to prevent or correct such mistakes. Show your pupil clouds passing over the moon at night, and he will think that the moon is moving in an opposite direction, and that the clouds are at rest. He will the more readily infer that this is the case, because he usually sees small objects, not large ones, in motion, and because the clouds seem to him larger than the moon, of whose distance he has no idea. When from a moving boat he sees the shore at a little distance, he makes the contrary mistake of thinking that the earth moves. For, unconscious of his own motion, the boat, the water, and the entire horizon seem to him one immovable whole of which the moving shore is only one part.

The first time a child sees a stick half immersed in water, it seems to be broken. The sensation is a true one, and would be, even if we did not know the reason for this appearance. If therefore you ask him what he sees, he answers truly, "A broken stick," because he is fully conscious of the sensation of a broken stick. But when, deceived by his judgment, he goes farther, and after saying that he sees a broken stick, he says again that the stick really is broken, he says what is not true; and why?

Because his judgment becomes active; he decides no longer from observation, but from inference, when he declares as a fact what he does not actually perceive; namely, that touch would confirm the judgment based upon sight alone.

The best way of learning to judge correctly is the one which tends to simplify our experience, and enables us to make no mistakes even when we dispense with experience altogether. It follows from this that after having long verified the testimony of one sense by that of another, we must further learn to verify the testimony of each sense by itself without appeal to any other. Then each sensation at once becomes an idea, and an idea in accordance with the truth. With such acquisitions I have endeavored to store this third period of human life.

To follow this plan requires a patience and a circumspection of which few teachers are capable, and without which a pupil will never learn to judge correctly. For example: if, when he is misled by the appearance of a broken stick, you endeavor to show him his mistake by taking the stick quickly out of the water, you may perhaps undeceive him, but what will you teach him? Nothing he might not have learned for himself. You ought not thus to teach him one detached truth, instead of showing him how he may always discover for himself any truth. If you really mean to teach him, do not at once undeceive him. Let Émile and myself serve you for example.

In the first place, any child educated in the ordinary way would, to the second of the two questions above mentioned, answer, "Of course the stick is broken." I doubt whether Émile would give this answer. Seeing no need of being learned or of appearing learned, he never judges hastily, but only from evidence. Knowing how easily appearances deceive us, as in the case of perspective, he is far from

finding the evidence in the present case sufficient. Besides, knowing from experience that my most trivial question always has an object which he does not at once discover, he is not in the habit of giving heedless answers. On the contrary, he is on his guard and attentive; he looks into the matter very carefully before replying. He never gives me an answer with which he is not himself satisfied, and he is not easily satisfied. Moreover, he and I do not pride ourselves on knowing facts exactly, but only on making few mistakes. We should be much more disconcerted if we found ourselves satisfied with an insufficient reason than if we had discovered none at all. The confession, "I do not know," suits us both so well, and we repeat it so often, that it costs neither of us anything. But whether for this once he is careless, or avoids the difficulty by a convenient "I do not know," my answer is the same: "Let us see; let us find out."

The stick, half-way in the water, is fixed in a vertical position. To find out whether it is broken, as it appears to be, how much we must do before we take it out of the water, or even touch it! First, we go entirely round it, and observe that the fracture goes around with us. It is our eye alone, then, that changes it; and a glance cannot move things from place to place.

Secondly, we look directly down the stick, from the end outside of the water; then the stick is no longer bent, because the end next our eye exactly hides the other end from us. Has our eye straightened the stick?

Thirdly, we stir the surface of the water, and see the stick bend itself into several curves, move in a zig-zag direction, and follow the undulations of the water. Has the motion we gave the water been enough thus to break, to soften, and to melt the stick?

Fourth, we draw off the water and see the stick straighten itself as fast as the water is lowered. Is not this more than enough to illustrate the fact and to find out the refraction? It is not then true that the eye deceives us, since by its aid alone we can correct the mistakes we ascribe to it.

Suppose the child so dull as not to understand the result of these experiments. Then we must call touch to the aid of sight. Instead of taking the stick out of the water, leave it there, and let him pass his hand from one end of it to the other. He will feel no angle; the stick, therefore, is not broken.

You will tell me that these are not only judgments but formal reasonings. True; but do you not see that, as soon as the mind has attained to ideas, all judgment is reasoning? The consciousness of any sensation is a proposition, a judgment. As soon, therefore, as we compare one sensation with another, we reason. The art of judging and the art of reasoning are precisely the same.

If, from the lesson of this stick, Émile does not understand the idea of refraction, he will never understand it at all. He shall never dissect insects, or count the spots on the sun; he shall not even know what a microscope or a telescope is.

Your learned pupils will laugh at his ignorance, and will not be very far wrong. For before he uses these instruments, I intend he shall invent them; and you may well suppose that this will not be soon done.

This shall be the spirit of all my methods of teaching during this period. If the child rolls a bullet between two crossed fingers, I will not let him look at it till he is otherwise convinced that there is only one bullet there.

Result. The Pupil at the Age of Fifteen.

I THINK these explanations will suffice to mark distinctly the advance my pupil's mind has hitherto made, and the route by which he has advanced. You are probably alarmed at the number of subjects I have brought to his notice. You are afraid I will overwhelm his mind with all this knowledge. But I teach him rather not to know them than to know them. I am showing him a path to knowledge not indeed difficult, but without limit, slowly measured, long, or rather endless, and tedious to follow. I am showing him how to take the first steps, so that he may know its beginning, but allow him to go no farther.

Obliged to learn by his own effort, he employs his own reason, not that of another. Most of our mistakes arise less within ourselves than from others; so that if he is not to be ruled by opinion, he must receive nothing upon authority. Such continual exercise must invigorate the mind as labor and fatigue strengthen the body.

The mind as well as the body can bear only what its strength will allow. When the understanding fully masters a thing before intrusting it to the memory, what it afterward draws therefrom is in reality its own. But if instead we load the memory with matters the understanding has not mastered, we run the risk of never finding there anything that belongs to it.

Émile has little knowledge, but it is really his own; he knows nothing by halves; and the most important fact is that he does not now know things he will one day know; that many things known to other people he never will know; and that there is an infinity of things which neither he nor any one else ever will know. He is prepared for knowledge of every kind; not because he has so much, but because he

knows how to acquire it; his mind is open to it, and, as Montaigne says, if not taught, he is at least teachable. I shall be satisfied if he knows how to find out the "wherefore" of everything he knows and the "why" of everything he believes. I repeat that my object is not to give him knowledge, but to teach him how to acquire it at need; to estimate it at its true value, and above all things, to love the truth. By this method we advance slowly, but take no useless steps, and are not obliged to retrace a single one.

Émile understands only the natural and purely physical sciences. He does not even know the name of history, or the meaning of metaphysics and ethics. He knows the essential relations between men and things, but nothing of the moral relations between man and man. He does not readily generalize or conceive of abstractions. He observes the qualities common to certain bodies without reasoning about the qualities themselves. With the aid of geometric figures and algebraic signs, he knows something of extension and quantity. Upon these figures and signs his senses rest their knowledge of the abstractions just named. He makes no attempt to learn the nature of things, but only such of their relations as concern himself. He estimates external things only by their relation to him; but this estimate is exact and positive, and in it fancies and conventionalities have no share. He values most those things that are most useful to him; and never deviating from this standard, is not influenced by general opinion.

Émile is industrious, temperate, patient, steadfast, and full of courage. His imagination, never aroused, does not exaggerate dangers. He feels few discomforts, and can bear pain with fortitude, because he has never learned to contend with fate. He does not yet know exactly what death is, but, accustomed to yield to the law of necessity, he will die when

he must, without a groan or a struggle. Nature can do no more at that moment abhorred by all. To live free and to have little to do with human affairs is the best way of learning how to die.

In a word, Émile has every virtue which affects himself. To have the social virtues as well, he only needs to know the relations which make them necessary; and this knowledge his mind is ready to receive. He considers himself independently of others, and is satisfied when others do not think of him at all. He exacts nothing from others, and never thinks of owing anything to them. He is alone in human society, and depends sólely upon himself. He has the best right of all to be independent, for he is all that any one can be at his age. He has no errors but such as a human being must have; no vices but those from which no one can warrant himself exempt. He has a sound constitution, active limbs, a fair and unprejudiced mind, a heart free and without passions. Self-love, the first and most natural of all, has scarcely manifested itself at all. Without disturbing any one's peace of mind he has led a happy, contented life, as free as nature will allow. Do you think a youth who has thus attained his fifteenth year has lost the years that have gone before?

Press of Berwick & Smith, 118 Purchase Street.

Pestalozzi's Leonard and Gertrude.

Translated and abridged by EVA CHANNING. With an Introduction by G. STANLEY HALL, Professor of Pedagogy in Johns Hopkins University. Cloth. 193 pp. Price by mail, 85 cts.

IN these days, when the prosperity of a young and flourishing nation is powerless to relieve much of the poverty and distress which glare at us on every side; when selfishness still reigns supreme in all classes of society; when corruption prevails in the high places, and the grog-shop lays its snares for the weak and unwary at every street corner, — in the midst of these evils, it is both instructive and interesting to go back a hundred years, and see how the same battle was fought against poverty, ignorance, and vice, in a little village of Switzerland. If, in "Leonard and Gertrude," we find the picture even darker than we behold it in this country to-day, this should be an encouragement to us, as a sign that the world is growing better; but there is so much need of regeneration, even under our improved conditions, that Pestalozzi's little book cannot fail to be a help to every thoughtful person who reads it.

There is a quaint simplicity and naturalness about it which would certainly make it intelligible to all classes, and it might do untold good if placed in the hands of those people, both young and old, who are especially in need of the lessons it teaches. But its ethical value is by no means its only merit. The book has an intense living interest, and we can hardly divest ourselves of the impression that its characters really breathe and speak.

Dr. G. Stanley Hall says in his Introduction: "It is a story of deep and ardent love, not for an individual, but for the wretched, the weak, and for children. It is of peasants who kick their wives, of hungry children who steal a handful of raw potatoes, and who only on gala-days have the cream left on their milk; of literal dunghills and stable drains. It is, moreover, fairly packed with incident and character. The hypocrite, the fool, the gossip, the miser, the sot, the sycophant, the schemer, the just judge, the good parson, the intriguing woman from the court, the old schoolmaster enraged at a new departure in education, the quack doctor sentenced to dig the graves of those he kills, and many more, stand out from these pages in as sharp relief as words can well paint them."

Of the many notices furnished by the press, testifying to the value and interest of the work, a few are subjoined: —

Mrs. E. D. Cheney, in Law and Order: This charming little story gives the history of a small German village which was redeemed from vice, immorality, and poverty by the wise administration of a benevolent landlord, seconded by the influence of a good mother and an intelligent teacher. Are not these just the influences that are needed to redeem our towns and villages from vice, intemperance, and crime, to sobriety, industry, and comfort? We are apt to consider the temperance movement as a modern reform; but Pestalozzi presents an unscrupulous innkeeper, who tempts the men to waste their substance in drinking, as the very embodiment of evil in the community.

Providence Sunday Star: Under the veil of a sweet story, the principles of love, of virtue, of learning, and of right, of respect and reverence for women, and of detestation of vice, are clearly brought out, and the great writer of a past century has given to his period noble sentiments that belong to all time, nor are confined to a single land.

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